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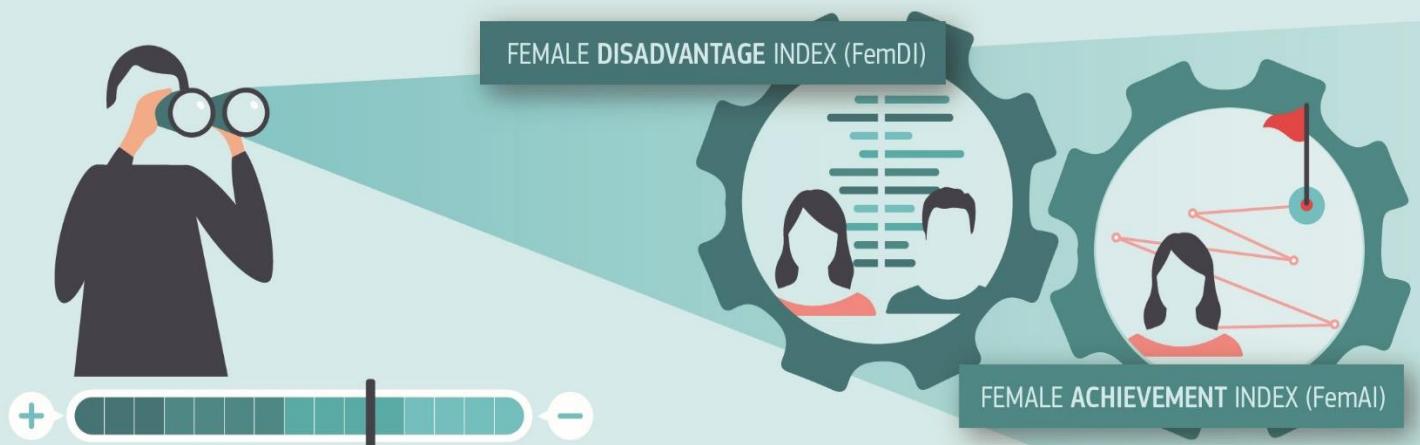
## JRC TECHNICAL REPORTS

# The Regional Gender Equality Monitor

*Measuring female disadvantage and achievement in EU regions*

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## Executive summary – key findings

Gender equality is one of the fundamental values of the European Union and the European Pillar of Social Rights establishes it as one of its key principles. While there are several measures of gender equality at country level there is none that capture regional differences in Europe.

This new regional gender equality monitor consists of two composite indices that address two specific and complementary aspects of this multifaceted phenomenon. The first index assesses the female disadvantage by measuring regional differences when females are doing worse than males. The second index measures the female level of achievement compared to the best regional performance. Viewing together the two indices facilitates the understanding of where women are at disadvantage and where they are performing well across the different regions and between the Member States. The indices are called the Female Disadvantage Index (FemDI) and the Female Achievement Index (FemAI).

The regional monitor for the EU builds on seven domains: 1) Work & Money, 2) Knowledge, 3) Time, 4) Power, 5) Health, 6) Safety, Security & Trust and 7) Quality of Life. The domains organise and aggregate over 30 individual indicators into the two summary measures of gender equality. The indices capture female disadvantage and achievement in 270 regions (NUTS2 level). The latest available data for the indicators have been retrieved from the European Union Statistics on Income and Living Conditions (EU SILC) microdata, European Union Labour Force Survey (EU LFS), Structure of Earnings Survey (EU SES), EIGE Gender Statistics Database and the Gallup World Poll microdata. Most data points refer to 2017.

The two indices reveal significant differences within Member States. For example, women in capital regions tend to achieve more, but also tend to feel less secure and safe than in the other regions in the country.

These two dimensions of gender equality are also linked to regional development. In more developed regions women tend to achieve more and be at a lower disadvantage. While the high level of female achievements in many of the Nordic regions does not come as a surprise, the pronounced female disadvantage in less developed regions is striking. In regions with low incomes and low employment rates, any additional income or job should be a big benefit. But exactly in these regions, women are far less likely to work, have less free time and they are also at more of a disadvantage in terms of education and training.

Political positions in less developed regions are predominantly held by men. This means female experiences are less likely to be considered when designing public policies. Having more women in power is also linked to a higher quality of government, which in turn helps to boost innovation, growth and quality of life.

Reducing the disadvantage women face will help everyone. It would increase what women can achieve, boost development and income, improve the quality of government and enhance life satisfaction.

## 1 Introduction – policy context

Comparing to the rest of the world the EU is a good address for women. Equality between women and men is and has always been in fact one of the core values of the European Union (EU). It goes back to the beginning of European Communities, in 1957, when the principle of equal pay for equal work became part of the Treaty of Rome (Article 157) [1]. Over the last 60 years, European legislation and changes to the Treaties have reinforced this core value and its implementation in the EU; *"In all its activities, the Union shall aim to eliminate inequalities and to promote equality, between men and women"* (Article 8) [1]. Equality between women and men is also one of the founding values of the European Union (Articles 2,3) [1] and is also included in the EU Charter of Fundamental rights (Article 21) [2] as a right for EU citizens and residents in front of EU law that any discrimination based on inter alia gender is prohibited.

Additionally to the legally binding directives of gender equality, the European Pact for Gender Equality (2011-2020) [3] and the Strategic Engagement for Gender Equality (2016-2019) [4] represent a clear commitment to promote gender equality within the EU and a list of measures to achieve this objective on EU, Member State, regional or local level. The Strategic engagement establishes the European Commission's work programme in terms of gender equality for the 2016-2019 period and outlines the commitments to promote it in all its policies as well as into EU funding programmes. The following priority areas for action are included in the Strategic Engagement:

1. Increasing female labour market participation and equal economic independence
2. Reducing gender pay, earnings and pension gaps and thus fighting poverty among women
3. Promoting equality between women and men in decision-making
4. Combating gender-based violence and protecting and supporting victims
5. Promoting gender equality and women's rights across the world.

Progress in gender equality is monitored every year and presented in the European Commission's "Report on Equality between women and men" [5]. The annual report includes key trends, actions and achievements by the Commission and the Member States. The Strategic Engagement will end in 2019 with the last monitoring exercise. The Commission will thereafter evaluate the progress made over the reference period and set priorities for the future.

Only one year is left of the 10-year Europe 2020 strategy [6] proposed by the European Commission in year 2010. Strengthening gender equality is essential in order to reach the targets of the strategy. Two out of the five headline targets focus on the increase of employment and reduction of poverty. For reaching the targets, it is necessary to enhance women's labour market participation and to tackle women's high exposure to poverty.

In 2017 the European Commission adopted the Work-Life Balance initiative [7] aimed at tackling women's under-representation in the labour market by modernising the current EU legal and policy frameworks for family-related leave, flexible working arrangements and formal care services and reducing economic disincentives for second-earners to work.

Gender equality is also a key element of the recently adopted European Pillar of Social Rights [8]. It states "equality of treatment and opportunities between women and men must

be ensured and fostered in all areas” and sets out key principles and rights to support fair and well-functioning labour markets and welfare system. It was proclaimed jointly by the three EU Institutions (European Commission, European Parliament, and Council) in November 2017.

Apart from a harmonious, balanced and sustainable development of the EU, the European Commission, with the aid of the European Structural Funds, wants to encourage a high level of employment and equality of opportunity between men and women. EU Cohesion Policy [9] targets all regions and cities within the EU and has the objective to improve the economic, social and territorial cohesion throughout the whole union. EU regional policy goes back to the beginning of the European Communities, in 1957 and the Treaty of Rome [1], where regional differences were mentioned. Cohesion Policy is in fact EU’s main investment policy and complements other policies concerning *e.g.* agriculture, education, employment, energy, environment, single market, research and innovation. Almost one third of the total EU budget has been allocated to Cohesion Policy for this programming period (2014-2020), 351.8 billion Euro. EU Cohesion Policy goes hand in hand with the Europe 2020 strategy [6], as the former provides the investment framework to meet the defined goals.

The Cohesion Policy is delivered through three main funds:

- I) European Regional Development Fund (ERDF)
- II) European Social Fund (ESF)
- III) Cohesion Fund

The three Cohesion Policy funds together with the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF), create the European Structural and Investment (ESI) funds. For the current programming period (2014-2020) there are eleven thematic objectives the Cohesion Policy prioritizes to help deliver the Europe 2020 targets.



**Figure 1.** Cohesion Policy priorities

Source: [https://ec.europa.eu/regional\\_policy/en/policy/how/priorities](https://ec.europa.eu/regional_policy/en/policy/how/priorities)

Cohesion Policy priorities concerning quality employment, promoting social inclusion, combating poverty and any type of discrimination, investing in education, training and lifelong learning (priorities 8-10) are highly relevant to gender equality and coincide with the main priorities for the ESF. Regions are categorised according to their GDP<sup>1</sup> in three categories, as more developed, transition or less developed. Depending on the category, the Cohesion Policy funds (I-III) can provide from half up to 85% of the total financing of a project. Most of the Cohesion Policy funding is dedicated to the less developed regions. Out of the 276 NUTS 2 regions (v.2013) 72 (26%) are classified as less developed, 50 (18%) as transition and the remaining 154 (56%) as more developed.

The objective of this study is to monitor gender equality at regional level. The multidimensional nature of gender equality means that it cannot be captured by a single indicator. Thus, a framework of relevant indicators is developed, which are combined into composite indicators – aggregations that make large and multifaceted data sets accessible by summarising patterns across a number of indicators and by providing the ‘big picture’ overview. Composite indicators are increasingly recognised as useful tools in policy analysis and public communication as they are easy to interpret.

The EU Regional Gender Equality Monitor is built on a robust methodology, based on the 10-step guide on building composite indicators developed by the European Commission’s Joint Research Centre (JRC) and the Organisation for Economic Cooperation and Development (OECD) [45].

<sup>1</sup> Cohesion Policy categories: Less Developed regions as GDP/head less than 75% of EU average (year 2014), transition regions between 75% to 90% of EU average and more developed regions above 90% of EU average



## 2 Indices measuring gender equality

Many indices that measure gender equality at international level already exist and they have been developed from several theoretical perspectives including human development, women's empowerment and gender equality. Some well-known indices are listed in Table 1.

**Table 1.** Overview of indices measuring gender equality at global and European level

Nr	Index	Source
1	Gender Development Index (GDI)	UNDP (1995)
2	Gender Empowerment Measure (GEM)	UNDP (1995)
3	Relative Status of Women (RSW)	Dijkstra and Hanmer (2000)
4	Global Gender Gap Index (GGGI)	World Economic Forum (2006)
5	Gender Equity Index	Social Watch (2007)
6	Social Institutions and Gender Index (SIGI)	OECD (2009)
7	European Union Gender Equality Index	Plantenga et al. (2009)
8	Gender Inequality Index (GII)	UNDP (2010)
9	Inequality-adjusted Human Development Index (IHDI)	UNDP (2010)
10	Gender Relative Status (GRS) and Women Disadvantage Index (WD)	Beneria and Permanyer (2010), Permanyer (2013)
11	European Gender Equality Index (EGEI)	Bericat (2011)
12	Gender Gap Measure (GGM)	Klasen and Schüler (2011)
13	Gender Equality Index (GEI)	European Institute of Gender Equality (2013)
14	SDG Gender Index	Equal Measures 2030 (2018)

The starting point for measuring gender equality through indices at global scale were the two UNDP's Human Development Report (HDR) gender indices [10] released in 1995, the **Gender-related Development Index (GDI)** and the **Gender Empowerment Measure (GEM)**. The **GDI** considered inequalities by gender in the three Human Development Index (HDI) dimensions; long and healthy living, knowledge and standard of living. The **GEM** focused on political participation (measured by women's shares of parliamentary seats), economic participation (shares of high-level and professional positions) and power over economic resources (income gaps). These ground-breaking indices received attention but also critics related to their methodology [11]. The **GEM** was abolished in the year 2010 version of HDR [12], with the introduction of two new gender related indices; the **Gender Inequality Index (GII)** and the **Inequality-adjusted Human Development Index (IHDI)**. The framework of **GII** includes three domains; health, empowerment and labour market. **GII** mixes absolute women-specific indicators (the first two indicators, Maternal Mortality Ratio (MMR) and Adolescent Birth Ratio (ABR)) and relative "women vs men" indicators (the other indicators) and completely disregards men's health status. MMR and ABR show low within EU28 variation compared to other regions in the world. The maximum welfare level that should be achieved when women and men score equally well in all dimensions is not specified either. The **IHDI** is distribution-sensitive average level of

Human Development by estimating inequality in the dimensions of the HDI; long and healthy life, knowledge and decent standard of living.

In 2006 the World Economic Forum released the **Global Gender Gap Index [13] (GGGI)**, a framework for capturing the magnitude of gender-based disparities and tracking their progress over time. The framework comprises 14 indicators distributed over four domains; economic participation and opportunity, education attainment, health and survival and political empowerment. Some indicators may not provide an adequate tool for the European Member States as they are relevant at world level but not at EU level. An example is the indicator of literacy rate which is not relevant in an EU context. The Literacy Rate is defined as the percentage of population aged 15 years+ who can both read and write and understand a short simple statement on his/her everyday life. In EU 28 the literacy rate for most countries (20 out of 28) more than 99%. These values may be compared with the minimum values in the world, Literacy Rate in Niger is only 19% and in South Sudan 27%. The latest edition of the **GGGI** was released in December 2018 and benchmarks 149 countries.

The **Social Institutions and Gender Index (SIGI) [14][15]** is a composite measure of discrimination against women and girls in social institutions, developed by the OECD Development Centre originally from 2009 but with a major revision in 2014. The latest version was launched on December 2018, it covers 180 countries and expands into four dimensions of discriminatory social institutions, covering major socio-economic areas that affect women's lives; discrimination in the family, restricted physical integrity, restricted access to productive and financial resources and restricted civil liberties. The SIGI indicators cover topics such as unequal inheritance rights, child marriage, violence against women, and unequal land and property rights. It provides a strong evidence base so that advocates can effectively address the discriminatory institutions that restrain progress on gender equality and women's empowerment and it is a useful tool for policy makers to assess their effects on gender equality in social institutions.

In 2013 the European Institute for Gender Equality (EIGE) launched the **Gender Equality Index (GEI) [16]**. The index has been updated biannually, with the last version from 2017. From 2019 it will be updated annually. The index has been developed to assess the levels of gender equality across the Member States of the European Union based on the EU policy framework. It is hierarchically structured and is composed of six core domains (work, money, knowledge, time, power and health) and each core domain is sub-divided into two to three sub-domains (14 sub-domains). Further, each sub-domain is divided into up to three indicators that are disaggregated by sex. In total there are 31 indicators across the sub-domains in the last version of the index. **GEI** provides a more comprehensive framework of gender equality, in line with the EU's framework on gender equality for both women and men. No distinction is made as to the direction of the gender 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. A couple of years before the **GEI** was published another metric at European level was developed, the **European Union Gender Equality Index [17]** starting from a perspective of women's empowerment and composed of four dimensions; equal sharing of paid work, money, decision-making power and time. During the same period **the European Gender Equality Index (EGEI) [18]** was published, which is composed of 18 indicators and three dimensions (education, work and power).

A newly published index is Equal Measures 2030's **SDG Gender Index [19]** launched in September 2018. Though still at pilot stage, the Index aims at tracking progress on the gender equality aspects of the SDGs. It includes many of the official gender-related SDG

indicators but at the same time, it goes beyond them to look at the full range of instrumental issues that shape the lives of girls and women. Currently it covers six countries, Colombia, El Salvador, India, Indonesia, Kenya and Senegal, and 12 of the 17 Goals. In 2019, the Global edition will be launched covering more countries.

Alongside the indices developed by international organisations listed above, there are several indices developed by researchers but which are not usually updated regularly. The **Relative Status of Women (RSW)** [20] developed by Dijkstra and Hanmer, is an arithmetic average of the female to male disparity ratios in the three HDI dimensions. The **Gender Gap Measure (GGM)** [21] by Klasen and Schüler, uses instead of an arithmetic average the geometric average of the female to male disparity ratios and they also provide a capped version of the index, by replacing the female to male ratio of any indicator that is greater than one by one. So the capped version of the index will always be less than or equal to the uncapped index and they conclude that the capped version is preferred since it looks at female disadvantage. In the same paper, they also rebuild the **GEM**, denoted as **GEM3**, by taking the geometric average of the female to male ratios of achievements in the three dimensions. The **Gender Relative Status (GRS)** and **Women Disadvantage (WD) indices** [22][23] by Beneria and Permanyer, are similar to Klasen and Schüler's uncapped and capped **GGM** metrics.

### 3 The Regional Gender Equality conceptual framework

The objective of this study has been to develop a tool for monitoring gender equality at regional level. Gender equality is multidimensional nature and cannot be captured by one single indicator. The method that has been taken is to develop a framework of relevant indicators which are combined into a composite indicator. The relevant indicators are deriving from priority areas in the Strategic Engagement for Gender Equality (2016-2019), the Cohesion Policy (2014-2020) and the Work-Life Balance initiative. The first three priority areas from the Strategic Engagement have been addressed and they represent equal economic independence of women and men (area 1), equal pay for work of equal value (area 2) and equality in decision making (area 3). The fourth priority area, ending gender-based violence should have been included in the framework but has been omitted due to lack of suitable data (see 3.9). The fifth priority about promoting gender equality beyond the EU is not relevant to this framework since it covers EU regions. Cohesion Policy (2014-2020) priorities concerning quality employment (priority 8), promoting social inclusion, combating poverty and any type of discrimination (priority 9), investing in education, training and lifelong learning (priority 10) are likewise included.

Moreover the framework of the Gender Equality Index (GEI) [24] developed by EIGE has been used as an inspiration to the current regional framework. The GEI framework is composed of six core domains (Work, Money, Knowledge, Time, Power and Health). For this reason, the two frameworks share domains but they also differ. Since the current framework focuses on regions, many indicators have been altered due to lack of data or of non-relevance. Two GEI domains have been combined into one (Work and Money). Two more domains that do not make part of the EIGE framework have been included and they are; Safety & Security and Life Quality. It is important to monitor the perceptions about the quality of life and the feelings of safety and security of women as part of the way to a more gender-equal society. The Regional Gender Equality framework thus consists of seven domains relevant to EU policy. The domains are the following: Work & Money, Knowledge, Time, Power, Health, Safety & Security and Life Quality.



**Figure 2.** Regional Gender Equality conceptual framework

For each domain, four to six individual indicators have been selected and in total, there are 35 indicators in the framework. All indicators are so called outcome based as they measure results (e.g. employment rate) rather than inputs (e.g. length of parental leave, which is a policy input indicator). Input indicators measure policy choices or investments believed or known to lead to an outcome while outcome indicators directly measure the outcomes of the investments. Annex I contains detailed information on the Regional Gender Equality conceptual framework.

Both official statistics and perception-based data (see Section 3.8) are used in the framework. The data sources are from Eurostat, the European Union Labour Force Survey<sup>2</sup> (EU LFS), European Union Structure of Earnings Survey<sup>3</sup> (EU SES), UNESCO OECD Eurostat (UOE) joint data collection<sup>4</sup>, the European Union Statistics on Income and Living Conditions<sup>5</sup> (EU-SILC), the GALLUP World Poll<sup>6</sup> and the EIGE Gender Statistics Database<sup>7</sup>. Most data points are deriving from 2017.



**Figure 3.** Data sources of the Regional Gender Equality Monitor framework

The framework is applied at NUTS 2<sup>8</sup> level since most indicators are available at this NUTS level and regions eligible for support from cohesion policy are also defined at this NUTS level. 270<sup>9</sup> out of 276 NUTS 2 regions are comprised in the study. Few indicators in the

<sup>2</sup> <https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>

<sup>3</sup> <https://ec.europa.eu/eurostat/web/microdata/structure-of-earnings-survey>

<sup>4</sup> [https://ec.europa.eu/eurostat/statistics-explained/index.php/UNESCO\\_OECD\\_Eurostat\\_\(UOE\)\\_joint\\_data\\_collection\\_%E2%80%93\\_methodology](https://ec.europa.eu/eurostat/statistics-explained/index.php/UNESCO_OECD_Eurostat_(UOE)_joint_data_collection_%E2%80%93_methodology)

<sup>5</sup> <https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions>

<sup>6</sup> <https://www.gallup.com/analytics/232838/world-poll.aspx>

<sup>7</sup> <https://eige.europa.eu/gender-statistics/dgs>

<sup>8</sup> NUTS 2013 classification has been used. Commission Regulation (EU) No 868/2014 of 8 August 2014 amending the annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS) <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32014R0868>

<sup>9</sup> Regions not present in the study are the Finnish region Åland (FI20, the region with the smallest population) and the five French overseas regions (Guadeloupe FRA1, Martinique FRA2, Guyane FRA3, La Réunion FRA4 and Mayotte FRA5) due to lack of data.

framework are measured at national scale. In the analysis they are down scaled to regional level<sup>10</sup>.



### 3.1 Domain 1: Work & Money

The domain of Work & Money measures first, the extent to which women and men can benefit from equal access to employment and good working conditions and second, the gender inequalities in access to financial resources. It combines five indicators: the full-time and part-time employment rate excluding involuntary part-time work, the unemployment rate, the duration of working life, the tertiary educated people employed in Science and Technology (S&T) and the mean annual earnings in euro.

**Table 2.** Regional Gender Equality Monitor: List of indicators in the Work & Money domain

Domain	Nr	Variable	Description	Unit	Data Source	Last available year
1. Work & Money	1	Full-time and part-time employment rate (15+population) excluding involuntary part-time work	Full-time and part-time employment rate (15+population) excluding involuntary part-time work	(%)	Eurostat - EU LFS, Eurostat calculations according to JRC's request	2016
	2	Unemployment rate	The unemployment rate shows unemployed persons as a percentage of the economically active population. Unemployed persons comprise persons aged 15-74 who were without work during the reference week, but available for work at the time and actively seeking employment.	(%)	Eurostat - EU LFS [fst_r_fu3rt]	2017
	3	Duration of working life	The duration of working life indicator measures the number of years a person aged 15 is expected to be active in the labour market throughout his/her life. This indicator is calculated with probabilistic model combining demographic data (Life tables available from Eurostat to calculate the survival functions) and labour market data (Labour Force Survey activity rates by single age group). Exact calculation methodology can be requested from Eurostat.	Years	Eurostat - EU LFS [fsi_dw_a]	2016
	4	Persons with tertiary education, employed in science & technology (%)	The share of persons aged 25 - 64, with tertiary education (ISCED levels 5 and 6) that are employed in a Science & Technology occupation (HRSTO) – ISCO major groups: 2 (professionals) and 3 (technicians) out of total employment 25 -64.	(%)	JRC elaboration from requested Eurostat - EU LFS data	2017
	5	Mean annual earnings - NACE Rev. 2, B-S excluding O	Mean annual earnings by sex, age and occupation - NACE Rev. 2, B-S excluding O	Currency: Euro	Eurostat - [earn_ses14_28]	2014

Gender equality in employment is of great importance for women's economic independence, social inclusion, health and well-being. Still, gender inequality, continues to structure the world of both unpaid and paid work. Removing barriers in access to the labour market also means facilitating the distribution of care responsibilities and fair remuneration [16]. Reducing gender discrimination is crucial for smooth, sustainable and inclusive growth. Gender equality in employment gives women more decision-making power and enhances family well-being: they will typically invest more of their income than men in the health, nutrition and education of their children. Studies demonstrate that women's ability to earn and take part in financial decisions increases families' resilience to economic shocks [25].

<sup>10</sup> Indicator 8: Tertiary students in STEM fields is representative at nations scale , since higher education is held by colleges, technical high schools and universities, national data are therefore representative.

Equal access to the labour market, fair working conditions and work-life balance have become key areas of priority in current employment and social policies in the EU. The European Pillar of Social Rights establishes gender equality as one of its key principles and encourages the incorporation of gender mainstreaming in the main areas of the Pillar, including active support to employment, secure and adaptable employment, fair wages, work-life balance and social dialogue [26]. Women's access to decent work and to income not only improves their agency over their own lives, but can also reduce poverty and improve health and educational outcomes for them and their families.



### **3.2 Domain 2: Knowledge**

The domain of knowledge measures gender inequalities in educational attainment, participation in education and training, gender segregation and leavers from education. It is measured by five indicators: the percentage of women and men tertiary graduates, the participation of women and men in formal and non-formal education and training, the percentage of women and men among students in Science, Technology, Engineering, and Mathematics (STEM) fields, the early leavers from education and training and the young people neither in employment nor in education and training (NEET).

**Table 3.** Regional Gender Equality Monitor: List of indicators in the Knowledge domain

Domain	Nr	Variable	Description	Unit	Data Source	Last available year
2. Knowledge	6	Graduates of tertiary education (% 25-64 population)	Graduates of tertiary education. This rate shows the tertiary education graduates as a percentage of the 25-64 population. All stages (ISCED levels 5 to 8) of tertiary education are used.	(%)	Eurostat - [edat_ifse_04]	2017
	7	People participating in formal or non-formal education and training (% 25 - 64 population)	The share of persons aged 25 - 64 that are participating/participated in formal or non-formal education and training the last 4 weeks. Percentage of people participating in formal or non-formal education and training, out of total population of 15+. Lifelong learning encompasses all purposeful learning activity, whether formal, non-formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence.	(%)	Eurostat - [trng_ifse_04]	2017
	8	Tertiary students in STEM fields	The share of tertiary students (ISCED 5-6) in STEM fields. The fields of education considered relevant, are: EF4 Science, mathematics and computing EF5 Engineering, manufacturing and construction EF6 Agriculture and veterinary.	(%)	Unesco/OECD/Eurostat (UOE) - [educ_enr5]	2012
	9	Early leavers from education and training	Early leavers from education and training denotes the percentage of the population aged 18 to 24 having attained at most lower secondary education and not being involved in further education or training. The numerator of the indicator refers to persons aged 18 to 24 who meet the following two conditions: (a) the highest level of education or training they have completed is ISCED 2011 level 0, 1 or 2 (ISCED 1997: 0, 1, 2 or 3C short) and (b) they have not received any education or training (i.e. neither formal nor non-formal) in the four weeks preceding the survey. The denominator in the total population consists of the same age group, excluding the respondents who have not answered the questions 'highest level of education or training successfully completed' and 'participation in education and training'.	(%)	Eurostat - [edat_ifse_14]	2016
	10	Young people neither in employment nor in education and training	Young people neither in employment nor in education and training (NEET) corresponds to the percentage of the population 15 to 24 years who is not employed and not involved in further education or training. The numerator of the indicator refers to persons who meet the following two conditions: they are not employed and they have not received any education or training in the last four weeks. The denominator in the total population consists of the 15 to 24 years persons, excluding the respondents who have not answered the question 'participation in regular (formal) education and training'.	(%)	Eurostat - [edat_ifse_22]	2017

Education and training provide women with knowledge and skills that promote their participation in society, and in secure and better jobs. There are close links between girls' education and social and economic development, including poverty reduction. Education is a driver for social change and it can be a powerful tool for achieving gender equality, social inclusion and the elimination of poverty. Tackling gender stereotypes and gender segregation is also central to the modernisation of the European higher education system [27] as the connection between knowledge, skills and the labour market needs to be improved.



### 3.3 Domain 3: Time

The domain of time measures how many women and men engage in social activities. Concretely, it measures gender gaps in women's and men's engagement in sport, cultural or leisure activities outside of their home, combined with their engagement in voluntary and



charitable activities. It combines the indicators of people regularly participating in leisure activities, people that donated money to a charity, persons that helped a stranger who needed help and persons that volunteered time to an organization.

**Table 4.** Regional Gender Equality Monitor: List of indicators in the Time domain

Domain	Nr	Variable	Description	Unit	Data Source	Last available year
3. Time	11	Regularly participate in a leisure activity (16+ population)	People doing sporting, cultural or leisure activities outside of their home, at least daily or several times a week (16+ age) as a share of total number of people of this age group.	(%)	JRC elaboration from EU-SILC microdata EU-SILC: PD060 (participation in a leisure activity)	2015 (3 yrs avg)
	12	Donated money to a charity	Share of people (15+ age) that donated money to a charity in the past month.	(%)	JRC elaboration from Gallup World Poll microdata WP108 (Donated money to a charity)	2017 (4 yrs avg)
	13	Helped a stranger/ someone you didn't know, who needed help	Share of people (15+ age) that helped a stranger or someone they didn't know who needed help in the past month.	(%)	JRC elaboration from GALLUP World Poll data (WP110)	2017 (4 yrs avg)
	14	Volunteered the time to an organization	Share of people (15+ age) that volunteered time to an organization in the past month.	(%)	JRC elaboration from GALLUP World Poll data (WP109)	2017 (4 yrs avg)

There are big differences in the time women and men devote to caring for themselves or caring for others. Moreover, the share of time devoted to work, whether this is paid or unpaid, also impacts on an individual's capacity to participate in social, personal, leisure and civic activities [28].



### 3.4 Domain 4: Power

The domain of power measures gender equality in decision-making positions in the political field. It consists of the share of ministers in national governments, share of members of national parliaments, share of members of regional assemblies and share of members of regional executives. Eight<sup>11</sup> Member States do not have regional assemblies and half<sup>12</sup> of the Member States do not have regional executives. The regional assemblies and executives exist in diverse territorial units, from NUTS 1 to NUTS 3 regions. For the Member States where regional assemblies and executives do not exist, national figures from parliaments have been used.

<sup>11</sup> BG, CY, EE, IE, LT, LU, MT, SI

<sup>12</sup> BG, CY, DK, EE, FR, HU, IE, LV, LT, LU, MT, RO, SI, SK

**Table 5.** Regional Gender Equality Monitor: List of indicators in the Power domain

Domain	Nr	Variable	Description	Unit	Data Source	Last available year
4. Power	15	Share of Ministers (%)	Share of all ministers (junior and senior) in national governments. The national government is the executive body with authority to govern a country or a state. The Cabinet is defined as a body of high-ranking members of the government, typically representing the executive branch and formed of senior ministers. In some cases, where there are no junior ministers, the national government is the Cabinet. It may also be referred to as the Council of Ministers, an Executive Council or an Executive Committee. Senior ministers are members of the government who have a seat in the cabinet or council of ministers (count includes the prime minister). Junior ministers are members of the government who do not have a seat in the cabinet.	(%)	Gender Statistics Database - European Institute of Gender Equality	2017
	16	Share of members of Parliament (%)	Share of all members (including president/leader) in national parliaments. The national parliament is the national legislative assembly. In a bicameral system, the parliament consists of two chambers/houses - a lower house and an upper house. In a unicameral system, there is only a single house of parliament.	(%)	Gender Statistics Database - European Institute of Gender Equality	2017
	17	Share of members of Regional Assemblies (%)	Share of all members (including president/leader) in regional assemblies. An assembly is the representative assembly of a region (i.e. regional authority) which is composed of popularly elected representatives of constituent self-governing regions. Regional parliaments, regional councils and regional assemblies are all treated as being equivalent. Eight countries do not have regional assemblies (BG, CY, EE, IE, LT, LU, MT, SI).	(%)	Gender Statistics Database - European Institute of Gender Equality	2017
	18	Share of members of Regional Executives (%)	Share of all members (including president/leader) in regional executives. A regional executive is a person or a body exercising executive functions on behalf of a region (regional authority). 14 countries do not have regional executives (BG, CY, DK, EE, FR, HU, IE, LV, LT, LU, MT, RO, SI, SK).	(%)	Gender Statistics Database - European Institute of Gender Equality	2017

Women's political participation is a fundamental feature of stable and transparent democracies. Women become more engaged in decision-making and government becomes more accountable to women [29]. Their access to political power is a first step towards laws and policies to safeguard the rights of disadvantaged people, particularly girls and women. Measuring their participation in political life, therefore, charts progress on social norms, as well as the fundamental right to participate. The EU's policy commitment to gender equality in decision-making can be found in a number of strategic documents. In the European Pact for Gender Equality 2011-2020, the Council specifically seeks to "*promote women's empowerment in political and economic life*" [30]. In practice, these overarching policy aims have served as a foundation for more concrete actions, for example, binding quotas for political decision-making positions in some Member States.



### 3.5 Domain 5: Health

The domain of health measures the health status and access to health services as they can be acknowledged as aspects of gender equality. It combines five indicators: self-perceived health, health problems, life expectancy, death rate caused by malignant neoplastic and cardiovascular diseases, population without unmet needs for medical examination and for dental examination.

**Table 6.** Regional Gender Equality Monitor: List of indicators in the Health domain

Domain	Nr	Variable	Description	Unit	Data Source	Last available year
5. Health	19	Self-perceived health, good or very good (% population)	Percentage of people (16+ age) assessing their health as "Very good" or "Good" out of total. The concept is operationalized by a question on how a person perceives his/her health in general using one of the answer categories very good/good/ fair/bad/very bad.	(%)	JRC elaboration from EU-SILC microdata EU-SILC: PH010 (General health)	2016 (3 yrs avg) [2015 for IE, IT, LU, MT (3 yrs avg)]
	20	Health problem that prevents you from doing any of the things people your age normally can do	Percentage of people (15 + age) that claim having health problems that prevents them from doing any of the things people their age normally can do	(%)	JRC elaboration from GALLUP World Poll data (WP23)	2017 (4 yrs avg)
	21	Life expectancy in absolute value at the age of <u>30 years old</u>	Life expectancy at 30 years old is the mean number of years still to be lived by a person who has reached a 30 years of age, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying).	Years	Eurostat - [demo_r_mlfexp]	2016
	22	Death rate caused by malignant neoplastic and cardiovascular diseases	The (age-) standardised death rate is a weighted average of age-specific mortality rates. The weighting factor is the age distribution of a standard reference population. The standard reference population used is the European standard population (see annex European standard population - revision 2012) as defined by Eurostat in 2012. The new European Standard Population (ESP) is the unweighted average of the individual populations of EU-27 plus EFTA countries in each 5-years age band (with the exception of under 5 and the highest age-group of 95+). As causes of death the categories ICD10 C_1 are used.	(%)	Eurostat - [hlth_cd_ysdr2]	2015 (3 yrs avg)
	23	Population without unmet needs for medical examination (% population)	Self-reported unmet needs for medical examination. The variables refer to the respondent's own assessment of whether he or she needed examination or treatment, but did not have it. Percentage of persons "No unmet needs to declare", Medical care: refers to individual health care services (medical examination or treatment excluding dental care) provided by or under direct supervision of medical doctors or equivalent professions according to national health care systems.	(%)	JRC elaboration from EU-SILC microdata EU-SILC: PH040 (Unmet need for medical examination or treatment)	2016 (3 yrs avg) [2015 for IE, IT, LU, MT (3 yrs avg)]
	24	Population without unmet needs for dental examination (% population)	Self-reported unmet needs for dental examination. The variables refer to the respondent's own assessment of whether he or she needed the examination or treatment, but did not have it. Percentage of persons "No unmet needs to declare". Dental care: refers to individual health care services provided by or under direct supervision of stomatologists (dentists). Health care rovided by orthodontists is included.	(%)	JRC elaboration from EU-SILC microdata EU-SILC: PH060 (Unmet need for dental examination or treatment)	2016 (3 yrs avg) [2015 for IE, IT, LU, MT (3 yrs avg)]

Good health is a major resource for social, economic and personal development and an important dimension of quality of life. Gender inequalities often determine who suffers the heaviest burden of disease and who can access healthcare. Health is shaped by political, economic, social, cultural, environmental, behavioural and biological factors [31], which are all gender related. A gender perspective is important for promoting healthy lifestyles, investing in prevention of disease and improving access to and the quality of healthcare.



### 3.6 Domain 6: Safety, Security & Trust

The domain of Safety, Security and Trust measures the perceptions of people concerning their personal safety and security in the areas where they live and the trust they feel towards their family, social circle and authorities. It consists of the indicators: Share of people that feel safe walking alone at night, share of people that had money or property stolen, share of people that had been assaulted or mugged, share of people that have

relatives or friends to count on for help, share of people that believe women are treated with respect and dignity and share of people that voiced their opinion to a public official.

**Table 7.** Regional Gender Equality Monitor: List of indicators in the Safety, Security & Trust domain

Domain	Nr	Variable	Description	Unit	Data Source	Last available year
6. Safety, Security and Trust	25	Safe walking alone at night in the city/ area where you live	Share of people (15 + age) that feel safe walking alone at night in the city or area where they live.	(%)	JRC elaboration from GALLUP World Poll data (WP113)	2017 (4 yrs avg)
	26	Money or property stolen	Share of people (15 + age) that had money or property stolen from them or another household member the last year.	(%)	JRC elaboration from GALLUP World Poll data (WP117)	2017 (4 yrs avg)
	27	Assaulted or mugged	Share of people (15 + age) that had been assaulted or mugged the last year.	(%)	JRC elaboration from GALLUP World Poll data (WP118)	2017 (4 yrs avg)
	28	Relatives/ friends you can count on to help you	Share of people (15 + age) that have relatives or friends to count on for help whenever they are in need them, or not?	(%)	JRC elaboration from GALLUP World Poll data (WP27)	2017 (4 yrs avg)
	29	Women in this country are treated with respect and dignity	Share of people (15 + age) that believe that women in their country are treated with respect and dignity.	(%)	JRC elaboration from GALLUP World Poll data (WP9050)	2017 (4 yrs avg)
	30	Voiced your opinion to a public official	Share of people (15 + age) that voiced their opinion to a public official the last month.	(%)	JRC elaboration from GALLUP World Poll data (WP111)	2017 (4 yrs avg)

Lack of safety and security for women is a very significant barrier to social, economic and political development. Men are far more likely than women to report feeling safe. Gender gaps in perceptions of safety show how women face restrictions on mobility, access to public spaces, transport and their ability to decide where and what hours to work. Gender gaps in perceptions of physical safety may also point to underlying issues with institutions and access to justice if reporting structures for acts of violence against women are lacking [32].

Eradicating gender-based violence against women is a priority of the EU and its Member States, which have taken a range of actions, in particular legal and policy measures, to criminalise violence against women and to protect and support women who have experienced it (see section 3.9).



### 3.7 Domain 7: Life Satisfaction & Quality

The last domain of the framework deals with the quality of life and the life satisfaction of people in the various EU regions. It tries to capture the level of wellbeing using the indicators: percentage of people that agree that friends and family give them positive energy every day, percentage of people that feel well-rested, percentage of people that smile or laugh a lot, percentage of people that experience enjoyment and percentage of people that are satisfied with their life.

**Table 8.** Regional Gender Equality Monitor: List of indicators in the Life Satisfaction & Quality domain

Domain	Nr	Variable	Description	Unit	Data Source	Last available year
7. Life satisfaction/quality	31	Your friends and family give you positive energy	Share of people (15 + age) that agree that friends and family give them positive energy every day.	(%)	JRC elaboration from GALLUP World Poll data (WP14445)	2017 (4 yrs avg)
	32	Feel well-rested	Share of people (15 + age) that felt well-rested yesterday.	(%)	JRC elaboration from GALLUP World Poll data (WP60)	2017 (4 yrs avg)
	33	Smile or laugh a lot	Share of people (15 + age) that smile or laugh a lot yesterday.	(%)	JRC elaboration from GALLUP World Poll data (WP63)	2017 (4 yrs avg)
	34	Experience enjoyment	Share of people (15 + age) that experienced enjoyment yesterday.	(%)	JRC elaboration from GALLUP World Poll data (WP67)	2017 (4 yrs avg)
	35	Life satisfaction	Share of people (15 + age) that feel very satisfied with their life.	(%)	JRC elaboration from GALLUP World Poll data (WP16)	2017 (4 yrs avg)

The focus is on well-being as a way to monitor the societal progress and quality of life at individual level. The WHO European policy framework for health and well-being, Health 2020 [33], recognizes well-being as an intrinsic value. Moreover, monitoring the life satisfaction and life quality of women serves as a summary indicator of the progress towards equality. A person generally is satisfied when she has reached a certain quality in her life in all dimensions mentioned before, be that health, education, security, work and economic independence or power.

### 3.8 Perception based indicators

Almost half of the indicators used in our framework are built on perception-based data (mostly from the Gallup World Poll database). Indicators of perceptions, asking people their opinions, could help motivate public debate and hold policy-makers accountable [34]. Conventional forms of data, household surveys, national economic accounts, institutional records, and so on, struggle to capture detailed information on the lives of women and girls. Key strengths of perceptions data are their timeliness and frequency; such attributes could make them very useful as warning signals for policy intervention. Moreover, they measure complementary aspects in areas related to gender, violence and governance. Analysing gaps between perceptions and objective indicators can improve understanding of how people are dissatisfied, or where there are implementation gaps in the policies intended to tackle these areas. Possible constrains could be that reliability of the obtained information should be ensured and that such data are too vague to be useful for policy reform (although frequently used as advocacy tools). Nowadays, more and more frameworks incorporate this kind of data in the area of the SDGs, Gender, Security and Governance [15], [35].

### 3.9 Violence against women

A major public health problem is violence against women, especially intimate partner violence and sexual violence. Global estimates published by WHO [36] show that more than

one third of women worldwide have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence in their lifetime. This figure is also corresponding with the results from the first EU-wide survey [37] about violence against women in 2012, "one in three women has experienced some form of physical and/or sexual assault since the age of 15". Women and girls in the European Union (EU) experience persistent gender discrimination and gender-based violence [38]. The European Union and all the Member States have committed themselves in the Treaty of Lisbon (article 19) [39] *"to combat all kinds of domestic violence. The Member States should take all necessary measures to prevent and punish these criminal acts and to support and protect the victims."* The domain of violence against women should have been in the framework but due to lack of regional data it was not possible to include it. Marginally, some aspects are covered in the Safety, Security and Trust domain as it is monitored the perception of safe walking alone or the opinions whether women are treated with respect and dignity.

From October 2017 the global #MeToo movement has drawn attention to the extent of sexual assault and sexual harassment worldwide and has sparked discussion about what is being done to prevent and combat this problem in Europe. In December 2017, the European Parliament issued resolution [40] on combating sexual harassment and abuse in the EU, condemning all forms of sexual violence and physical or psychological harassment and recognising that such acts constitute a systematic violation of fundamental rights. The global attention to this movement has had a strong effect in the condemnation of violence and sexual harassment against women. For example the Nobel Peace Prize 2018 was awarded jointly to Denis Mukwege and Nadia Murad "for their efforts to end the use of sexual violence as a weapon of war and armed conflict" and for the implications in society of the cancelled Nobel Prize in Literature 2018.

### **3.10 Linkage between the SDGs and the Regional Gender Equality Monitor framework**

The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), adopted by the United Nations in September 2015, have given a new impulse to global efforts for achieving sustainable development. The EU is fully committed to playing an active role implementing the 2030 Agenda and maximizing progress towards the SDGs, as outlined in its Communication (COM (2016) 739) "Next steps for a sustainable European future" [41].

Achieving gender equality and women's empowerment is integral to each of the 17 goals. Aligning to that context, the theoretical regional gender equality framework of the intersects with many of the goals. Almost all (89%) indicators used in the regional gender equality framework have strong linkages to specific targets and they represent seven of the SDGs: the Goal 3 Good health and well-being, Goal 4 Quality education, Goal 5 Gender Equality, Goal 8 Decent work and economic growth, Goal 9 Industry, innovation and infrastructure, Goal 10 Reduce inequalities and Goal 11 Sustainable cities and communities.

The goal that is more present is the third, Good health and well-being, as it is represented throughout the 5<sup>th</sup> domain of Health but also the 7<sup>th</sup> Domain of Life satisfaction and quality where the aspect of "well-being" is mostly captured. The indicators of the first, Work & Money, domain are almost all linked to the Goal 8, decent work and economic growth and similarly, the second domain of Knowledge is strongly connected to the Goal 4, Quality education. The Power domain relates to Goal 5, Gender Equality and specifically to the target 5.5: Ensure women's full and effective participation and equal opportunities for

leadership at all levels of decision-making in political, economic and public life. Finally the Safety, Security and Trust Domain can be linked mostly to the Goals 11: Sustainable cities and communities and 10: Reduce inequalities. Last, the Goal 9: Industry, innovation and infrastructure is represented by one indicator in the Work and Money Domain.

At European level, Eurostat coordinated the development and maintenance of the EU SDG indicators and regularly monitors progress towards the SDGs [42]. The selected indicators have strong links with EU policies and initiatives such as Europe 2020, the 10 Commission Priorities, etc., and look at how EU policies contribute to the implementation of the 17 Goals. In this respect, they complement from an EU angle the UN global indicators, which refer to the goals and targets specified in the 2030 Agenda for Sustainable Development. Our regional gender equality framework naturally shares many indicators (11 identical or closely related) with the Eurostat set, mostly relevant to Goals 3, 4, 5 and 8. One main difference, apart from the fact that the objective is not the same, is that Eurostat uses only official data, while in the current framework there are included several survey-based indicators.

A more relevant, towards the gender equality perspective, effort is done by Equal Measures 2030 that develops the EM2030 SDG Gender Index [19]. Though still at pilot stage, the Index aims to track progress on the gender equality aspects of the SDGs and to use data, stories and evidence to help advocates frame their influencing on the gender equality elements of the Goals. It includes many of the official gender-related SDG indicators but at the same time uses a gender lens to analyse them and capture as many gender issues as possible for each of the goals included, using complementary indicators where necessary. Currently it covers 12 of the 17 Goals, though it will extend to two more for the next global edition. At this first iteration, the focus was on six developing countries, thus it is not surprising that only 4 out of 43 indicators are common with our regional gender equality framework.

**Table 9.** Mapping between the SDGs and the Regional Gender Equality Monitor framework

EU Regional Gender Equality Monitor			Sustainable Development Goals		
Domain	Nr	Variable	SDG relevance	SDG Target	SDG Goal
1. Work & Money	1	Full-time and part-time employment rate (15+population) excluding involuntary part-time work	8.5	<b>8.5</b> By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	<b>8.</b> Decent work and economic growth
	2	Unemployment rate	8.5	<b>8.5</b> By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	<b>8.</b> Decent work and economic growth
	3	Duration of working life	8.8	<b>8.8</b> Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	<b>8.</b> Decent work and economic growth
	4	Persons with tertiary education, employed in science & technology (%)	9.5	<b>9.5</b> Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	<b>9.</b> Industry, innovation and infrastructure
	5	Mean monthly earnings - NACE Rev. 2, categories B-S excluding O (PPS)	8.5	<b>8.5</b> By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	<b>8.</b> Decent work and economic growth
2. Knowledge	6	Graduates of tertiary education (% 15-74 population), First and second stage of tertiary education (levels 5 and 6)	4.3	<b>4.3</b> By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	<b>4.</b> Quality education
	7	People participating in formal or non-formal education and training (% 15-74 population)	4.3	<b>4.3</b> By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	<b>4.</b> Quality education
	8	Tertiary students in STEM fields - ISCED 5-6 (% tertiary students)	4.4	<b>4.4</b> By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	<b>4.</b> Quality education
	9	Early leavers from education	4.1	<b>4.1</b> By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	<b>4.</b> Quality education
3. Time	10	Young people neither in employment nor in education and training	8.6	<b>8.6</b> By 2020, substantially reduce the proportion of youth not in employment, education or training	<b>8.</b> Decent work and economic growth
	11	Regularly participate in a leisure activity (16+ population)	-		
	12	Donated money to a charity	-		
	13	Helped a stranger/ someone you didn't know, who needed help	-		
4. Power	14	Volunteered the time to an organization	-		
	15	Share of Ministers (%)	5.5	<b>5.5</b> Ensure women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life	<b>5.</b> Gender equality
	16	Share of members of Parliament (%)	5.5	<b>5.5</b> Ensure women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life	<b>5.</b> Gender equality
	17	Share of members of Regional Assemblies (%)	5.5	<b>5.5</b> Ensure women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life	<b>5.</b> Gender equality
	18	Share of members of Regional Executives (%)	5.5	<b>5.5</b> Ensure women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life	<b>5.</b> Gender equality



EU Regional Gender Equality Monitor		Sustainable Development Goals			
Domain	Nr	Variable	SDG relevance	SDG Target	SDG Goal
5. Health	19	Self-perceived health, good or very good (% population)	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
	20	Health problem that prevents you from doing any of the things people your age normally can do	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
	21	Life expectancy in absolute value at the age of <u>30 years old</u>	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
	22	Death rate caused by malignant neoplastic and cardiovascular diseases	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
	23	Population without unmet needs for medical examination (% population)	3.8	<b>3.8</b> Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	<b>3.</b> Good health and well-being
	24	Population without unmet needs for dental examination (% population)	3.8	<b>3.8</b> Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	<b>3.</b> Good health and well-being
	6. Safety, Security and Trust	25	Safe walking alone at night in the city/ area where you live	11.7	<b>11.7</b> By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
26		Money or property stolen	11.7	<b>11.7</b> By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	<b>11.</b> Sustainable cities and communities
27		Assaulted or mugged	11.7	<b>11.7</b> By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	<b>11.</b> Sustainable cities and communities
28		Relatives/ friends you can count on to help you	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
29		Women in this country are treated with respect and dignity	10.2 - 10.3	<b>10.2</b> By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status <b>10.3</b> Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	<b>10.</b> Reduced inequalities
30		Voiced your opinion to a public official	10.2 - 10.3	<b>10.2</b> By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status <b>10.3</b> Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	<b>10.</b> Reduced inequalities
7. Life satisfaction/quality	31	Your friends and family give you support	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
	32	Feel well-rested	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
	33	Smile or laugh a lot	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
	34	Experience enjoyment	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being
	35	Life satisfaction	3.4	<b>3.4</b> By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<b>3.</b> Good health and well-being

Note: Regional Gender Equality indicators linked to the SDGs:

Goals	Number of	Goals	Number of
	Indicators		Indicators
Goal 3	12	Goal 8	5
Goal 4	4	Goal 9	1
Goal 5	4	Goal 10	2

## 4 Measuring female disadvantages and female achievements in European regions

As introduced in the previous chapter, an inspiration and starting point of the regional framework has been the GEI framework developed by EIGE. The GEI comprises two components; the gender equality component and the overall achievement of women and men (denoted as the correction coefficient). For each indicator in the GEI framework, a so-called "*gender gaps corrected by levels of achievement*" metric is calculated. Permanyer [43] criticised the GEI metric, since calculations showed that the GEI scores were largely driven by differences in the overall achievement levels between countries rather than by gender gap differences within them and concluded to eliminate the correction coefficient from the metric. In the last version of GEI [44] the correction coefficient has been downscaled with a factor of a square root.

In the regional framework the objective has been to include both the gender gaps and the levels of achievement, but to make the contributions clear and transparent, they are kept separately. Specifically, in this study the interest is assessing female disadvantage but also performance. The questions to be answered are thus the following:

Where do women perform better?

Where are women disadvantaged relative to men?

Which are the best regions for women to live in?

One index is therefore assessing the gender gaps and the other index the female achievement level. The developed indices are denoted as the Female Disadvantage Index (FemDI) and the Female Achievement Index (FemAI).

The framework is built on a robust methodology, based on the 10-step guide on building composite indicators developed by the European Commission's Joint Research Centre (JRC) and the Organisation for Economic Cooperation and Development (OECD) [45]. It builds on seven domains relevant (introduced in the previous chapter) to EU policy framework: Work & Money, Knowledge, Time, Power, Health, Safety & Security and Life Quality. These domains organise and aggregate 35 individual indicators into the summary measures of gender equality.

Both the FemDI and FemAI indices share most of the indicators with some small changes, as needed, to respect the statistical coherence of the framework. For this reason, FemDI, which has 31 indicators, does not include "Persons with tertiary education, employed in science & technology" (Ind.4) in the Work & Money domain, "Life expectancy in absolute value at the age of 30 years old" (Ind.21) and "Death rate caused by malignant neoplastic and cardiovascular diseases" (Ind.22) in the Health domain and "Life satisfaction" (Ind.35) in the Life quality domain. Similarly, FemAI has in total 34 indicators and it does not include "Tertiary students in STEM fields" (Ind.8) in the Knowledge domain.

## 4.1 The Female Disadvantage Index (FemDI)

The FemDI measures gender gaps, it is investigating how close women are to reaching equality with men but does not reward or penalize regions for having a gender difference in the other direction.

The metric used is the difference [17] between men and women and the scale is one sided. The different gender differences may be going in opposite directions, so there may be the possibility of compensation between the domains and this may give the wrong picture of the existing levels of gender equality.

Our aim is to focus on whether the gaps between women and men in the chosen indicators are small, rather than whether women are winning the “battle”. Hence, the Index rewards regions that reach the point where outcomes for women equal those for men, but it neither rewards nor penalizes cases in which women are outperforming men in particular indicators in some regions. To truncate the gender gaps at equality point is in line what is highly recommended in literature [21], [22], [23], [46], [47] [48]. Thus, a region that has lower unemployment rate for women rather than men will score equal to a region where men’s and women’s unemployment rates are the same.

The overall Female Disadvantage Index (FemDI) is constructed using the following process:

### **1. Convert to differences.**

Initially, all data are converted to male minus female differences<sup>13</sup> or the other way round when the direction of the indicator is opposite.

### **2. Outlier detection.**

Potentially problematic indicators that could bias the overall index results were identified on the basis of two measures related to the shape of the distributions, skewness and kurtosis<sup>14</sup>.

### **3. Truncate at equality benchmark.**

As a second step, these differences are truncated at the “equality benchmark”. For all indicators except “Mean monthly earnings” (Ind.5), this equality benchmark is considered to be 0, meaning equal numbers of women and men. For the “Mean monthly earnings” indicator on the other hand, that would be 1, since it is constructed as a woman to men ratio. Truncating the data at the equality benchmarks for each assigns the same score to a country that has reached parity between women and men and zero where women have surpassed men.

### **4. Normalisation.**

The truncated indicators measuring the difference between men and women are normalised using the min-max normalisation method:

$$y = (x - \min) / (\max - \min) \quad \text{Eq 1}$$

where min and max are the minimum and maximum values in the set of observed values.

<sup>13</sup> This concerns all indicators except “Mean monthly earnings” (Ind.5) for which a ratio is used instead as a difference would make little sense.

<sup>14</sup>A practical rule suggested by the JRC is that the region values should be treated if the indicators have absolute skewness greater than 2.0 and kurtosis greater than 3.

### **5. Aggregation.**

Simple (equal) arithmetic averages were used at the two aggregation levels, from indicators to the seven domains, and from seven domains to overall index. The rationale for this choice is the following. Arithmetic averages are easy to interpret and allow perfect compensability between indicators, whereby a high score on one indicator can fully offset low scores in other indicators.

For of all domains, the lowest possible score is 0 (parity) and the highest possible score is 1 (imparity). Similar to domain scores, the final index value ranges between 0 (parity) and 1 (imparity), thus allowing for comparisons relative to ideal standards of equality in addition to relative country rankings.

## **4.2 The Female Achievement Index (FemAI)**

The second metric of the framework, the Female Achievement Index, shares the same domains as the first metric. The construction of the index though is different, as what is measured, the percentages of women individuals only, in each indicator. The seven core domains assign scores for each region between 0 (lowest performance) and 100 (best performance). The FemAI is formed by combining these domains into a single summary measure, which allows for the issue of female achievement to be synthesised into one easy to understand measure.

The overall Female Achievement Index (FemAI) is constructed as follows:

### **1. Outlier detection.**

Potentially problematic indicators that could bias the overall index results were identified using the same rule as in the FemDI.

### **2. Normalisation.**

The metric used is the distance from the best performer for each indicator (min-max normalisation). That is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the best. In the same time the indicators that have negative direction are getting reversed.

$$y = 100 * (x - \min) / (\max - \min) \quad \text{Eq 2}$$

where min and max are the minimum and maximum values in the set of observed values.

### **3. Aggregation.**

Simple arithmetic averages were used at the two aggregation levels. Each of the seven domains composing the Index is a simple arithmetic average of the underlying indicators and the overall index score is, again, an arithmetic average of the seven above-mentioned domains. The indices measure female disadvantage and achievement in almost all NUTS level 2 regions (270 regions). The latest available data for the indicators have been retrieved from the European Union Statistics on Income and Living Conditions (EU SILC) microdata, European Union Labour Force Survey (EU LFS), Structure of Earnings Survey (EU SES), EIGE Gender Statistics Database and the Gallup World Poll microdata. Most data points are deriving from 2017.

## 5 The Findings

Figure 4 illustrates the map of the FemDI scores. Regions with low scores (light coloured regions) mean that women score the same as men or outperform them. Regions with high scores (dark coloured regions) illustrate where women are at great disadvantage compared to men. There is considerable variation exists between the EU regions of female disadvantage. A majority of the regions in the Nordic countries, France and UK have the lowest scores of female disadvantage. The regions in the south and eastern countries tend to have higher scores. The Belgian and Dutch regions show substantial variation. The relative standard deviations<sup>15</sup> in these countries are as large as the corresponding measure at national scale over all Member States.

Figure 5 shows the comparable map of the FemAI scores. In this map the darker the colour, the higher the score and better female performance. As in the former map, regions in the Nordic countries and UK score well as some of the Dutch and Austrian regions.

Annex II summarises the FemDI & Fem AI scores, overall and by domain, while Annex III contains the maps per domain for both indices.

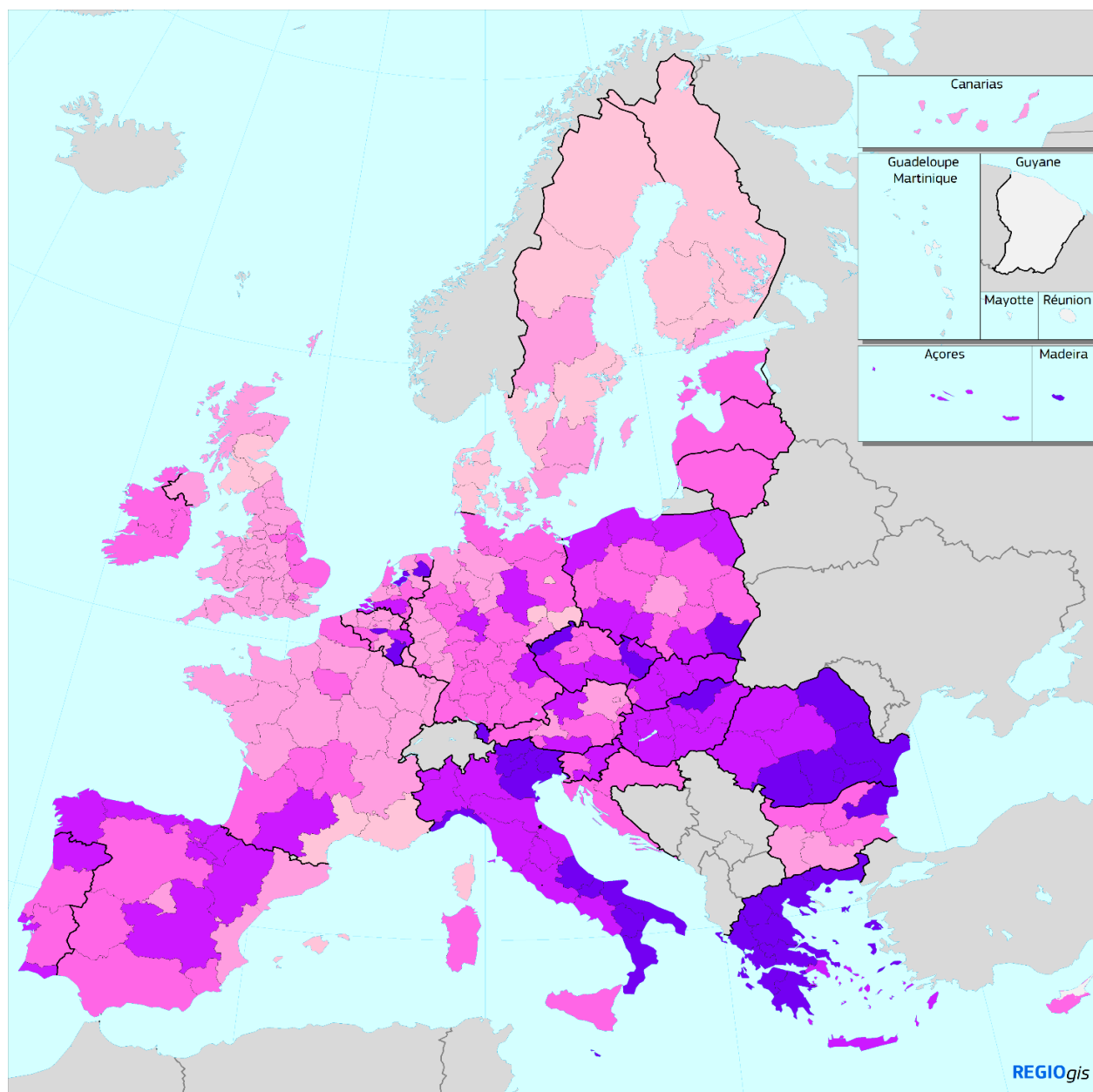
The capital regions in FemAI (Figure 7) usually score better than the other regions within that country. This trend may be seen in most Member States apart from the Netherlands and Belgium. In FemDI (Figure 6) the capitals likewise perform well (the lowest scores) but exceptions exist, e.g. Finland, United Kingdom, France and Italy.

Cohesion policy provides funding largely in function of the level of development of a region (see introduction). Regions are categorised according to their GDP in three categories, as more developed, transition or less developed. Less developed regions are defined as GDP/head less than 75% of EU average (in year 2014 which was the beginning of the current programming period (2014-2020)). Transition regions are defined as GDP/head between 75-90% of EU average and more developed as those regions above 90% of EU average. The less developed regions receive a high level of funding per head, the transition regions receive a moderate level, while the more developed regions receive a low level.

By assigning the regional FemDI and FemAI scores to the three categories, we are able to identify which regions in the corresponding categories are in need of extra support (Table 10).

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<sup>15</sup> Coefficient of variation is defined as the ratio of the standard deviation to the mean. 29% of CV in BE, 27% in NL and 27% at national scale over EU28.



### Female Disadvantage Index, 2018

- Low index = low disadvantage  
High index = high disadvantage
- 0 - 0.15
  - 0.15 - 0.20
  - 0.20 - 0.25
  - 0.25 - 0.30
  - > 0.30
  - no data

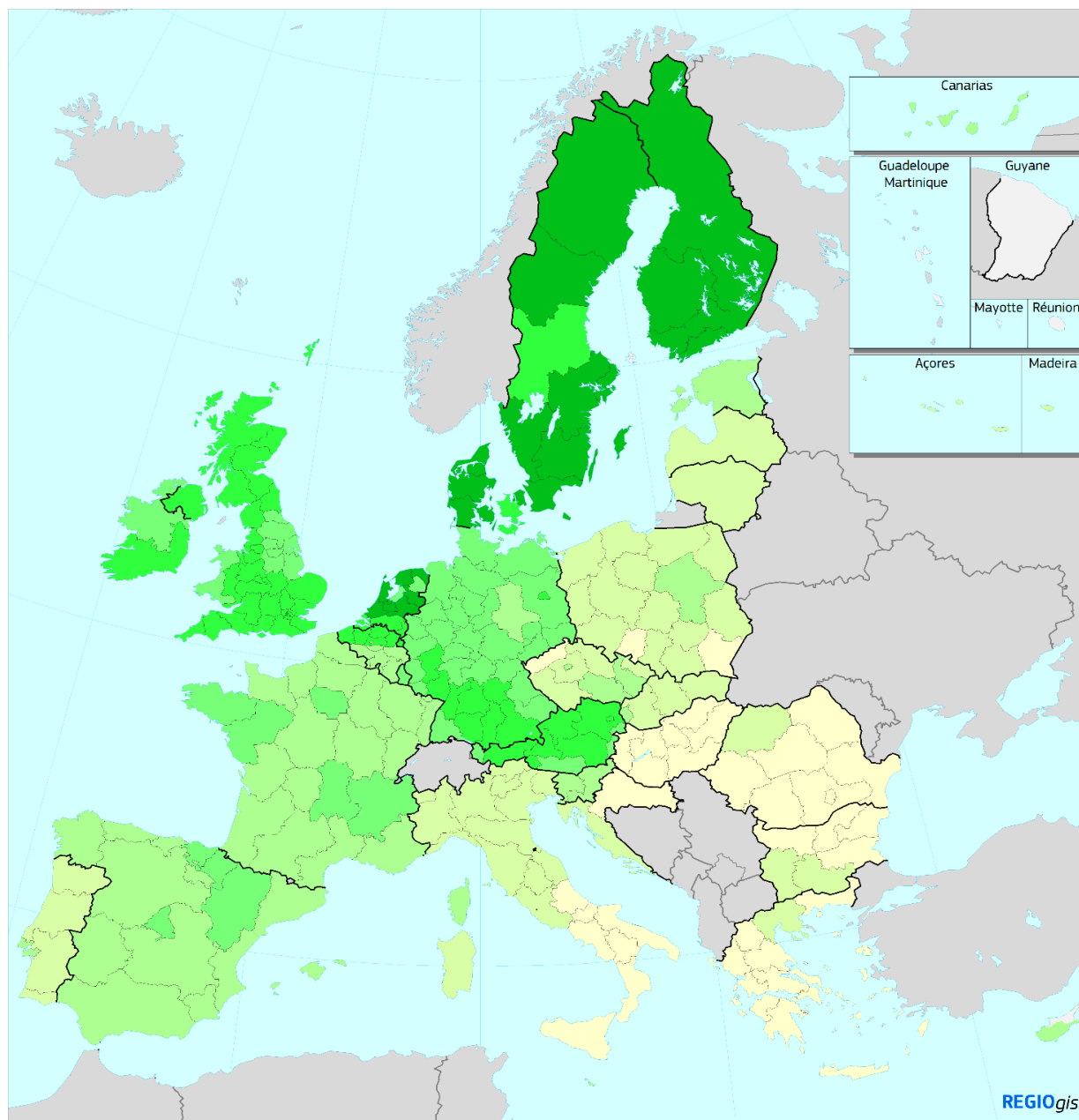
This index measures the difference between the performance of men and women in a region. Low scores mean that women score the same as men or outperform them. High scores mean that women are at a significant disadvantage in that region.

Source: JRC

0 500 km

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**Figure 4.** Map of FemDI



### Female Achievement Index, 2018

Low index = low achievement  
High index = high achievement

0 - 40	65 - 70
40 - 50	> 70
50 - 60	no data
60 - 65	

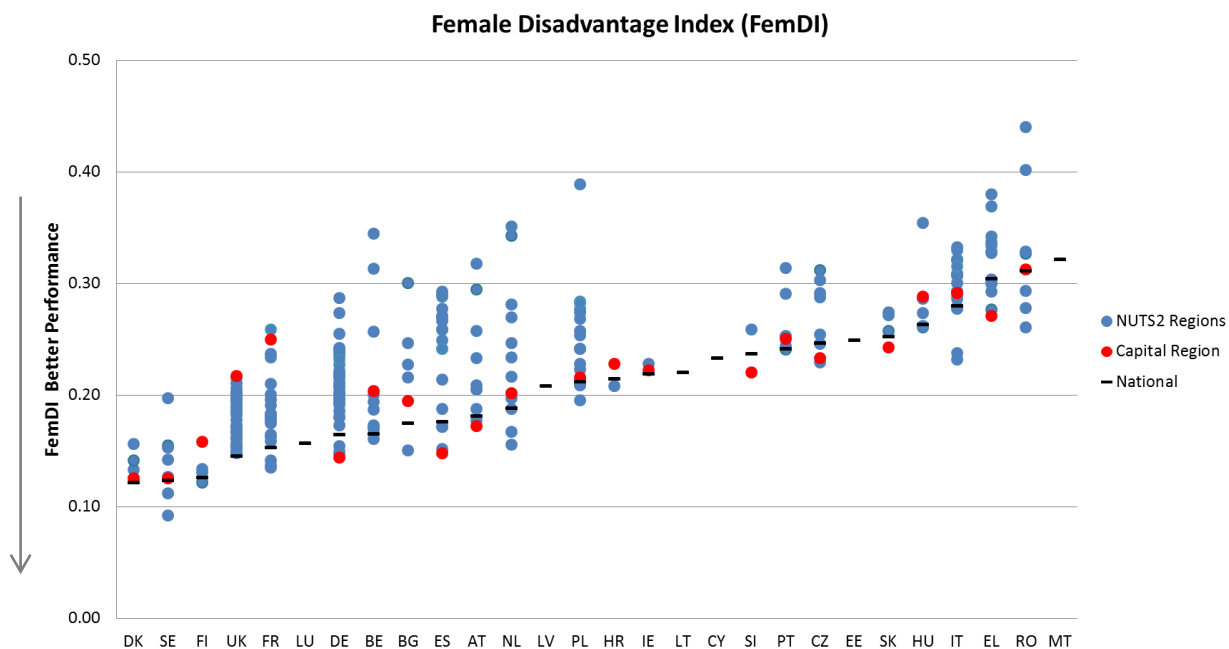
This index measures the regional differences in achievement relative to the region with the highest female achievements. If women score as well as those in the region with the best performing women, the index is high.

Source: JRC

0 500 km

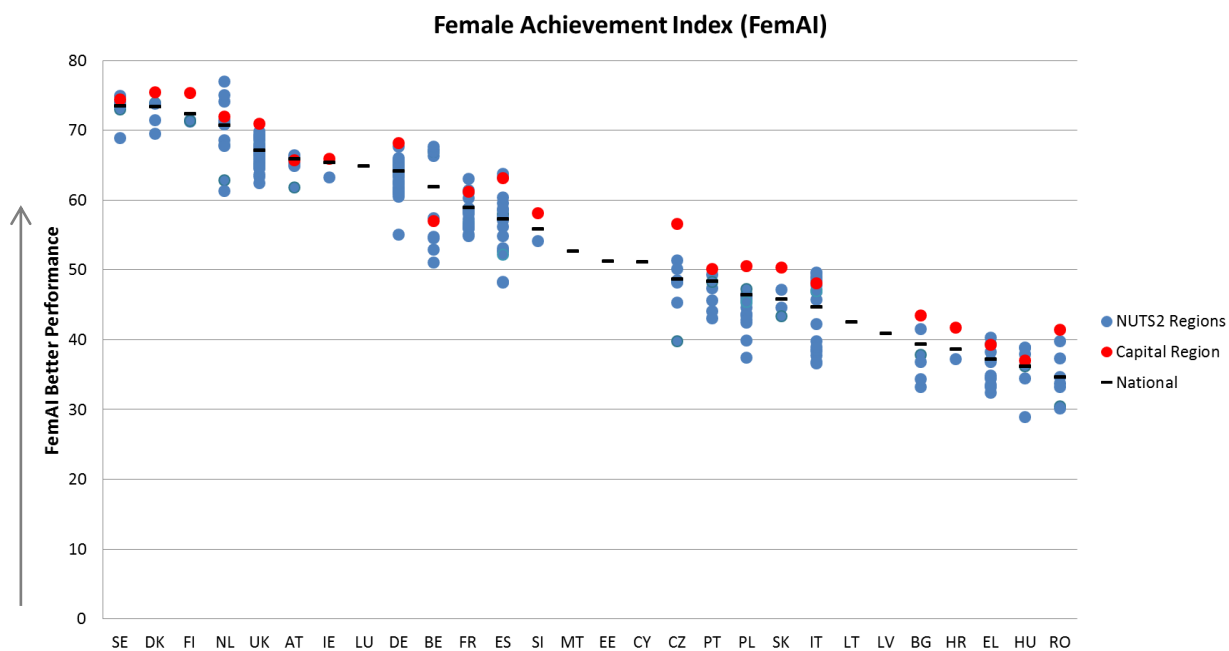
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**Figure 5.** Map of FemAI



**Figure 6.** Female Disadvantage Index scores

Note: NUTS 2 regions (blue circles), capital regions (red circles) and national values (black lines). Sorted by national values. The lower the score the better performance.



**Figure 7.** Female Achievement Index scores

Note: NUTS 2 regions (blue circles), capital regions (red circles) and national values (black lines). Sorted by national values. The higher the score the better performance.



**Table 10.** Index scores per cohesion policy category

Female Disadvantage Index				Female Achievement Index			
Rank	More developed regions	NUTS 2 code	Score	Rank	More developed regions	NUTS 2 code	Score
1	Upper Norrland, Sweden	SE33	0.09	1	Utrecht, NL	NL31	76.99
2	East Middle Sweden	SE12	0.11	2	Hovedstaden, DK	DK01	75.42
3	Eastern Finland	FI1D	0.12	3	Helsinki-Uusimaa, FI	FI1B	75.38
4	Stockholm, SE	SE11	0.13	4	Overijssel, NL	NL21	74.99
5	Hovedstaden, DK	DK01	0.13	5	Upper Norrland, SE	SE33	74.92
149	Vorarlberg, AT	AT34	0.32	149	Região Autónoma da Madeira, PO	PT30	43.06
150	Liguria, IT	ITC3	0.32	150	București-Ilfov	RO32	39.77
151	Drenthe, NL	NL13	0.34	151	Attica, EL	EL30	39.29
152	Walloon Brabant, BE	BE31	0.34	152	South Aegean, EL	EL42	37.04
153	Flevoland, NL	NL23	0.35	153	Central Hungary	HU10	37.01
Rank	Transition regions	NUTS 2 code	Score	Rank	Transition regions	NUTS 2 code	Score
1	Corsica, FR	FR83	0.14	1	Zealand, DK	DK02	69.50
2	Languedoc-Roussillon, FR	FR81	0.14	2	Northern Ireland, UK	UKN0	68.63
3	Dresden, DE	DED2	0.15	3	Shropshire & Staffordshire, UK	UKG2	67.50
4	Merseyside, UK	UKD7	0.15	4	Devon, UK	UKK4	67.37
5	Northern Ireland, UK	UKN0	0.15	5	Lancashire, UK	UKD4	66.98
46	Luxembourg (BE)	BE34	0.31	46	North Aegean, EL	EL41	34.84
47	Malta	MT00	0.32	47	Peloponnese, EL	EL65	34.56
48	Abruzzo, IT	ITF1	0.33	48	Western Macedonia, EL	EL53	33.38
49	Central Greece	EL64	0.34	49	Central Greece	EL64	33.21
50	Western Macedonia, EL	EL53	0.38	50	Ionian Islands, EL	EL62	32.39
Rank	Less developed regions	NUTS 2 code	Score	Rank	Less developed regions	NUTS 2 code	Score
1	Yuzhen Tsentralen, BG	BG42	0.15	1	Cornwall & Isles of Scilly, UK	UKK3	66.97
2	West Wales & The Valleys, UK	UKL1	0.17	2	West Wales & The Valleys, UK	UKL1	64.74
3	Cornwall & Isles of Scilly, UK	UKK3	0.18	3	Eastern Slovenia	SI03	54.08
4	Southwestern, BG	BG41	0.20	4	Extremadura, ES	ES43	53.06
5	Łódzkie, PL	PL11	0.20	5	Estonia	EE00	51.31
63	Northern Hungary	HU31	0.35	63	Nord-Est, RO	RO21	33.24
64	Eastern Macedonia and Thrace, EL	EL51	0.37	64	Northwestern, BG	BG31	33.18
65	Podkarpackie, PL	PL32	0.39	65	Sud-Est, RO	RO22	30.42
66	Sud-Est, RO	RO22	0.40	66	Sud-Muntenia, RO	RO31	30.16
67	Sud-Muntenia, RO	RO31	0.44	67	Northern Hungary	HU31	28.91

Notes:

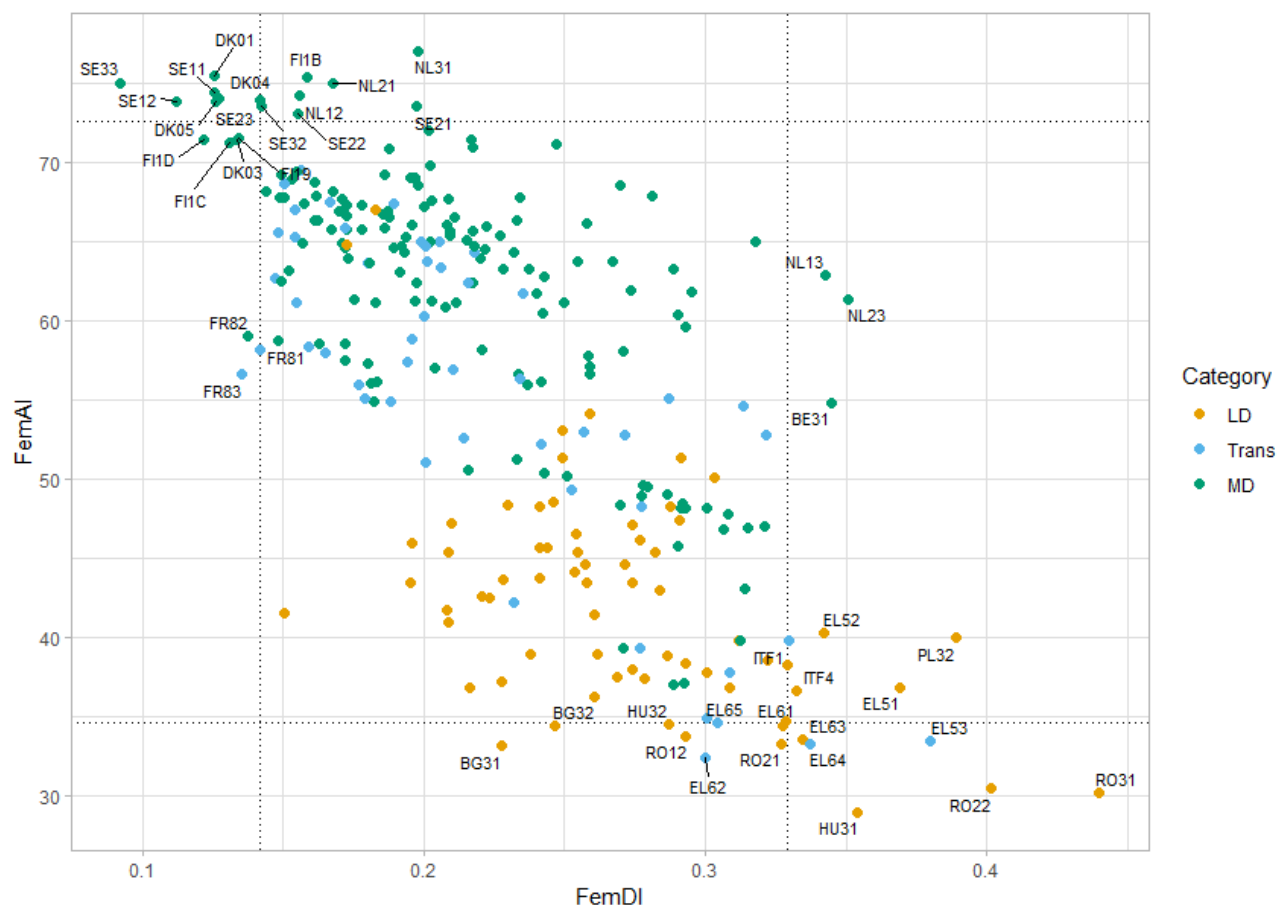
**FemDI**-The lower the score the better performance**FemAI**-The higher the score the better performance

Viewing together the two indices facilitates the understanding of where women are at disadvantage and where they are performing well across the different regions and between the Member States.

There is a fairly strong relationship between FemDI and FemAI (Figure 8). The relationship is negative as expected since a high score in FemAI and a low score in FemDI are desired. The correlation between the indices is -0.72 and FemDI explains more than half of the variation in FemAI.

More developed regions have the highest scores in both indices, where regions in the Nordic countries score well in both indices. Nevertheless there are as well more developed capital regions score at the bottom end in both indices (e.g. capital regions in Hungary, Greece,

Romania and Portugal). Two less developed regions in UK (Cornwall and Isles of Scilly, UKK3 and West Wales and The Valleys, UKL1) are in the cloud of more developed regions. Generally the scores from regions in Bulgaria, Romania, Hungary and Greece are low in both indices. There are exceptions, the Bulgarian region Yuzhen Tsentralen (BG42) for example, performs well in FemDI (generally small gender gaps) but has a low FemAI value (low female values in general). The Dutch (Drenthe, NL13 and Flevoland, NL23) and Belgian (Walloon Brabant, BE31) regions have low FemDI scores compared to their corresponding FemAI scores. Table 11 illustrates the top and bottom performing regions in both indices.



**Figure 8.** Relationship between FemDI and FemAI

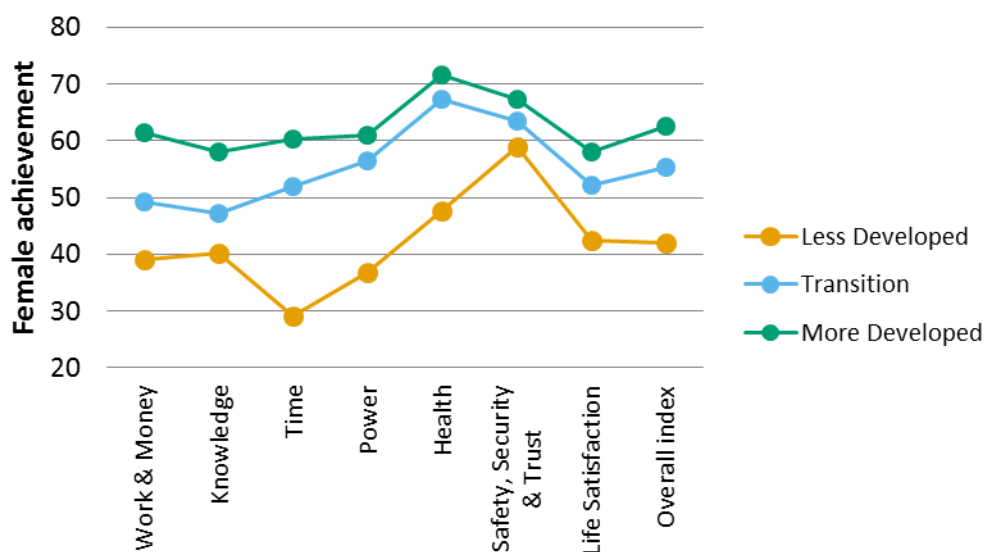
Note: The scatterplot shows different regions as More Developed (MD, green circles), Transition (Trans, blue circles) and Less Developed (LD, yellow circles).

**Table 11.** Top and bottom performing regions in both FemDI and FemAI

FemDI and FemAI high ranked regions	
Hovedstaden, Denmark	DK01
North Jutland, Denmark	DK05
Stockholm, Sweden	SE11
East Middle Sweden	SE12
West Sweden, Sweden	SE23
Upper Norrland, Sweden	SE33
FemDI and FemAI low ranked regions	
Western Macedonia, Greece	EL53
Western Greece, Greece	EL63
Central Greece, Greece	EL64
Northern Hungary, Hungary	HU31
Sud-Est, Romania	RO22
Sud - Muntenia, Romania	RO31

### 5.1 Are women in less developed regions achieving less and more disadvantaged?

Cohesion policy can be used to help women achieve more and to reduce their disadvantage relative to men. For example, cohesion policy has helped to expand childcare, to increase the education and training of women and to boost their participation in the labour market.

**Figure 9.** The female achievement index by type of region

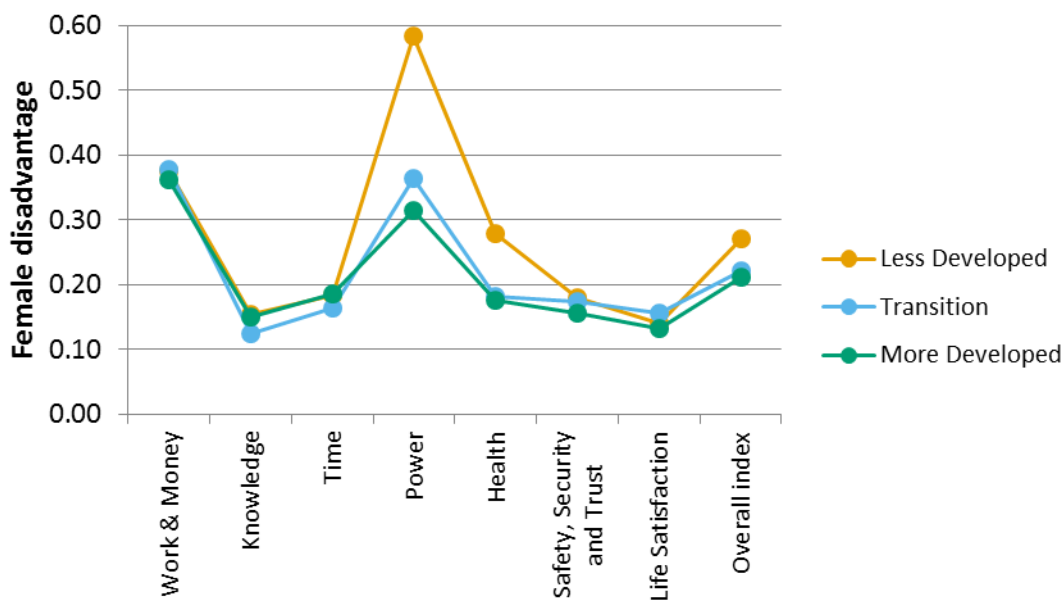
The FemAI (Figure 9) clearly shows that women in less developed regions achieve less in all of the seven domains covered by this analysis. The biggest gap is found in the time domain, while the smallest gap is in the safety, security and trust domain. Boosting the achievements of women in less developed regions will help these regions catch up with the rest of the EU.

Women in transition regions also have lower levels of achievements in all seven domains, but the gap with the more developed regions is far smaller. The biggest gaps are found in the Work & Money and the Knowledge domains.

The disadvantage of women relative to men in the same region does not differ as strongly between the three types of region (Figure 10). The more developed regions and transition regions score very similar with only a slightly higher disadvantage in the transition regions.

The less developed regions also score quite similar to the more developed regions with the clear exception of two domains: Power and Health. The gap in the Power domain is large. The gap for the Health domain is smaller but still substantial. Through its investments in health care infrastructure, cohesion policy can improve access to health care and improve women's health. The disparities in the share of women in politics, however, can only be fixed by political actors and voters.

There is one domain where the less developed regions show a slightly lower female disadvantage than the transition regions: life satisfaction. The achievement index shows that women in less developed regions are less satisfied with life than women in other regions, but relative to the men in less developed regions, the disadvantage is a bit smaller.

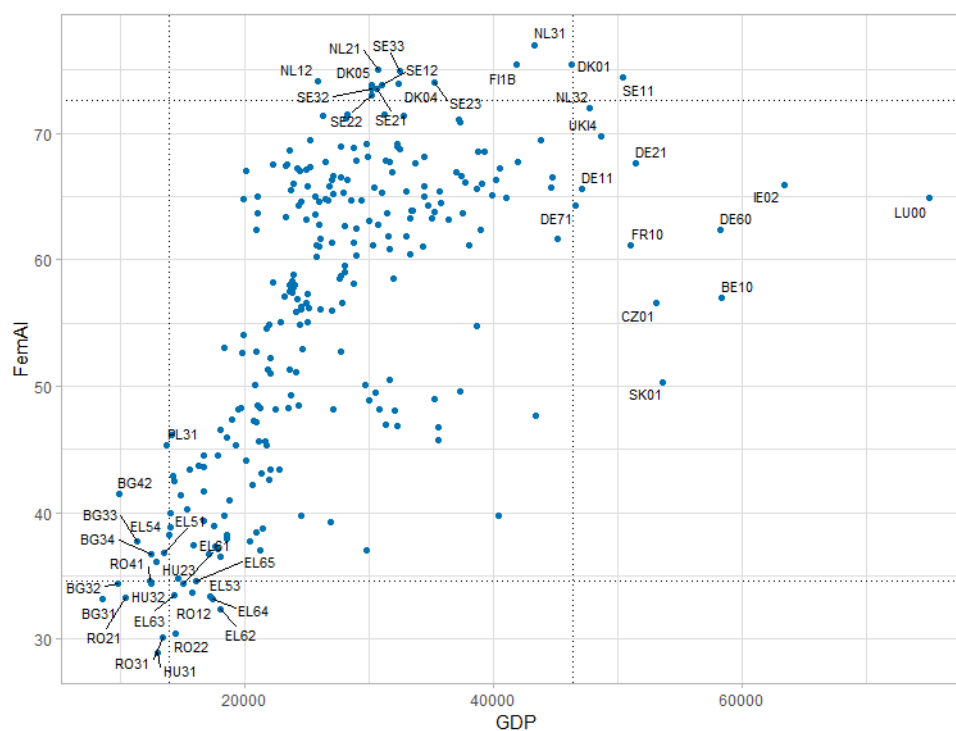


**Figure 10.** The Female Disadvantage Index by type of region.

## 5.2 The positive impact of gender equality on GDP

Gender equality has a strong and positive impact on GDP. A study from EIGE [53] has shown that a more gender equal EU would benefit from between 6.3 million and 10.5 million additional jobs in 2050, with about 70 % of these jobs taken by women and an increase in GDP per capita of up to nearly 10% in 2050.

GDP per capita varies considerably between the European regions, from 8.600 PPS per capita in the Bulgarian region Severozapaden (BG31) to almost 21 times as much, 178.200 PPS, in West Inner London (UKI3) in 2016. Luxembourg has the second highest GDP per capita with 75.100 PPS per capita, which is almost nine times the GDP per capita of Severozapaden. There is a fairly strong and positive relationship between FemAI and GDP per capita (Figure 11, correlation of 0.62<sup>16</sup>). The capital regions of Bratislava (SK01), Brussels (BE10), Dublin (IE02), London (UKI3), Luxembourg (LU00), Paris (FR10) have all higher GDP per head with respect the female achievement levels. Other regions, in Sweden, Finland, Denmark and the Netherlands have higher values of female achievement compared to their economic level. Stockholm (SE11) is the only top performing region in both indices. The relationship between FemDI and GDP per capita follows a similar but anticipated opposite association but the relationship is less strong (Figure 12, correlation -0.31).

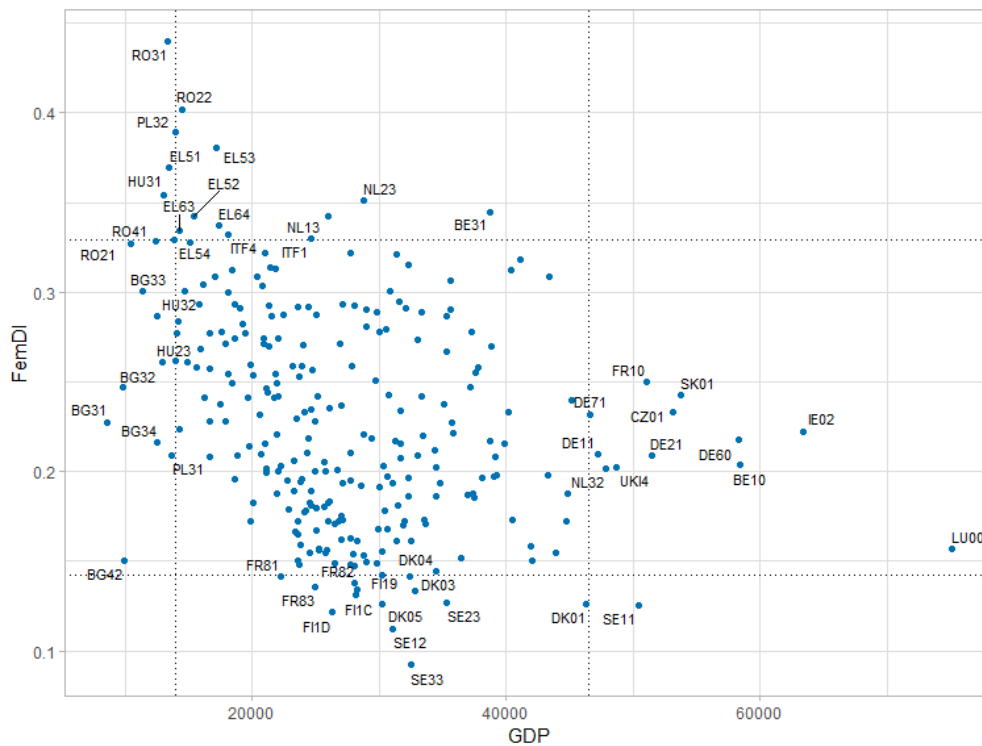


**Figure 11.** GDP (PPS per capita) in 2016 versus FemAI

Source: Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions (code: nama\_10r\_2gdp)

Note: West Inner London (UKI3) has been removed from scatterplot (GDP per capita 178.200)

<sup>16</sup> UKI3 has been removed. Correlations are considerably lower with UKI3 (correlations 0.50 in the case with FemAI and -0.25 with FemDI).



**Figure 12.** GDP (PPS per capita) in 2016 versus FemDI

Source: Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions (code: nama\_10r\_2gdp)

Note: West Inner London (UKI3) has been removed from scatterplot (GDP per capita 178.200)

### 5.3 The connection between socio-economic development, high female achievement and low female disadvantage

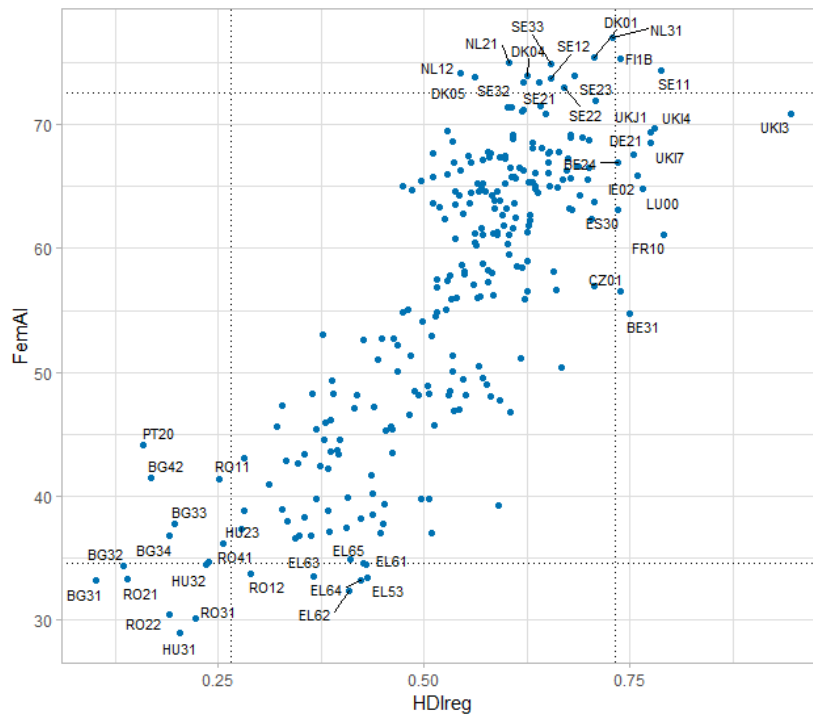
From a global perspective, observing one of the most well-known indices of socio-economic development, specifically UNDP's Human Development Index [57] within Europe reveals little difference. The European countries are either classified as of "high or very high human development". It is therefore interesting to calculate this index at European regional level. The 2018 methodology [58] for HDI is to take the geometric average of three normalised indices, one in each dimension of human development. These indices (life, education and income) measure the achievements in each area, considering the following indicators: life expectancy at birth, knowledge and education (combining expected and mean years of schooling) and GNI per capita (PPP US\$). An updated version of the method used in (Bubbico et al., 2011) [60] has been used to calculate the HDI at European regional level (denoted as HDIreg). The indicators<sup>17</sup> considered for the regional HDI are: years of healthy life expectancy; GDP (per capita PPS); low and high education attainment<sup>18</sup> for people aged 25–64 (% of population 25–64 with low and % with high education attainment). A geometric average of three normalised indices is subsequently calculated.

There is a strong positive relationship between FemAI and HDIreg (Figure 13), the correlation between the indices is high (0.81). The HDIreg explains more than 65% of the total variation of the FemAI. The Nordic and the Dutch regions are performing at the top end in both indices while generally the scores from Bulgaria, Romania, Hungary and Greece are at the opposite end. Some regions (e.g. Inner London (UKI3) and Prov. Brabant Wallon (BE31) have higher scores of HDIreg compared with the expected FemAI scores. The opposite holds true for the Acores region (PT20) and for some regions in Bulgaria (e.g. Yuzhen tsentralen (BG42)) and Romania (e.g. Nord-Vest (RO11)). Only the two regions are top performing in both indices (having scores greater than the 95<sup>th</sup> percentiles) and these are the capital regions in Finland (Helsinki-Uusimaa (FI1B)) and Sweden (Stockholm (SE11)).

The negative relationship on the other hand between FemDI and HDIreg is not as pronounced as the positive relationship with FemAI (Figure 14). Here the correlation is fairly weak and negative (-0.48) and the variation is larger. The Bulgarian region Yuzhen tsentralen (BG42) is performing considerably better in the FemDI than in the HDIreg. Its' FemDI score is similar to the scores of the capitals in Spain (Comunidad de Madrid (ES30)), Finland ((Helsinki-Uusimaa (FI1B)) and Luxembourg (LU00). Its' HDIreg score is on the other hand even lower than the lowest FemDI scores (Sud - Muntenia (RO31) and Sud-Est (RO22)). Stockholm (SE11) is the only top performing region in both indices.

<sup>17</sup> The indicators are available at NUTS 2 level for 2016 or 2017 and published by Eurostat. Life expectancy by age, sex and NUTS 2 region [demo\_r\_mlifexp] from year 2016, Gross domestic product (GDP) at current market prices by NUTS 2 regions [nama\_10r\_2gdp] from year 2016 and Population aged 25-64 by educational attainment level, sex and NUTS 2 regions (%) [edat\_lfse\_04] from 2017. The value of London (UKI3) has been winsorized to the value of LU00.

<sup>18</sup> Where low education attainment reflects less than primary, primary and lower secondary education (ISCED levels 0-2) and high education attainment meaning tertiary education (ISCED levels 5-8). For the Education indicator in the HDIreg an average of these attainment levels have been calculated.



**Figure 13.** Relationship between FemAI and HDI at European regional level



**Figure 14.** Relationship between FemDI and HDI at European regional level

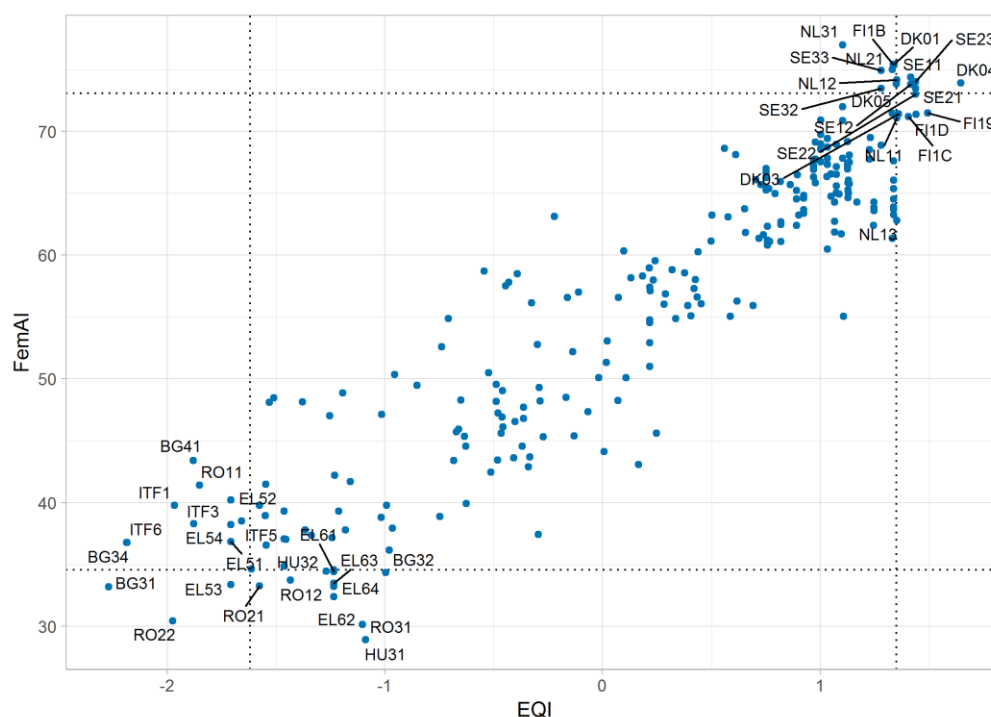


## 5.4 When women are in power the quality of governance is better

There is literature evidence that “the quality of government”, *i.e.* how impartial, efficient and uncorrupted a government is, plays an important role in explaining differences in socio-economic performance [61]. For that reason, it is interesting to understand how related the quality of governance is with the gender inequalities and the women’s achievements within the European regions.

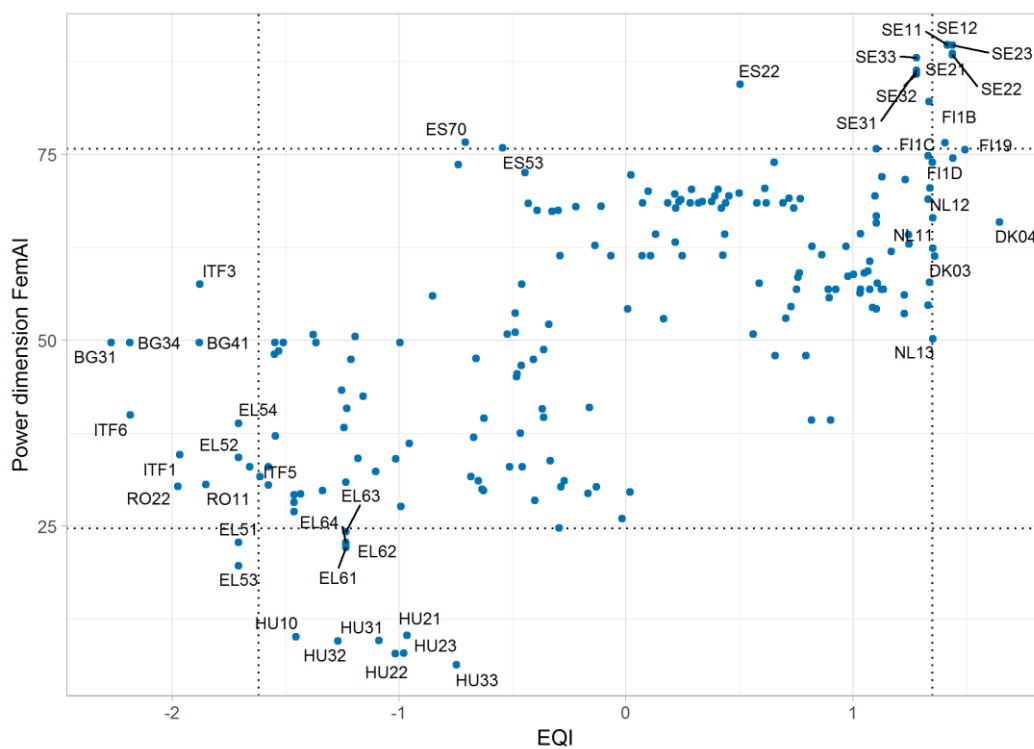
The European Quality of Government Index (EQI) is developed by the Quality of Government Institute of Gothenburg University in collaboration with DG REGIO. It is a measure of institutional quality at regional level in the European Union. Institutional quality is defined as a combination of high impartiality and quality of public service delivery, along with low corruption. The index focusses on both perceptions and experiences with public sector corruption, along with the extent to which citizens believe various public sector services are impartially allocated and of good quality.

For 2017, the EQI [62] contains 202 regions. The data is standardized with a mean of zero, and higher scores implying higher QoG. The relationship between FemAI and EQI is positive and very strong (Figure 15, correlation 0.93). Indeed, 85% of the variation is explained and the hypothesis that regions do better in gender related matters when the quality of QoG is better, is confirmed. It is interesting to see that both indices converge to the better scoring countries while in the other end of the distributions there is bigger heteroscedasticity. The Hungarian region of Northern Hungary (HU31), the Romanian South Muntentia (RO31) and the Greek regions of Central Greece (EL61, EL62, EL63 & EL64) do better in institutional quality than in terms of women achievement. On the other hand, the Italian regions of Abruzzo (ITF1), Campania (ITF3), Basilicata (ITF5) and Calabria (ITF6), the Bulgarian Yugoiztochen (BG34) and Yugozapaden (BG41), the Greek northern regions of Macedonia & Epirus(EL51-54) score worse in institutional quality than in women’s achievement.



**Figure 15.** Relationship between FemAI and EQI at European regional level

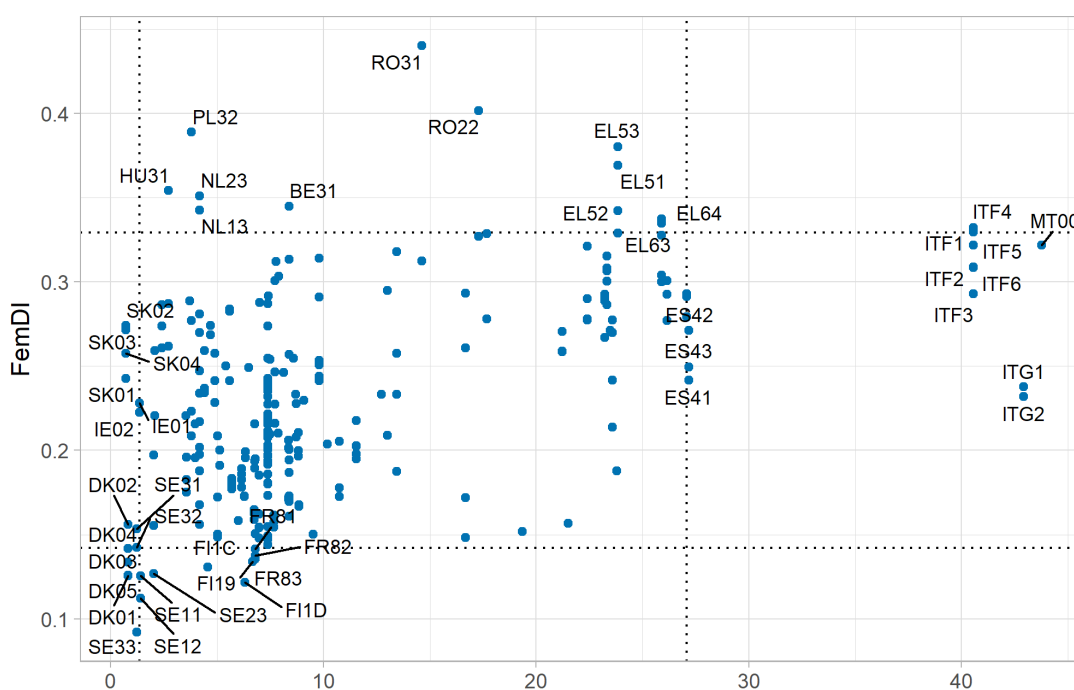
There is as well a fairly strong and positive relationship between the Power dimension in FemAI and EQI (correlation 0.67). Women are significantly under-represented in decision-making positions and gender equality in political office does matter. It is therefore very important to increase women's voice and participation in politics because it clearly has positive impacts on the quality of governance, transparency and accountability. Member States must take more action including legislative and voluntary quota to promote gender equality in politics. (Figure 16)



**Figure 16.** Relationship between Power dimension FemAI and EQI at European regional level

## 5.5 The availability of formal childcare enables parents to participate in the labour market

In all Member States the underrepresentation of women in the labour market is a major problem. The overall female employment rate for women in the European Union is 66.5 percentage while for men it is 78 percentage, so the gender employment gap is 11.5 percentage points<sup>19</sup> and the resulting economic loss amounts to 370 billion euro a year [49]. The main reason for the low female labour market participation is that caring responsibilities is mostly done by women compared to men. In some Member States, up to one fourth of the inactive women are inactive due to caring responsibilities. Figure 17 shows the positive relationship between the difference of inactive population due to caring responsibilities<sup>20</sup> and the FemDI scores. Inactive people due to caring activities are found in regions where the female disadvantage is high.



**Figure 17.** Difference in caring responsibilities and FemDI scores

Note: Difference in inactive population due to caring responsibilities (% of population)

Source: EU-SILC survey microdata for the years 2014-2016, (code: PL089). Note: Data for IE, IT, LU and MT refer to 2013-2015. The dotted lines show the 5<sup>th</sup> and 95<sup>th</sup> percentiles.

The availability, accessibility and affordability of high quality childcare facilities are crucial for enabling women, and men, with caring responsibilities, to participate in the labour market [50]. 17 years ago, in 2002, the Barcelona European Council [51] set the following objectives with regard to the availability of high quality and affordable childcare facilities for pre-school children, through two targets:

<sup>19</sup> Eurostat, Labour Force Survey, 2017. Eurostat code t2020\_10, available at: [https://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=t2020\\_10&language=en](https://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=t2020_10&language=en)

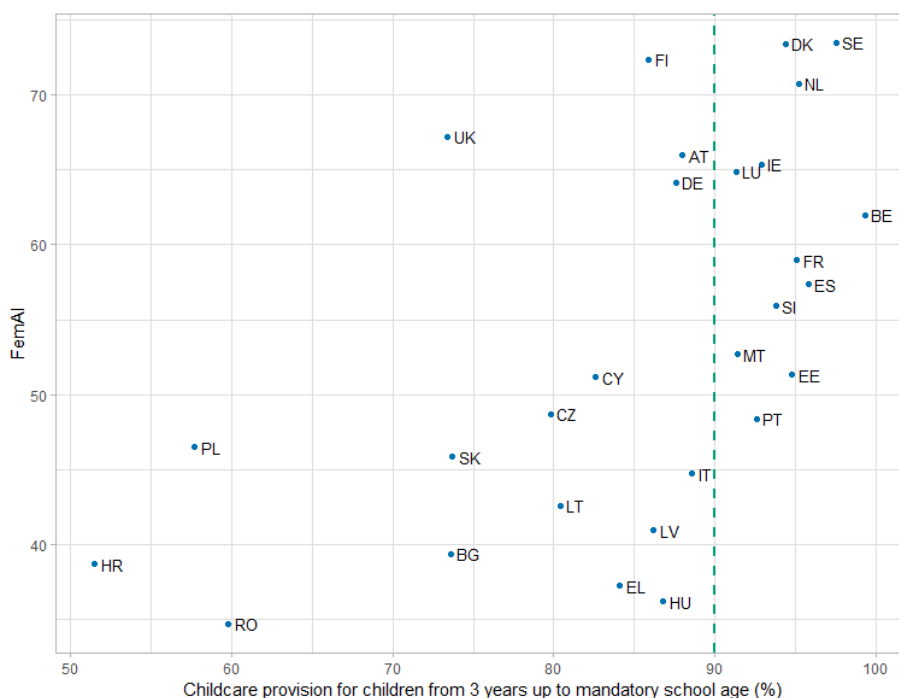
<sup>20</sup> Inactive population due to caring responsibilities; that is, persons that stayed without seeking a job for a period of more than a month because of caring responsibilities.

"Member states should remove disincentives to female labour force participation and strive, taking into account the demand for childcare facilities and in line with national patterns of provision, to provide childcare by 2010

- to 90 % of children from age 3 until mandatory school age (Target 1); and
- to 33 % of children under 3 years of age (Target 2)."

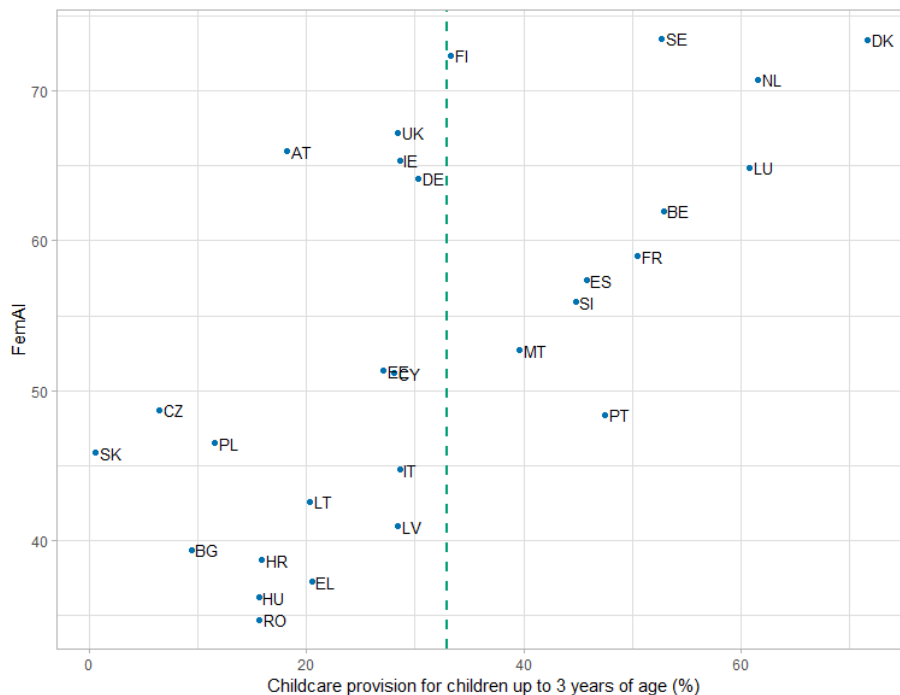
Reaching the Barcelona targets is correlated with the scores from FemAI at national scale, especially for the second target. Countries where formal childcare provision for children under the age of three is high also tend to score well in the FemAI, the correlation is 0.67. For the first target, the correlation is slightly weaker (Figure 19, correlation 0.55). Seven years after the Barcelona targets were formulated, the European Council adopted a strategic framework for the European cooperation in education and training (ET 2020) [52]. One of the five benchmarks concerns early childhood education, with the following target:

"With a view to increasing participation in early childhood education as a foundation for later educational success, especially in the case of those from disadvantaged backgrounds: By 2020, at least 95 % of children between 4 years old and the age for starting compulsory primary education should participate in early childhood education."



**Figure 18.** Childcare provision for children from 3 years up to mandatory school age (%) over the population of each age group) and FemAI scores by MS, 2017.

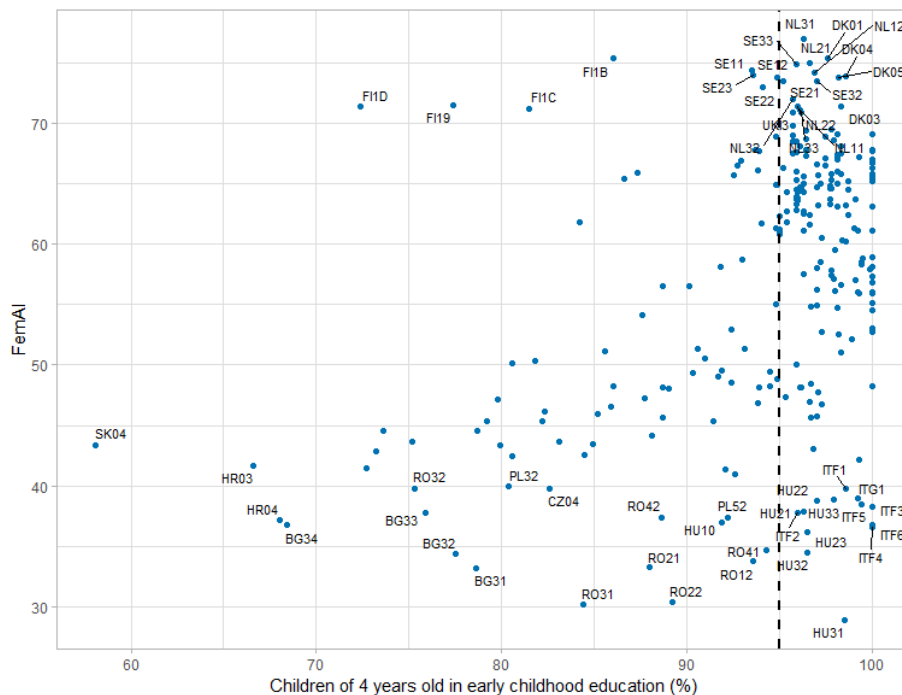
Note: Data for IE, HU and UK refer to 2016. Source: EU-SILC survey (Eurostat code: ilc\_caindformal).



**Figure 19.** Childcare provision for children below 3 years of age (% over the population of each age group) and FemAI scores by MS, 2017

Note: Data for IE, HU and UK refer to 2016. Source: EU-SILC survey (Eurostat code: ilc\_caindformal).

The first Barcelona target concerns children from three years old up to mandatory school age, while the ET 2020 target starts one year later, from four years old up to starting compulsory primary education. Participation rates of four year old children in childcare provision are available at regional level. These rates may be seen as a reasonable proxy for assessing the ET 2020 target. Meeting this target is fairly well correlated with the FemAI scores (Figure 20). Regions which have high FemAI scores usually have high participation rates of four year old children in early childhood education. The Finnish regions have lower participation rates compared to regions with similar FemAI scores. Notwithstanding the low FemAI scores, some Hungarian and Italian regions have very high participation rates. Investing in child care provisions has both positive short-term and long-term effects since more women can and enter and remain in the labour market.



**Figure 20.** Participation rates of 4 years old children in early childhood education (% over the population of each age group) and FemAI scores, 2017

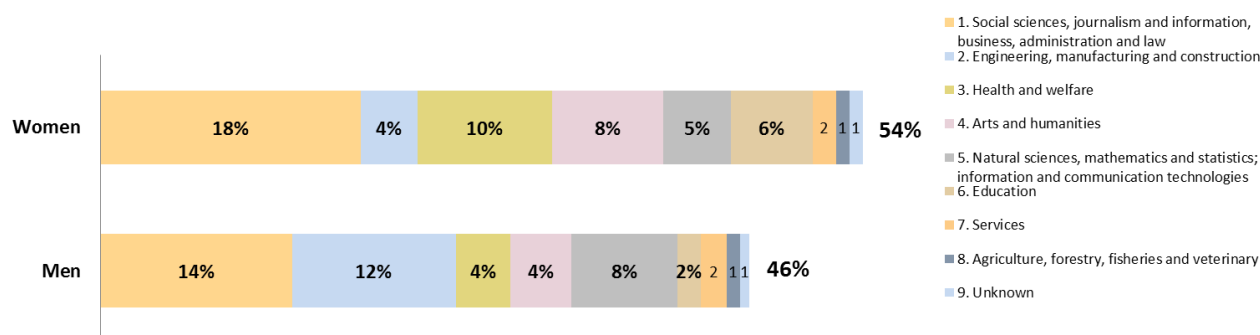
Note: x-axis: Data for BE, CZ, DE, IE, FR, IT, CY, LV, LT, HU, MT, PT, RO, SI and SK from 2016. Data for EE, LU from 2015 and UK from 2014. Data from EL has been omitted because of non-congruent data.

Source: Eurostat, code x-axis educ\_uae\_enra14.

## 5.6 Women in STEM careers

The STEM (Science, Technology, Engineering and Math) labour force is fundamental to the capacity of the EU to be innovative and competitive. Women could potentially make up half of the EU labour force and a majority of tertiary students today are women, still women are underrepresented in STEM jobs and among STEM tertiary graduates. If more women choose STEM related studies and STEM careers, the productive capacity and the competitiveness of the EU would clearly increase. A study [53] from EIGE shows that closing gender gaps in STEM education would have a positive impact on employment, with total EU employment foreseen to rise from 850,000 to 1,200,000 jobs by 2050. Consequently, this would imply an increase in EU GDP per capita from 0.7 % to 0.9 % by 2030 and from 2.2 % to 3 % by 2050.

In the EU a majority (54%) of the tertiary<sup>21</sup> students were women in 2016 (Figure 21). Almost 60% of the tertiary students in Sweden, Slovakia, Latvia, Poland and Estonia were women. Only in two MS, Greece and Germany, the majority of students were men. Almost 75% of the students in the second most common field of tertiary education; engineering, manufacturing and construction studies, were men. Male students were also dominating in the field of natural sciences, mathematics, statistics, and information and communication technologies, where the share of men was 61%. On the hand, female tertiary students were dominating the fields of health and welfare (71%), arts and humanities (64%) and education (78%).

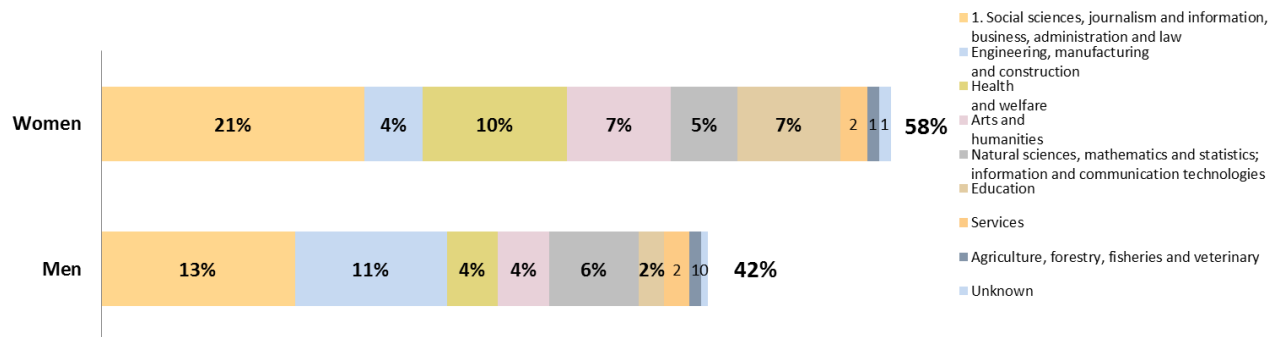


**Figure 21.** Distribution of EU tertiary students in field of study in 2016 (%)

Source: Eurostat (code: educ\_uoe\_enrt03)  
Note: including 2015 data for the Netherlands.

Almost 60% (Figure 22) of all tertiary graduates in EU in 2016 were women. Male graduates were clearly dominating in the STEM related fields (72% in engineering, manufacturing and construction studies and 58% in natural sciences, mathematics, statistics, and information and communication technologies). Female graduates were in majority in the fields of social sciences, journalism, information, business, administration and law (61%), health and welfare (74%), arts and humanities (67%) and education (80%).

<sup>21</sup> Tertiary education is the level of education following secondary schooling and include ISCED levels 5-8 (International Standard Classification of Education) include academic education but also includes advanced vocational or professional education. ISCED 3: Upper secondary education, ISCED 4: Post-secondary non-tertiary education, ISCED 5: Short-cycle tertiary education, ISCED 6: Bachelor's level, ISCED 7: Master's level, ISCED 8: Doctoral level. Eurostat code: [educ\\_uoe\\_enrt04](#).



**Figure 22.** Distribution of EU tertiary graduates by field of study in 2016 (%)

Source: Eurostat (code: educ\_uoe\_grad02)  
 Note: including 2015 data for the Netherlands.

In addition, women in EU have better educational outcomes than men. In 2017, 45%<sup>22</sup> of women aged 30-34 have completed tertiary education compared to men in the same age group who had 10 percentage points less. Women had already reached the Europe 2020 headline target in 2012 (the proportion of 30-34 year-olds with tertiary educational attainment should be at least 40%) while men still had not reached this target in 2017. For the whole EU population in this age group, this Europe 2020 headline target will soon be reached thanks to the female population (in 2017 39.9 % of the population aged 30-34 in the EU-28 had completed tertiary education).

Despite the better educational outcomes, women in EU are over-represented in sectors with low pay levels and being under-represented in sectors with high pay levels. In the whole EU, men dominate fields such as engineering and technology and are less represented in fields such as teaching and care work. Another study from EIGE [54] shows that the employment rate of women graduates in STEM fields at tertiary level was 76 % in 2014 in the EU, which was ten percentage points lower than the employment rate of men with the same qualification and three percentage points lower than the average employment rate of women with tertiary education. Furthermore, only one third of women STEM graduates work in STEM occupations, compared to one in two men. There are nevertheless many reasons why girls do not embark into STEM studies. Some reasons may be the absence of female role models, family background, social norms and cultural practices. But also girls may dread the male dominated STEM fields and think it is difficult to combine with family responsibilities. There are global, European and national initiatives to increase female participation in science and engineering. UN has for example created the "International day of women and girls in science"<sup>23</sup> on the 11<sup>th</sup> of February.

Figure 23 illustrates the relationship between FemAI and with tertiary education, employed in science and technology<sup>24</sup>. Regions where the female rate is high, also score well in the FemAI, the correlation is strong, 74%. Capital regions usually have higher percentages of graduated women working in these fields, where Inner London (UKI3) is having the highest rate with almost 45%.

According to a recent study [55], there tend to be less female STEM graduates in countries with higher gender equality. The authors call this the "gender equality paradox in STEM"

<sup>22</sup> Eurostat (code: edat\_lfse\_03), data from 2017.

<sup>23</sup> <https://www.womeninscienceday.org/>

<sup>24</sup> Defined here as those who work as science and engineering professionals, health professionals, or information and communications technology professionals. This indicator is included in the FemDI but not in the FemAI.



related fields, countries with high levels of gender equality (e.g. Finland and Sweden have relatively few women among their STEM graduates). In contrast, more socially conservative countries have a larger percentage of women among their STEM graduates. They investigate the relationship between the percentage of female STEM graduates and the gender equality scores coming from the Global Gender Gap Index [56] from WEF. The gender-equality paradox comes from the fact that in richer countries with higher gender equality, women are encouraged to participate in STEM education but personal preferences are more strongly expressed and choices based on non-economic factors prevail. Sex differences in academic strengths and interests are therefore larger in richer countries. In countries with fewer opportunities, a well-paid and relatively secure STEM career may seem as a good option for a woman.

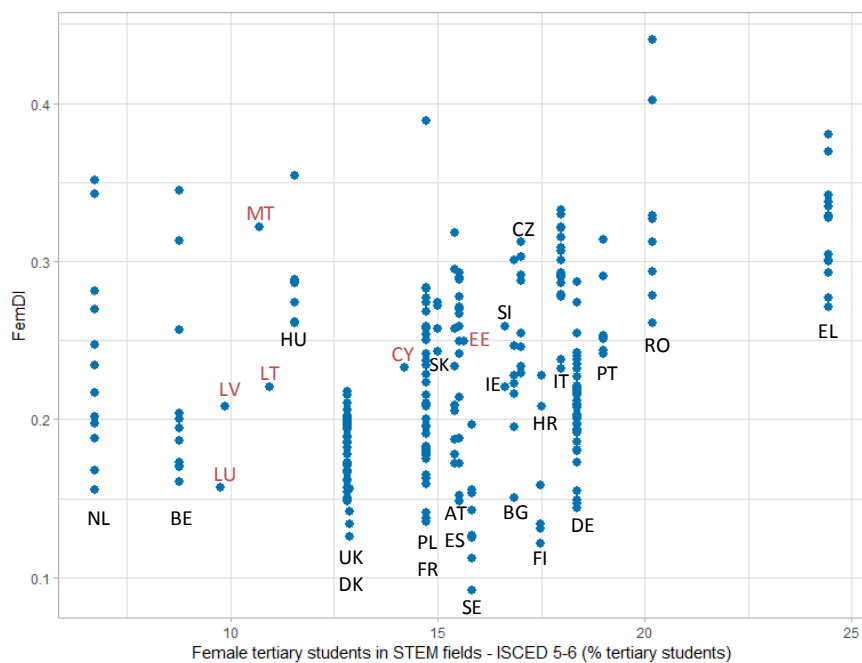


**Figure 23.** Women with tertiary education, employed in science and technology (%) by NUTS 2 regions versus FemAI in 2017

Source: Eurostat (code: hrst\_st\_rcat, special request split by gender and NUTS2)

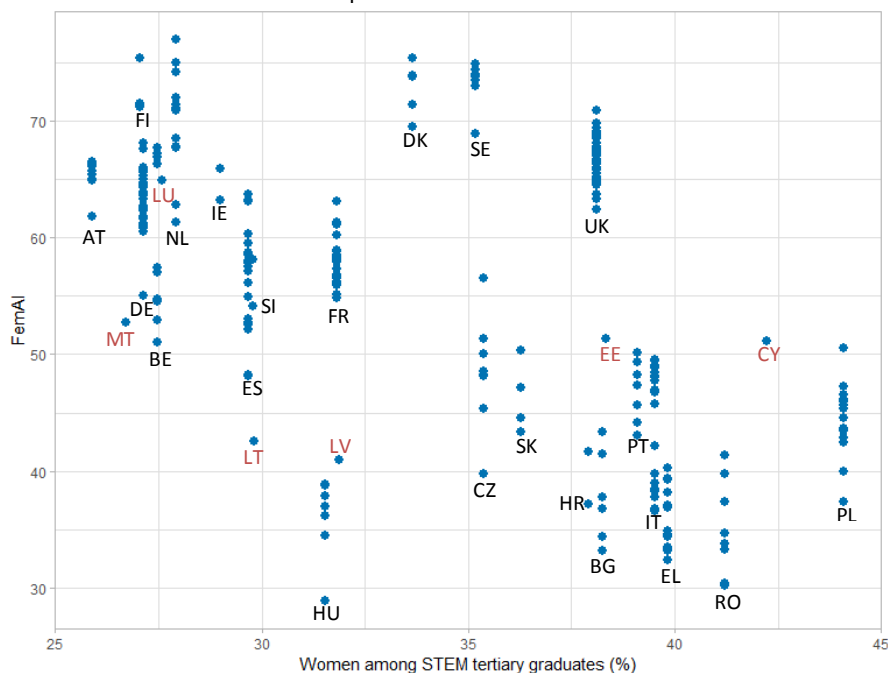
The “gender equality paradox in STEM” can also be seen within the European regions and between the MS, even though being a more homogeneous sample than the world-wide scale. National data on female tertiary students and graduates in STEM fields are plotted against FemDI (Figure 24) and FemAI (Figure 25). Since higher education is held by colleges, technical high schools and universities and these institutions are situated in cities and bigger towns, national data are more representative than regional data. In Figure 24, despite regional differences in FemDI scores, there is positive trend in the percentage of female tertiary students in STEM and FemDI scores, meaning that there is a tendency with more female STEM students in countries/regions with lower gender equality. Romanian and Greek regions with high scores of Female Disadvantage have the highest share of female tertiary students in STEM fields. In (Figure 25), the relationship is stronger; there are more female STEM graduates in countries/regions with lower gender equality. Poland has the

highest share of female graduates in STEM fields, followed by Cyprus, Romania, Greece and Italia.



**Figure 24.** Female tertiary students in STEM fields (%) by country versus FemDI in 2012

Source: Eurostat (code: educ\_enr15), fields science, mathematics and computing, engineering, manufacturing and construction. Note: Eurostat's last available data was from year 2012 (Eurostat last update 09-02-2017). This indicator is part of the FemAI framework.



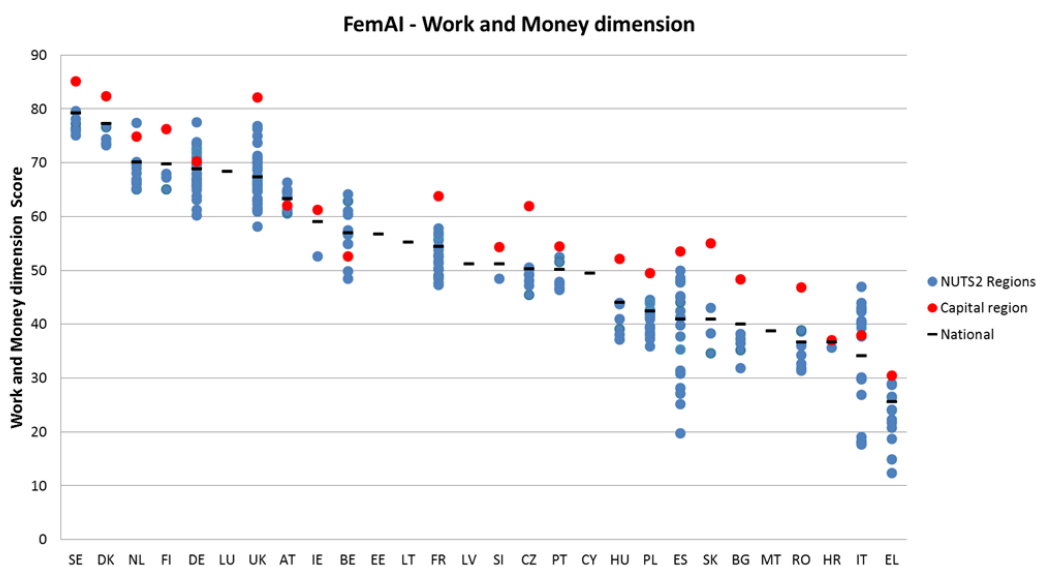
**Figure 25.** Female STEM tertiary graduates (%) by country versus FemAI in 2017

Source: Eurostat (code: educ\_uoe\_grad02), fields science, mathematics and computing, engineering, manufacturing and construction.

## 5.7 Women in capital regions

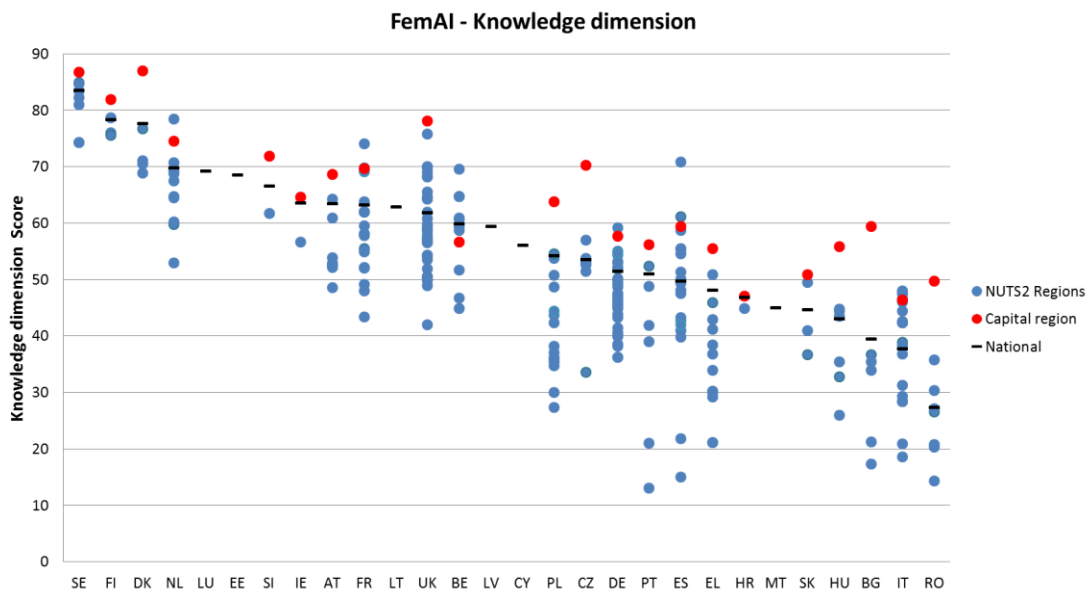
As with the overall FemAI scores, women in capital regions tend to have higher scores in the different dimensions of the index.

That is very evident in the Work and Money dimension (Figure 26) where in all countries, except Netherlands, Germany, Austria, Belgium and Italy, the capital regions score higher. A similar pattern can be seen in the Knowledge dimension (Figure 27). What is also noticeable though, is the big dispersion of the data: Women in the various regions within each country show very different levels of achievement when it comes to Knowledge & Education. The scores of many regions are far behind the scores of the capital ones.



**Figure 26.** Female Achievement Work & Money dimension scores

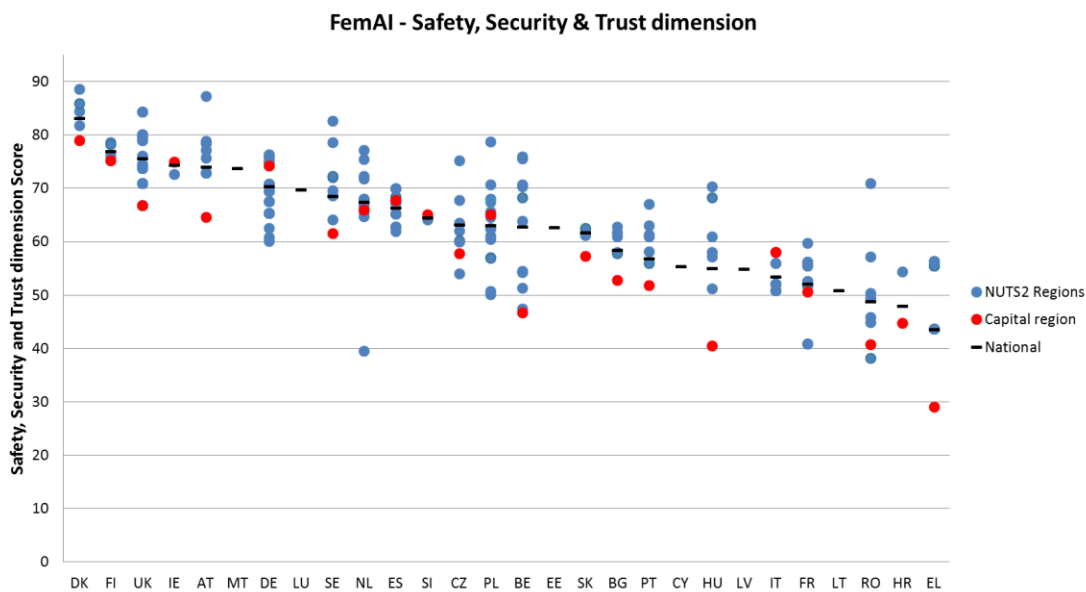
Note: NUTS 2 regions (blue circles), capital regions (red circles) and national values (black lines). Sorted by national values. The higher the score the better performance



**Figure 27.** Female Achievement Knowledge dimension scores

Note: NUTS 2 regions (blue circles), capital regions (red circles) and national values (black lines). Sorted by national values. The higher the score the better performance

Women do achieve more in capital regions but at the same time they tend to feel less safe and secure, as Figure 28 shows.



**Figure 28.** Female Achievement Safety, Security & Trust dimension scores

Note: NUTS 2 regions (blue circles), capital regions (red circles) and national values (black lines). Sorted by national values. The higher the score the better performance

## 6 Conclusions

This report presents two new regional indices that capture two distinct aspects of gender equality: the disadvantage women have relative to the men in their region and the achievements of women in a region relative to the region with the best performing women.

These two indices are the first to capture gender equality at the regional level for all EU regions. The report shows that this regional dimension is important because significant differences are found within Member States for both the achievement and the disadvantage index. For example, women in capital regions tend to achieve more, but also tend to feel less secure and safe than in the other regions in the country.

The female disadvantage index truncates differences at parity, which means that it focusses exclusively on the issues and the regions where women are at a disadvantage. This has the benefit that the index is clear about which gender is being treated in an unequal manner. It also means that the male disadvantage is not allowed to compensate for female disadvantage in income.

The female achievement index compares how well women are doing in a region compared to the region with the best performing women on this issue. This has the benefit that if women are doing equally poorly as men, the female achievement index would still be low while the female disadvantage index would indicate no disadvantage.

The combination of these indices shows, however, that women are at more of a disadvantage in regions with low achievements. In other words, in regions with low employment rate, the gap between female and male employment rate is even bigger. This implies that low female achievements are not the result of living in a region with low overall achievement, but the consequence of even higher disadvantages for women in regions with low achievements.

These two indices of regional gender equality are linked to regional development. In more developed regions women tend to achieve more and be at a less of a disadvantage. In less developed regions, women are less likely to work, have less free time and they are also at more of a disadvantage in terms of education and training. Political positions are less developed regions are predominantly held by men. This means female experiences are less likely to be considered when designing public policies.

Overall, female achievements are higher in regions with a high GDP per head. To some extent this is inevitable as more women working and earning higher wages will also boost GDP. But better health and life satisfaction, more free time, more women in politics do not necessarily boost GDP. Women also tend to be at less of a disadvantage in regions with high GDP per head. As a result, women moving from a region with low GDP per head to a region with high GDP per head could not only improve what they can achieve, but also reduce their disadvantage relative to men.

Regions with a high level of human development also tend to have higher achieving women. The link with the female disadvantage index is weaker, but still regions with a high level of human development also tend to have lower levels of female disadvantage.

The link between the regional quality of government and female achievements is very strong. Regions with high quality of government have women with high achievements. The link with the power dimension is also strong, underlining the need to further increase the number of women in politics, especially in regions where there are (almost) no women in political positions.

The availability of formal childcare is essential to allow women to return to the labour market. It is no surprise that the participation rate of 4-year-old children in early childhood education is positively correlated with the female achievement index. Early childhood education also improve later educational success, especially in the case of children from disadvantaged backgrounds. So it is good for women and children.

The field of Science, Technology, Engineering and Math or STEM is more popular with women in regions with bigger female disadvantages. More women opt for these studies and are afterwards employed in these fields in regions with big female disadvantages. This paradox has been noted at the national level before, but is here confirmed at the regional level. The explanation is that in regions it is harder for a women to find work, they tend to opt more for STEM degrees and jobs and they tend to pay more and provide more employment opportunities. In regions where women face less of a disadvantage, more women tend to favour degrees and jobs outside the male dominated STEM field.

Capital regions are typically the most developed region in the country and have the highest number of political posts. Women tend to perform better in these regions in terms of work & money, knowledge and power, but they tend to feel less safe and secure.

Reducing the disadvantage women face will help everyone. It would increase what women can achieve, boost development and income, improve the quality of government and enhance life satisfaction.

## 7 References

- [1] European Union, (2012), 'Treaty on the Functioning of the European Union (Treaty of Rome)', Official Journal of the European Union, C 32, p. 0001 – 0390, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT>
- [2] European Union, (2012), 'Charter of Fundamental rights of the European Union', Official Journal of the European Union, C 326, p. 391–407, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012P/TXT>
- [3] Council of European Union (2011), 'Council conclusions of 7 March 2011 on European Pact for Gender Equality (2011-2020)', Official Journal of the European Union, C 155/02, p.10–13, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52011XG0525%2801%29>
- [4] European Commission, (2016), 'Strategic engagement for gender equality 2016-2019', 3.12.2015, SWD (2015), 278final, Brussels. <https://publications.europa.eu/en/publication-detail/-/publication/24968221-eb81-11e5-8a81-01aa75ed71a1>
- [5] European Commission, (2018), 'Report on equality between women and men in the EU' Directorate-General for Justice and Consumers, Publications Office of the European Union, Luxembourg. <https://publications.europa.eu/en/publication-detail/-/publication/950dce57-6222-11e8-ab9c-01aa75ed71a1>
- [6] European Commission, (2010), 'Europe 2020: A strategy for smart, sustainable and inclusive growth', COM/2010/2020 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1547571016399&uri=CELEX:52017SC0201>
- [7] European Commission, (2017), 'Proposal for a Directive of the European Parliament and of the Council on work-life balance for parents and carers and repealing Council Directive 2010/18/EU', OM/2017/0253 final - 2017/085 (COD)
- [8] European Commission, (2017), 'European Pillar of Social Rights', COM(2017) 250 final, 2017, <https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-250-F1-EN-MAIN-PART-1.PDF>
- [9] European Commission, (2014), 'An introduction to EU Cohesion Policy 2014-2020', [https://ec.europa.eu/regional\\_policy/sources/docgener/informat/basic/basic\\_2014\\_en.pdf](https://ec.europa.eu/regional_policy/sources/docgener/informat/basic/basic_2014_en.pdf)
- [10] UNDP (1995), 'Human Development Report 1995', UN, New York, Oxford University Press. [http://hdr.undp.org/sites/default/files/reports/256/hdr\\_1995\\_en\\_complete\\_nostats.pdf](http://hdr.undp.org/sites/default/files/reports/256/hdr_1995_en_complete_nostats.pdf)
- [11] Klasen, S., and D. Schüler. (2010). 'Reforming the Gender-Related Development Index (GDI) and the Gender Empowerment Measure (GEM): Implementing Some Specific Proposals.' IAI Discussion Paper 186, Ibero America Institute for Economic Research, Göttingen, Germany.
- [12] UNDP (2010), 'Human Development Report 2010: 20th Anniversary Edition: The Real Wealth of Nations: Pathways to Human Development' , UN, New York, Palgrave Macmillian, [http://hdr.undp.org/sites/default/files/reports/270/hdr\\_2010\\_en\\_complete\\_reprint.pdf](http://hdr.undp.org/sites/default/files/reports/270/hdr_2010_en_complete_reprint.pdf)

- [13]UN World Economic Forum (2006), 'Global Gender Gap Report 2006', WEF, Genève, [http://www3.weforum.org/docs/WEF\\_GenderGap\\_Report\\_2006.pdf](http://www3.weforum.org/docs/WEF_GenderGap_Report_2006.pdf)
- [14]OECD (2009), 'Social Institutions and Gender Index (SIGI) 2009', <http://www.oecd.org/development/development-gender/theoecdsocialinstitutionsandgenderindex.htm>
- [15]OECDdev (2018), 'Social Institutions and Gender Index (SIGI) 2019', <https://www.genderindex.org/>
- [16]European Institute for Gender Equality (EIGE) (2013), 'Gender Equality Index Report', Publications Office of the European Union, Luxemburg, <http://eige.europa.eu/sites/default/files/documents/Gender-Equality-Index-Report.pdf>
- [17]Plantenga, J., Remery, C., Figueriredo, H. and Smith, M. (2009), 'Towards a European Union Gender Equality Index', Journal of European Social Policy, 19(1): 19–33
- [18]Bericat, E. (2011), 'The European Gender Equality Index: Conceptual and Analytical Issues', Social Indicators Research, 108 (1), 1–28
- [19]Equal Measures 2030 (2018), Data Driving Change: Introducing the EM2030 SDG Gender Index
- [20]Dijkstra, A. G., and L. C. Hanmer (2000), 'Measuring Socio - Economic GENDER Inequality: Toward an Alternative to the UNDP Gender - Related Development Index', Feminist Economics, 6 (2): 41-75
- [21]Klasen, S., and Schüller, D., (2011), 'Reforming the Gender-Related Index and the Gender Empowerment Measure: Implementing Some Specific Proposals', Feminist Economics, 17 (1): 1–30, DOI: [10.1080/13545701.2010.541860](https://doi.org/10.1080/13545701.2010.541860)
- [22]Beneria, L., and Permanyer, I., (2010), 'The Measurement of Socio-economic Gender Inequality Revisited', Development and Change, 41(3):375-399
- [23]Permanyer, I., (2013), 'A Critical Assessment of the UNDP's Gender Inequality Index', Feminist Economics, 19(2): 1–32
- [24]European Institute for Gender Equality (EIGE) (2017), 'Gender Equality Index Report 2017', Publications Office of the European Union, Luxembourg, <https://eige.europa.eu/rdc/eige-publications/gender-equality-index-2017-measuring-gender-equality-european-union-2005-2015-report>
- [25]World Bank (2012), 'World Development Report 2012: Gender Equality and Development', Washington, DC.
- [26]European Commission, (2017), Commission Staff Working Document '[Social Scoreboard](#)' — accompanying the document "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Establishing a European Pillar of Social Rights", SWD(2017) 200 final.
- [27]European Commission, (2011), Communication from the Commission 'Supporting growth and jobs — An agenda for the modernisation of Europe's higher education systems', COM(2011) 567 final
- [28]Eurofound, (2006), 'Reconciliation of work and family life and collective bargaining in the European Union: An analysis of EIRO articles', Publications Office of the European Union, Luxembourg,



- [https://www.eurofound.europa.eu/sites/default/files/ef\\_publication/field\\_ef\\_document/ef0606en.pdf](https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef0606en.pdf)
- [29] UN Women, 'Political Participation of Women', New York.  
<http://asiapacific.unwomen.org/en/focus-areas/governance/political-participation-of-women>
- [30] Council of the European Union (2010), 'European Pact for Gender Equality (2011-2020)'.  
[http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XG0525\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XG0525(01)&from=EN)
- [31] World Health Organisation (WHO) (1986), 'The Ottawa Charter for Health Promotion: First International Conference on Health Promotion', Ottawa.
- [32] UN Women, 'Ending violence against women: Creating safe public spaces', New York.  
<http://www.unwomen.org/en/what-we-do/ending-violence-against-women/creating-safe-public-spaces>
- [33] World Health Organisation (WHO), 'Health 2020: The European Policy for Health and Well – being'
- [34] Overseas Development Institute (ODI) (2015), 'Asking people what they think: Using perceptions data to monitor the post-2015 agenda', Working paper 413, London.
- [35] Bertelsmann Stiftung & Sustainable Development Solutions Network (2018), 'SDG Index and Dashboards Report 2018', New York.  
<http://sdgindex.org/assets/files/2018/01%20SDGS%20GLOBAL%20EDITION%20WEB%20V9%20180718.pdf>
- [36] World Health Organisation (WHO) (2017), 'Violence against women'.  
<https://www.who.int/news-room/fact-sheets/detail/violence-against-women>.
- [37] European Union Agency for Fundamental Rights (FRA), (2015), 'Violence against women: an EU-wide survey. Main results', Publications Office of the European Union, Luxembourg. <http://fra.europa.eu/en/publication/2014/violence-against-women-eu-wide-survey-main-results-report>.
- [38] European Union Agency for Fundamental Rights (FRA), (2017), 'Challenges to women's human rights in the EU', Publications Office of the European Union, Luxembourg. <http://fra.europa.eu/en/publication/2017/colloq-womens-rights>
- [39] European Union (2007), 'Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community', Official Journal of the European Union, C 306, p. 1–271,  
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12007L%2FTXT>
- [40] European Parliament (2017), 'Resolution of 26 October 2017 on combating sexual harassment and abuse in the EU', P8\_TA-PROV(2017)0417, Strasbourg,  
<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2017-0417+0+DOC+XML+V0//EN&language=EN>
- [41] European Commission, (2016), 'Next steps for a sustainable European future: European action for sustainability', COM 739 final, Strasbourg.  
[https://ec.europa.eu/europeaid/sites/devco/files/communication-next-steps-sustainable-europe-20161122\\_en.pdf](https://ec.europa.eu/europeaid/sites/devco/files/communication-next-steps-sustainable-europe-20161122_en.pdf)

- [42]Eurostat (2018), 'Sustainable Development in the European Union – Monitoring report on progress towards the SDGs in an EU context -2018 edition', Publications Office of the European Union, Luxembourg.  
<https://ec.europa.eu/eurostat/product?code=KS-01-18-656>
- [43]Permanyer, I., (2015), 'Why call it "equality" when it should be "achievement"? A proposal to un-correct the "corrected gender gaps" in the EU Gender Equality Index', Journal of European Social Policy, 25:4, 414-430,  
<https://scholar.google.es/scholar?oi=bibs&cluster=13710092902304163982&btnI=1&hl=en>
- [44]European Institute for Gender Equality (EIGE) (2017), 'Gender Equality Index 2017: Methodological Report', Publications Office of the European Union, Luxembourg,  
<https://eige.europa.eu/rdc/eige-publications/gender-equality-index-2017-methodological-report>
- [45]OECD/EC JRC (2008), 'Handbook on Constructing Composite Indicators: Methodology and User Guide', OECD, Paris, <http://www.oecd.org/sdd/42495745.pdf>
- [46]Klasen, S., (2017) 'UNDP's Gender-related measures: Current problems and proposals for fixing', Courant Research Center Discussion Paper, University of Göttingen, <https://www.econstor.eu/bitstream/10419/157265/1/882698184.pdf>
- [47]Klasen, S., (2018), 'Human Development Indices and Indicators: A Critical Evaluation', UNDP Human Development Report Office, Background paper, [http://hdr.undp.org/sites/default/files/klasen\\_final.pdf](http://hdr.undp.org/sites/default/files/klasen_final.pdf)
- [48]Anand, S., (2018), 'Recasting Human Development Measures', UNDP Human Development Report, Discussion Paper, [http://hdr.undp.org/sites/default/files/anand\\_recasting\\_human\\_development\\_measures.pdf](http://hdr.undp.org/sites/default/files/anand_recasting_human_development_measures.pdf)
- [49]Eurofound, (2016), 'The gender employment gap: challenges and solutions', Publications Office of the European Union, Luxembourg.
- [50]European Commission, (2018), 'Barcelona objectives', Justice and Consumers, Publications Office of the European Union, Luxembourg.  
[https://ec.europa.eu/info/sites/info/files/bcn\\_objectives-report2018\\_web\\_en.pdf](https://ec.europa.eu/info/sites/info/files/bcn_objectives-report2018_web_en.pdf)
- [51]European Council, (2002), 'Presidency Conclusions', Barcelona,  
[http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/71025.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/71025.pdf)
- [52]Council of the European Union, (2009), 'Council conclusions on a strategic framework for European cooperation in education and training (ET 2020)', OJ 2009/C 119/02,  
<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A52009XG0528%2801%29>
- [53]European Institute for Gender Equality (EIGE), (2017), 'Economic Benefits of Gender Equality in the EU: EU and EU Member States overviews', Publications Office of the European Union, Luxembourg  
[http://eige.europa.eu/sites/default/files/documents/ti\\_pubpdf\\_mh0116183enn\\_pdfweb\\_20170518162039.pdf](http://eige.europa.eu/sites/default/files/documents/ti_pubpdf_mh0116183enn_pdfweb_20170518162039.pdf)
- [54]European Institute for Gender Equality (EIGE), (2017), 'Gender segregation in education, training and the labour market', Publications Office of the European Union,

- Luxembourg, <http://data.consilium.europa.eu/doc/document/ST-14624-2017-ADD-2/en/pdf>
- [55]Stoet, G., Geary, D. C. (2018), 'The Gender-Equality Paradox in Science, Technology, Engineering, and Mathematics Education', *Psychological Science*, 29(4).  
<https://doi.org/10.1177/0956797617741719>
- [56]World Economic Forum (2018), 'Global Gender Gap Report 2018', WEF, Genève,  
<https://www.weforum.org/reports/the-global-gender-gap-report-2018>
- [57]UNDP, (2017), 'Human Development Report 2016: Human Development for Everyone', UN, New York, <https://doi.org/10.18356/b6186701-en>
- [58]UNDP, (2018), 'Human Development Indices and Indicators 2018: Statistical update', UN, New York, <https://doi.org/10.18356/656a3808-en>
- [59]Smits, J., & Permanyer, I., (2018), 'Subnational Human Development Database', GDL Working Paper 18-101
- [60]Bubbico, R., & Dijkstra, L., (2011), 'The European Regional Human Development and Human Poverty Indices', *European Union Regional Focus* 02/2011,  
[http://ec.europa.eu/regional\\_policy/information/focus/index\\_en.cfm](http://ec.europa.eu/regional_policy/information/focus/index_en.cfm)
- [61]Charron, N., Lapuente, V. & Dijkstra, L., (2012), 'Regional Governance Matters', DG Regio Working Papers,  
[https://ec.europa.eu/regional\\_policy/sources/docgener/work/2012\\_02\\_governance.pdf](https://ec.europa.eu/regional_policy/sources/docgener/work/2012_02_governance.pdf)
- [62]Charron, N., Lapuente, V., (2018), "Quality of Government in EU regions: Spatial and temporal patterns", *The Quality of Government Institute Working Papers*, University of Gothenburg

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## **ANNEXES**

### **ANNEX I. List of indicators included in the Regional Gender Equality Monitor framework**

Domain	Nr	Variable	Description	Unit	Data Source	Last available year	Direction	Perception based	Women Disadvantage Index	Women Presence Index
1. Work & Money	1	Full-time and part-time employment rate (15+population) excluding involuntary part-time work	Full-time and part-time employment rate (15+population) excluding involuntary part-time work	(%)	Eurostat - EU LFS, Eurostat calculations according to JRC's request	2016	+	no	Y	Y
	2	Unemployment rate	The unemployment rate shows unemployed persons as a percentage of the economically active population. Unemployed persons comprise persons aged 15-74 who were without work during the reference week, but available for work at the time and actively seeking employment.	(%)	Eurostat - EU LFS [fst_r_fu3rt]	2017	-	no	Y	Y
	3	Duration of working life	The duration of working life indicator measures the number of years a person aged 15 is expected to be active in the labour market throughout his/her life. This indicator is calculated with probabilistic model combining demographic data (Life tables available from Eurostat to calculate the survival functions) and labour market data (Labour Force Survey activity rates by single age group). Exact calculation methodology can be requested from Eurostat.	Years	Eurostat - EU LFS [fsi_dwL_a]	2016	+	no	Y	Y
	4	Persons with tertiary education, employed in science & technology (%)	The share of persons aged 25 - 64, with tertiary education (ISCED levels 5 and 6) that are employed in a Science & Technology occupation (HRSTO) – ISCO major groups: 2 (professionals) and 3 (technicians)out of total employment 25 -64.	(%)	JRC elaboration from requested Eurostat - EU LFS data	2017	+	no	N	Y
	5	Mean annual earnings - NACE Rev. 2, B-S excluding O	Mean annual earnings by sex, age and occupation - NACE Rev. 2, B-S excluding O	Currency: Euro	Eurostat - [earn_ses14_28]	2014	+	no	Y	Y
2. Knowledge	6	Graduates of tertiary education (% 25-64 population)	Graduates of tertiary education. This rate shows the tertiary education graduates as a percentage of the 25-64 population. All stages (ISCED levels 5 to 8) of tertiary education are used.	(%)	Eurostat - [edat_fse_04]	2017	+	no	Y	Y
	7	People participating in formal or non-formal education and training (% 25 - 64 population)	The share of persons aged 25 - 64 that are participating/ participated in formal or non-formal education and training the last 4 weeks. Percentage of people participating in formal or non-formal education and training, out of total population of 15+.	(%)	Eurostat - [trng_fse_04]	2017	+	no	Y	Y
	8	Tertiary students in STEM fields	Lifelong learning encompasses all purposeful learning activity, whether formal, non-formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence.  The share of tertiary students (ISCED 5-6)in STEM fields. The fields of education considered relevant, are: EF4 Science, mathematics and computing EF5 Engineering, manufacturing and construction EF6 Agriculture and veterinary.	(%)	Unesco/OECD/Eurostat (UOE) - [educ_enr5]	2012	+	no	Y	N
	9	Early leavers from education and training	Early leavers from education and training denotes the percentage of the population aged 18 to 24 having attained at most lower secondary education and not being involved in further education or training. The numerator of the indicator refers to persons aged 18 to 24 who meet the following two conditions: (a) the highest level of education or training they have completed is ISCED 2011 level 0, 1 or 2 (ISCED 1997: 0, 1, 2 or 3C short) and (b) they have not received any education or training (i.e. neither formal nor non-formal) in the four weeks preceding the survey. The denominator in the total population consists of the same age group, excluding the respondents who have not answered the questions 'highest level of education or training successfully completed' and 'participation in education and training'.	(%)	Eurostat - [edat_fse_14]	2016	-	no	Y	Y
10	Young people neither in employment nor in education and training	Young people neither in employment nor in education and training (NEET) corresponds to the percentage of the population 15 to 24 years who is not employed and not involved in further education or training. The numerator of the indicator refers to persons who meet the following two conditions: they are not employed and they have not received any education or training in the last four weeks. The denominator in the total population consists of the 15 to 24 years persons, excluding the respondents who have not answered the question 'participation in regular (formal) education and training'.	(%)	Eurostat - [edat_fse_22]	2017	-	no	Y	Y	

Domain	Nr	Variable	Description	Unit	Data Source	Last available year	Direction	Perception based	Women Disadvantage Index	Women Presence Index
3. Time	11	Regularly participate in a leisure activity (16+ population)	People doing sporting, cultural or leisure activities outside of their home, at least daily or several times a week (16+ age) as a share of total number of people of this age group.	(%)	JRC elaboration from EU-SILC microdata EU-SILC: PD060 (participation in a leisure activity)	2015 (3 yrs avg)	+	no	Y	Y
	12	Donated money to a charity	Share of people (15+ age) that donated money to a charity in the past month.	(%)	JRC elaboration from Gallup World Poll microdata WP108 (Donated money to a charity)	2017 (4 yrs avg)	+	yes	Y	Y
	13	Helped a stranger/ someone you didn't know, who needed help	Share of people (15+ age) that helped a stranger or someone they didn't know who needed help in the past month.	(%)	JRC elaboration from GALLUP World Poll data (WP110)	2017 (4 yrs avg)	+	yes	Y	Y
	14	Volunteered the time to an organization	Share of people (15+ age) that volunteered time to an organization in the past month.	(%)	JRC elaboration from GALLUP World Poll data (WP109)	2017 (4 yrs avg)	+	yes	Y	Y
4. Power	15	Share of Ministers (%)	Share of all ministers (junior and senior) in national governments. The national government is the executive body with authority to govern a country or a state. The Cabinet is defined as a body of high-ranking members of the government, typically representing the executive branch and formed of senior ministers. In some cases, where there are no junior ministers, the national government is the Cabinet. It may also be referred to as the Council of Ministers, an Executive Council or an Executive Committee. Senior ministers are members of the government who have a seat in the cabinet or council of ministers (count includes the prime minister). Junior ministers are members of the government who do not have a seat in the cabinet.	(%)	Gender Statistics Database - European Institute of Gender Equality	2017	+	no	Y	Y
	16	Share of members of Parliament (%)	Share of all members (including president/leader) in national parliaments. The national parliament is the national legislative assembly. In a bicameral system, the parliament consists of two chambers/houses - a lower house and an upper house. In a unicameral system, there is only a single house of parliament.	(%)	Gender Statistics Database - European Institute of Gender Equality	2017	+	no	Y	Y
	17	Share of members of Regional Assemblies (%)	Share of all members (including president/leader) in regional assemblies. An assembly is the representative assembly of a region (i.e. regional authority) which is composed of popularly elected representatives of constituent self-governing regions. Regional parliaments, regional councils and regional assemblies are all treated as being equivalent. Eight countries do not have regional assemblies (BG, CY, EE, IE, LT, LU, MT, SI).	(%)	Gender Statistics Database - European Institute of Gender Equality	2017	+	no	Y	Y
	18	Share of members of Regional Executives (%)	Share of all members (including president/leader) in regional executives. A regional executive is a person or a body exercising executive functions on behalf of a region (regional authority). 14 countries do not have regional executives (BG, CY, DK, EE, FR, HU, IE, LV, LT, LU, MT, RO, SI, SK).	(%)	Gender Statistics Database - European Institute of Gender Equality	2017	+	no	Y	Y



Domain	Nr	Variable	Description	Unit	Data Source	Last available year	Direction	Perception based	Women Disadvantage Index	Women Presence Index
5. Health	19	Self-perceived health, good or very good (% population)	Percentage of people (16+ age) assessing their health as "Very good" or "Good" out of total. The concept is operationalized by a question on how a person perceives his/her health in general using one of the answer categories very good/good/ fair/bad/very bad.	(%)	JRC elaboration from EU-SILC microdata EU-SILC: PH010 (General health)	2016 (3 yrs avg) [2015 for IE, IT, LU, MT (3 yrs avg)]	+	yes	Y	Y
	20	Health problem that prevents you from doing any of the things people your age normally can do	Percentage of people (15 + age) that claim having health problems that prevents them from doing any of the things people their age normally can do	(%)	JRC elaboration from GALLUP World Poll data (WP23)	2017 (4 yrs avg)	-	yes	Y	Y
	21	Life expectancy in absolute value at the age of <u>30 years old</u>	Life expectancy at 30 years old is the mean number of years still to be lived by a person who has reached a 30 years of age, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying).	Years	Eurostat - [demo_r_mlfexp]	2016	+		N	Y
	22	Death rate caused by malignant neoplastic and cardiovascular diseases	The (age-) standardised death rate is a weighted average of age-specific mortality rates. The weighting factor is the age distribution of a standard reference population. The standard reference population used is the European standard population (see annex European standard population - revision 2012) as defined by Eurostat in 2012. The new European Standard Population (ESP) is the unweighted average of the individual populations of EU-27 plus EFTA countries in each 5-years age band (with the exception of under 5 and the highest age-group of 95+). As causes of death the categories ICD10 C_I are used.	(%)	Eurostat - [hlth_cd_ysdr2]	2015 (3 yrs avg)	-		N	Y
	23	Population without unmet needs for medical examination (% population)	Self-reported unmet needs for medical examination. The variables refer to the respondent's own assessment of whether he or she needed examination or treatment, but did not have it. Percentage of persons "No unmet needs to declare", Medical care: refers to individual health care services (medical examination or treatment excluding dental care) provided by or under direct supervision of medical doctors or equivalent professions according to national health care systems.	(%)	JRC elaboration from EU-SILC microdata EU-SILC: PH040 (Unmet need for medical examination or treatment)	2016 (3 yrs avg) [2015 for IE, IT, LU, MT (3 yrs avg)]	+	yes	Y	Y
	24	Population without unmet needs for dental examination (% population)	Self-reported unmet needs for dental examination. The variables refer to the respondent's own assessment of whether he or she needed the examination or treatment, but did not have it. Percentage of persons "No unmet needs to declare". Dental care: refers to individual health care services provided by or under direct supervision of stomatologists (dentists). Health care provided by orthodontists is included.	(%)	JRC elaboration from EU-SILC microdata EU-SILC: PH060 (Unmet need for dental examination or treatment)	2016 (3 yrs avg) [2015 for IE, IT, LU, MT (3 yrs avg)]	+	yes	Y	Y

Domain	Nr	Variable	Description	Unit	Data Source	Last available year	Direction	Perception based	Women Disadvantage Index	Women Presence Index
6. Safety, Security and Trust	25	Safe walking alone at night in the city/ area where you live	Share of people (15 + age) that feel safe walking alone at night in the city or area where they live.	(%)	JRC elaboration from GALLUP World Poll data (WP113)	2017 (4 yrs avg)	+	yes	Y	Y
	26	Money or property stolen	Share of people (15 + age) that had money or property stolen from them or another household member the last year.	(%)	JRC elaboration from GALLUP World Poll data (WP117)	2017 (4 yrs avg)	-	yes	Y	Y
	27	Assaulted or mugged	Share of people (15 + age) that had been assaulted or mugged the last year.	(%)	JRC elaboration from GALLUP World Poll data (WP118)	2017 (4 yrs avg)	-	yes	Y	Y
	28	Relatives/ friends you can count on to help you	Share of people (15 + age) that have relatives or friends to count on for help whenever they are in need them, or not?	(%)	JRC elaboration from GALLUP World Poll data (WP27)	2017 (4 yrs avg)	+	yes	Y	Y
	29	Women in this country are treated with respect and dignity	Share of people (15 + age) that believe that women in their country are treated with respect and dignity.	(%)	JRC elaboration from GALLUP World Poll data (WP9050)	2017 (4 yrs avg)	+	yes	Y	Y
	30	Voiced your opinion to a public official	Share of people (15 + age) that voiced their opinion to a public official the last month.	(%)	JRC elaboration from GALLUP World Poll data (WP111)	2017 (4 yrs avg)	+	yes	Y	Y
7. Life satisfaction/quality	31	Your friends and family give you positive energy	Share of people (15 + age) that agree that friends and family give them positive energy every day.	(%)	JRC elaboration from GALLUP World Poll data (WP14445)	2017 (4 yrs avg)	+	yes	Y	Y
	32	Feel well-rested	Share of people (15 + age) that felt well-rested yesterday.	(%)	JRC elaboration from GALLUP World Poll data (WP60)	2017 (4 yrs avg)	+	yes	Y	Y
	33	Smile or laugh a lot	Share of people (15 + age) that smile or laugh a lot yesterday.	(%)	JRC elaboration from GALLUP World Poll data (WP63)	2017 (4 yrs avg)	+	yes	Y	Y
	34	Experience enjoyment	Share of people (15 + age) that experienced enjoyment yesterday.	(%)	JRC elaboration from GALLUP World Poll data (WP67)	2017 (4 yrs avg)	+	yes	Y	Y
	35	Life satisfaction	Share of people (15 + age) that feel very satisfied with their life.	(%)	JRC elaboration from GALLUP World Poll data (WP16)	2017 (4 yrs avg)	+	yes	N	Y

## ANNEX II. FemDI & Fem AI scores, overall and by domain

**Table 1.** Country and region scores by domain and overall FemDI

NUTS_CODE	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	FemDI
AT	0.35	0.09	0.18	0.37	0.11	0.08	0.08	0.18
AT11	0.39	0.09	0.12	0.46	0.21	0.00	0.17	0.21
AT12	0.35	0.10	0.12	0.37	0.08	0.04	0.18	0.18
AT13	0.30	0.07	0.21	0.28	0.14	0.15	0.04	0.17
AT21	0.37	0.09	0.19	0.46	0.16	0.17	0.63	0.30
AT22	0.37	0.09	0.24	0.33	0.16	0.14	0.13	0.21
AT31	0.38	0.16	0.51	0.42	0.12	0.16	0.06	0.26
AT32	0.36	0.23	0.20	0.38	0.08	0.01	0.05	0.19
AT33	0.42	0.13	0.52	0.34	0.08	0.14	0.00	0.23
AT34	0.40	0.16	0.48	0.39	0.22	0.15	0.41	0.32
BE	0.26	0.05	0.10	0.28	0.23	0.16	0.09	0.17
BE10	0.29	0.05	0.29	0.22	0.17	0.27	0.14	0.20
BE21	0.31	0.05	0.09	0.30	0.20	0.17	0.10	0.17
BE22	0.31	0.05	0.09	0.30	0.21	0.07	0.09	0.16
BE23	0.26	0.07	0.09	0.30	0.19	0.17	0.10	0.17
BE24	0.26	0.08	0.14	0.30	0.20	0.24	0.08	0.19
BE25	0.26	0.05	0.17	0.30	0.17	0.14	0.11	0.17
BE31	0.23	0.06	0.31	0.29	0.26	0.41	0.86	0.34
BE32	0.23	0.05	0.24	0.29	0.27	0.18	0.15	0.20
BE33	0.24	0.05	0.15	0.29	0.36	0.28	0.44	0.26
BE34	0.25	0.06	0.20	0.29	0.24	0.57	0.59	0.31
BE35	0.22	0.05	0.13	0.29	0.37	0.13	0.16	0.19
BG	0.22	0.12	0.08	0.44	0.23	0.09	0.04	0.18
BG31	0.23	0.23	0.10	0.44	0.24	0.06	0.29	0.23
BG32	0.23	0.15	0.28	0.44	0.28	0.14	0.21	0.25
BG33	0.35	0.23	0.42	0.44	0.24	0.25	0.17	0.30
BG34	0.28	0.25	0.09	0.44	0.35	0.07	0.03	0.22
BG41	0.18	0.08	0.10	0.44	0.23	0.11	0.22	0.20
BG42	0.22	0.06	0.09	0.44	0.17	0.08	0.00	0.15
CY	0.33	0.00	0.22	0.73	0.11	0.20	0.05	0.23
CY00	0.33	0.00	0.22	0.73	0.11	0.20	0.05	0.23
CZ	0.48	0.16	0.18	0.66	0.10	0.15	0.00	0.25
CZ01	0.46	0.18	0.09	0.50	0.16	0.24	0.00	0.23
CZ02	0.48	0.16	0.23	0.65	0.02	0.05	0.02	0.23
CZ03	0.48	0.19	0.23	0.65	0.11	0.24	0.11	0.29
CZ04	0.48	0.38	0.22	0.69	0.18	0.16	0.09	0.31
CZ05	0.48	0.17	0.16	0.67	0.08	0.15	0.00	0.25
CZ06	0.50	0.20	0.38	0.66	0.15	0.14	0.01	0.29
CZ07	0.46	0.13	0.44	0.71	0.13	0.24	0.01	0.30
CZ08	0.48	0.20	0.14	0.65	0.11	0.16	0.04	0.25

NUTS_CODE	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	FemDI
DE	0.35	0.27	0.05	0.28	0.06	0.11	0.04	0.16
DE11	0.42	0.34	0.08	0.31	0.11	0.08	0.13	0.21
DE12	0.40	0.40	0.08	0.31	0.11	0.08	0.13	0.22
DE13	0.38	0.33	0.08	0.31	0.11	0.08	0.13	0.20
DE14	0.40	0.41	0.08	0.31	0.11	0.08	0.13	0.22
DE21	0.37	0.32	0.12	0.36	0.13	0.16	0.00	0.21
DE22	0.39	0.51	0.12	0.36	0.13	0.16	0.00	0.24
DE23	0.38	0.64	0.12	0.36	0.13	0.16	0.00	0.25
DE24	0.36	0.41	0.12	0.36	0.13	0.16	0.00	0.22
DE25	0.37	0.32	0.12	0.36	0.13	0.16	0.00	0.21
DE26	0.37	0.41	0.12	0.36	0.13	0.16	0.00	0.22
DE27	0.42	0.41	0.12	0.36	0.13	0.16	0.00	0.23
DE30	0.24	0.13	0.04	0.21	0.04	0.14	0.20	0.14
DE40	0.17	0.13	0.15	0.23	0.13	0.46	0.36	0.24
DE50	0.38	0.31	0.54	0.20	0.04	0.09	0.12	0.24
DE60	0.33	0.14	0.20	0.28	0.04	0.38	0.15	0.22
DE71	0.40	0.30	0.11	0.34	0.13	0.11	0.24	0.23
DE72	0.39	0.38	0.11	0.34	0.13	0.11	0.24	0.24
DE73	0.39	0.60	0.11	0.34	0.13	0.11	0.24	0.27
DE80	0.18	0.16	0.04	0.29	0.10	0.41	0.34	0.22
DE91	0.36	0.37	0.17	0.29	0.04	0.08	0.05	0.19
DE92	0.33	0.26	0.17	0.29	0.04	0.08	0.05	0.17
DE93	0.35	0.29	0.17	0.29	0.04	0.08	0.05	0.18
DE94	0.36	0.29	0.17	0.29	0.04	0.08	0.05	0.18
DEA1	0.36	0.27	0.12	0.35	0.05	0.12	0.12	0.20
DEA2	0.35	0.28	0.12	0.35	0.05	0.12	0.12	0.20
DEA3	0.37	0.31	0.12	0.35	0.05	0.12	0.12	0.20
DEA4	0.37	0.36	0.12	0.35	0.05	0.12	0.12	0.21
DEA5	0.36	0.34	0.12	0.35	0.05	0.12	0.12	0.21
DEB1	0.33	0.40	0.19	0.21	0.07	0.08	0.07	0.19
DEB2	0.32	0.40	0.19	0.21	0.07	0.08	0.07	0.19
DEB3	0.34	0.34	0.19	0.21	0.07	0.08	0.07	0.19
DEC0	0.34	0.42	0.32	0.27	0.14	0.09	0.11	0.24
DED2	0.22	0.22	0.07	0.29	0.04	0.16	0.03	0.15
DED4	0.27	0.22	0.07	0.29	0.04	0.16	0.03	0.15
DED5	0.19	0.26	0.07	0.29	0.04	0.16	0.03	0.15
DEE0	0.18	0.15	0.40	0.35	0.04	0.50	0.37	0.29
DEF0	0.30	0.34	0.14	0.29	0.07	0.21	0.18	0.22
DEG0	0.19	0.17	0.46	0.19	0.04	0.24	0.11	0.20
DK	0.27	0.02	0.01	0.23	0.17	0.10	0.04	0.12
DK01	0.27	0.02	0.07	0.21	0.12	0.14	0.04	0.13
DK02	0.29	0.06	0.04	0.20	0.16	0.16	0.18	0.16
DK03	0.26	0.02	0.00	0.31	0.15	0.10	0.10	0.13
DK04	0.30	0.03	0.01	0.26	0.28	0.09	0.03	0.14
DK05	0.30	0.04	0.07	0.17	0.14	0.11	0.05	0.13
EE	0.34	0.16	0.08	0.47	0.52	0.13	0.05	0.25
EE00	0.34	0.16	0.08	0.47	0.52	0.13	0.05	0.25

NUTS_CODE	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	FemDI
EL	0.61	0.10	0.10	0.66	0.36	0.16	0.13	0.30
EL30	0.54	0.13	0.12	0.45	0.37	0.17	0.10	0.27
EL41	0.69	0.14	0.10	0.68	0.22	0.20	0.09	0.30
EL42	0.55	0.19	0.10	0.70	0.22	0.20	0.09	0.29
EL43	0.54	0.15	0.10	0.65	0.22	0.20	0.09	0.28
EL51	0.63	0.14	0.13	0.75	0.46	0.17	0.32	0.37
EL52	0.62	0.11	0.13	0.60	0.46	0.17	0.32	0.34
EL53	0.70	0.10	0.13	0.80	0.46	0.17	0.32	0.38
EL54	0.59	0.12	0.13	0.53	0.46	0.17	0.32	0.33
EL61	0.69	0.10	0.13	0.76	0.32	0.16	0.14	0.33
EL62	0.48	0.12	0.13	0.75	0.32	0.16	0.14	0.30
EL63	0.70	0.16	0.13	0.73	0.32	0.16	0.14	0.33
EL64	0.76	0.10	0.13	0.75	0.32	0.16	0.14	0.34
EL65	0.65	0.09	0.13	0.64	0.32	0.16	0.14	0.30
ES	0.43	0.09	0.28	0.20	0.12	0.08	0.03	0.18
ES11	0.37	0.09	0.54	0.23	0.30	0.20	0.07	0.26
ES12	0.32	0.13	0.54	0.25	0.30	0.20	0.07	0.26
ES13	0.36	0.09	0.54	0.33	0.30	0.20	0.07	0.27
ES21	0.39	0.09	0.64	0.18	0.20	0.21	0.16	0.27
ES22	0.49	0.18	0.64	0.14	0.20	0.21	0.16	0.29
ES23	0.50	0.11	0.64	0.23	0.20	0.21	0.16	0.29
ES24	0.52	0.09	0.64	0.21	0.20	0.21	0.16	0.29
ES30	0.34	0.10	0.13	0.24	0.15	0.09	0.01	0.15
ES41	0.47	0.09	0.35	0.24	0.08	0.12	0.34	0.24
ES42	0.63	0.13	0.35	0.25	0.08	0.12	0.34	0.27
ES43	0.59	0.09	0.35	0.17	0.08	0.12	0.34	0.25
ES51	0.38	0.10	0.17	0.25	0.10	0.05	0.15	0.17
ES52	0.46	0.09	0.17	0.17	0.10	0.05	0.15	0.17
ES53	0.32	0.09	0.17	0.15	0.10	0.05	0.15	0.15
ES61	0.51	0.09	0.36	0.18	0.26	0.10	0.00	0.21
ES62	0.55	0.12	0.36	0.30	0.26	0.10	0.00	0.24
ES63	0.66	0.30	0.36	0.20	0.26	0.10	0.00	0.27
ES64	0.71	0.31	0.36	0.20	0.26	0.10	0.00	0.28
ES70	0.38	0.09	0.26	0.14	0.17	0.18	0.09	0.19
FI	0.21	0.20	0.00	0.14	0.18	0.12	0.03	0.13
FI19	0.22	0.21	0.02	0.14	0.24	0.11	0.00	0.13
FI1B	0.22	0.20	0.00	0.11	0.41	0.13	0.03	0.16
FI1C	0.21	0.20	0.03	0.13	0.16	0.16	0.02	0.13
FI1D	0.21	0.20	0.00	0.16	0.11	0.11	0.06	0.12

NUTS_CODE	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	FemDI
FR	0.29	0.08	0.06	0.24	0.17	0.15	0.08	0.15
FR10	0.29	0.08	0.10	0.23	0.39	0.41	0.26	0.25
FR21	0.28	0.08	0.06	0.24	0.21	0.15	0.25	0.18
FR22	0.28	0.08	0.06	0.23	0.21	0.15	0.25	0.18
FR23	0.31	0.08	0.06	0.23	0.21	0.15	0.25	0.18
FR24	0.26	0.08	0.06	0.25	0.21	0.15	0.25	0.18
FR25	0.26	0.08	0.06	0.23	0.21	0.15	0.25	0.18
FR26	0.26	0.10	0.06	0.24	0.21	0.15	0.25	0.18
FR30	0.27	0.12	0.31	0.23	0.26	0.10	0.18	0.21
FR41	0.28	0.13	0.18	0.24	0.15	0.14	0.03	0.16
FR42	0.27	0.12	0.18	0.24	0.15	0.14	0.03	0.16
FR43	0.27	0.10	0.18	0.24	0.15	0.14	0.03	0.16
FR51	0.29	0.08	0.18	0.24	0.20	0.14	0.11	0.18
FR52	0.30	0.11	0.18	0.24	0.20	0.14	0.11	0.18
FR53	0.36	0.14	0.18	0.24	0.20	0.14	0.11	0.20
FR61	0.30	0.10	0.11	0.24	0.23	0.47	0.20	0.24
FR62	0.34	0.18	0.11	0.29	0.23	0.47	0.20	0.26
FR63	0.26	0.12	0.11	0.24	0.23	0.47	0.20	0.23
FR71	0.30	0.08	0.34	0.24	0.07	0.22	0.09	0.19
FR72	0.31	0.14	0.34	0.24	0.07	0.22	0.09	0.20
FR81	0.29	0.08	0.06	0.29	0.16	0.06	0.06	0.14
FR82	0.32	0.08	0.06	0.23	0.16	0.06	0.06	0.14
FR83	0.27	0.10	0.06	0.24	0.16	0.06	0.06	0.14
HR	0.24	0.07	0.21	0.55	0.20	0.12	0.10	0.21
HR03	0.24	0.07	0.20	0.51	0.27	0.15	0.01	0.21
HR04	0.24	0.08	0.28	0.57	0.17	0.12	0.14	0.23
HU	0.35	0.22	0.06	0.89	0.17	0.12	0.03	0.26
HU10	0.38	0.18	0.16	0.88	0.27	0.14	0.02	0.29
HU21	0.35	0.20	0.12	0.88	0.16	0.17	0.04	0.27
HU22	0.36	0.23	0.04	0.90	0.20	0.17	0.10	0.29
HU23	0.31	0.25	0.04	0.90	0.11	0.10	0.11	0.26
HU31	0.31	0.43	0.15	0.88	0.23	0.25	0.22	0.35
HU32	0.30	0.25	0.10	0.88	0.27	0.14	0.06	0.29
HU33	0.30	0.21	0.06	0.92	0.17	0.14	0.03	0.26
IE	0.38	0.09	0.10	0.56	0.19	0.12	0.10	0.22
IE01	0.38	0.10	0.10	0.56	0.19	0.11	0.15	0.23
IE02	0.38	0.09	0.13	0.56	0.19	0.12	0.09	0.22
IT	0.54	0.04	0.29	0.47	0.31	0.15	0.16	0.28
ITC1	0.53	0.06	0.42	0.43	0.19	0.15	0.17	0.28
ITC2	0.44	0.06	0.42	0.60	0.19	0.15	0.17	0.29
ITC3	0.62	0.18	0.42	0.51	0.19	0.15	0.17	0.32
ITC4	0.57	0.04	0.42	0.41	0.19	0.15	0.17	0.28
ITF1	0.62	0.04	0.28	0.63	0.33	0.19	0.23	0.33
ITF2	0.44	0.05	0.28	0.65	0.33	0.19	0.23	0.31
ITF3	0.61	0.06	0.28	0.36	0.33	0.19	0.23	0.29
ITF4	0.62	0.09	0.28	0.59	0.33	0.19	0.23	0.33
ITF5	0.55	0.04	0.28	0.64	0.33	0.19	0.23	0.32

NUTS_CODE	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	FemDI
ITF6	0.54	0.05	0.28	0.54	0.33	0.19	0.23	0.31
ITG1	0.55	0.04	0.10	0.44	0.23	0.26	0.04	0.24
ITG2	0.42	0.04	0.10	0.53	0.23	0.26	0.04	0.23
ITH1	0.48	0.15	0.16	0.46	0.41	0.19	0.32	0.31
ITH2	0.46	0.04	0.16	0.57	0.41	0.19	0.32	0.31
ITH3	0.58	0.08	0.16	0.48	0.41	0.19	0.32	0.32
ITH4	0.55	0.12	0.16	0.37	0.41	0.19	0.32	0.30
ITH5	0.52	0.08	0.16	0.33	0.41	0.19	0.32	0.29
ITI1	0.49	0.07	0.41	0.35	0.41	0.16	0.05	0.28
ITI2	0.53	0.04	0.41	0.43	0.41	0.16	0.05	0.29
ITI3	0.56	0.04	0.41	0.41	0.41	0.16	0.05	0.29
ITI4	0.51	0.04	0.41	0.44	0.41	0.16	0.05	0.29
LT	0.14	0.14	0.08	0.59	0.44	0.14	0.02	0.22
LT00	0.14	0.14	0.08	0.59	0.44	0.14	0.02	0.22
LU	0.23	0.03	0.10	0.48	0.11	0.14	0.01	0.16
LU00	0.23	0.03	0.10	0.48	0.11	0.14	0.01	0.16
LV	0.16	0.13	0.11	0.64	0.27	0.14	0.01	0.21
LV00	0.16	0.13	0.11	0.64	0.27	0.14	0.01	0.21
MT	0.59	0.07	0.32	0.76	0.17	0.21	0.12	0.32
MT00	0.59	0.07	0.32	0.76	0.17	0.21	0.12	0.32
NL	0.39	0.02	0.12	0.31	0.19	0.22	0.07	0.19
NL11	0.26	0.04	0.62	0.31	0.22	0.28	0.00	0.25
NL12	0.30	0.02	0.12	0.27	0.12	0.08	0.18	0.16
NL13	0.34	0.06	0.27	0.48	0.18	0.38	0.68	0.34
NL21	0.37	0.02	0.12	0.21	0.19	0.22	0.04	0.17
NL22	0.37	0.02	0.20	0.22	0.21	0.36	0.14	0.22
NL23	0.38	0.06	0.12	0.43	0.26	0.62	0.58	0.35
NL31	0.41	0.02	0.19	0.17	0.29	0.15	0.16	0.20
NL32	0.38	0.02	0.24	0.26	0.15	0.27	0.09	0.20
NL33	0.42	0.04	0.12	0.27	0.21	0.19	0.07	0.19
NL34	0.44	0.19	0.17	0.41	0.36	0.30	0.10	0.28
NL41	0.41	0.03	0.22	0.40	0.22	0.22	0.39	0.27
NL42	0.41	0.06	0.31	0.43	0.12	0.19	0.13	0.23
PL	0.34	0.11	0.09	0.56	0.23	0.16	0.00	0.21
PL11	0.35	0.09	0.06	0.44	0.23	0.16	0.03	0.20
PL12	0.33	0.09	0.18	0.41	0.25	0.19	0.05	0.22
PL21	0.39	0.09	0.09	0.71	0.31	0.18	0.01	0.25
PL22	0.37	0.13	0.09	0.50	0.25	0.14	0.00	0.21
PL31	0.27	0.11	0.11	0.69	0.17	0.12	0.00	0.21
PL32	0.32	0.11	0.64	0.56	0.28	0.35	0.46	0.39
PL33	0.28	0.18	0.11	0.63	0.17	0.20	0.00	0.22
PL34	0.31	0.11	0.47	0.63	0.21	0.20	0.01	0.28
PL41	0.36	0.21	0.08	0.58	0.28	0.18	0.00	0.24
PL42	0.33	0.16	0.12	0.55	0.21	0.23	0.21	0.26
PL43	0.32	0.18	0.08	0.45	0.21	0.35	0.01	0.23
PL51	0.42	0.08	0.20	0.47	0.26	0.22	0.27	0.27

NUTS_CODE	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	FemDI
PL52	0.45	0.09	0.26	0.75	0.17	0.07	0.09	0.27
PL61	0.30	0.11	0.11	0.62	0.18	0.17	0.20	0.24
PL62	0.34	0.23	0.11	0.40	0.27	0.24	0.41	0.28
PL63	0.32	0.12	0.23	0.69	0.31	0.26	0.05	0.28
PT	0.27	0.09	0.21	0.31	0.39	0.25	0.17	0.24
PT11	0.33	0.11	0.27	0.31	0.45	0.28	0.29	0.29
PT15	0.20	0.12	0.24	0.31	0.32	0.43	0.15	0.25
PT16	0.28	0.09	0.25	0.31	0.35	0.27	0.14	0.24
PT17	0.23	0.10	0.21	0.31	0.40	0.28	0.23	0.25
PT18	0.29	0.09	0.20	0.31	0.30	0.27	0.25	0.24
PT20	0.17	0.14	0.33	0.39	0.30	0.30	0.14	0.25
PT30	0.11	0.14	0.57	0.42	0.49	0.41	0.06	0.31
RO	0.30	0.18	0.10	0.65	0.64	0.16	0.15	0.31
RO11	0.30	0.26	0.12	0.65	0.45	0.05	0.00	0.26
RO12	0.32	0.18	0.21	0.67	0.38	0.18	0.12	0.29
RO21	0.23	0.13	0.05	0.65	0.77	0.21	0.24	0.33
RO22	0.32	0.27	0.15	0.65	0.73	0.27	0.41	0.40
RO31	0.31	0.31	0.24	0.63	0.92	0.27	0.40	0.44
RO32	0.27	0.11	0.17	0.63	0.77	0.21	0.04	0.31
RO41	0.33	0.18	0.16	0.64	0.42	0.19	0.37	0.33
RO42	0.37	0.18	0.16	0.66	0.32	0.11	0.14	0.28
SE	0.17	0.10	0.10	0.02	0.27	0.19	0.02	0.12
SE11	0.19	0.10	0.07	0.00	0.21	0.29	0.02	0.13
SE12	0.19	0.10	0.13	0.01	0.20	0.17	0.00	0.11
SE21	0.16	0.10	0.23	0.02	0.39	0.28	0.20	0.20
SE22	0.15	0.11	0.15	0.03	0.29	0.19	0.16	0.16
SE23	0.16	0.10	0.10	0.00	0.29	0.22	0.01	0.13
SE31	0.11	0.12	0.14	0.05	0.29	0.21	0.16	0.15
SE32	0.13	0.16	0.05	0.05	0.42	0.17	0.02	0.14
SE33	0.10	0.15	0.05	0.03	0.23	0.09	0.00	0.09
SI	0.20	0.13	0.29	0.40	0.24	0.20	0.21	0.24
SI03	0.24	0.15	0.32	0.40	0.25	0.25	0.21	0.26
SI04	0.16	0.13	0.25	0.40	0.22	0.15	0.23	0.22
SK	0.40	0.14	0.21	0.63	0.22	0.15	0.01	0.25
SK01	0.35	0.14	0.19	0.59	0.21	0.20	0.01	0.24
SK02	0.41	0.17	0.26	0.61	0.20	0.20	0.06	0.27
SK03	0.39	0.22	0.20	0.66	0.24	0.19	0.00	0.27
SK04	0.43	0.12	0.25	0.64	0.24	0.10	0.02	0.26



NUTS_CODE	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	FemDI
UK	0.41	0.07	0.07	0.34	0.03	0.03	0.07	0.15
UKC1	0.38	0.10	0.13	0.34	0.15	0.09	0.19	0.20
UKC2	0.36	0.10	0.13	0.34	0.15	0.09	0.19	0.20
UKD1	0.33	0.08	0.06	0.34	0.05	0.04	0.18	0.15
UKD3	0.33	0.14	0.06	0.34	0.05	0.04	0.18	0.16
UKD4	0.35	0.07	0.06	0.34	0.05	0.04	0.18	0.15
UKD6	0.39	0.24	0.06	0.34	0.05	0.04	0.18	0.19
UKD7	0.30	0.07	0.06	0.34	0.05	0.04	0.18	0.15
UKE1	0.40	0.28	0.08	0.34	0.21	0.09	0.03	0.21
UKE2	0.35	0.09	0.08	0.34	0.21	0.09	0.03	0.17
UKE3	0.34	0.31	0.08	0.34	0.21	0.09	0.03	0.20
UKE4	0.38	0.07	0.08	0.34	0.21	0.09	0.03	0.17
UKF1	0.38	0.12	0.10	0.34	0.10	0.06	0.23	0.19
UKF2	0.39	0.14	0.10	0.34	0.10	0.06	0.23	0.19
UKF3	0.43	0.25	0.10	0.34	0.10	0.06	0.23	0.22
UKG1	0.42	0.10	0.15	0.34	0.09	0.08	0.00	0.17
UKG2	0.43	0.07	0.15	0.34	0.09	0.08	0.00	0.17
UKG3	0.44	0.07	0.15	0.34	0.09	0.08	0.00	0.17
UKH1	0.43	0.18	0.17	0.34	0.07	0.08	0.20	0.21
UKH2	0.45	0.07	0.17	0.34	0.07	0.08	0.20	0.20
UKH3	0.47	0.07	0.17	0.34	0.07	0.08	0.20	0.20
UKI3	0.55	0.17	0.19	0.32	0.04	0.13	0.12	0.22
UKI4	0.49	0.12	0.19	0.32	0.04	0.13	0.12	0.20
UKI5	0.55	0.07	0.19	0.32	0.04	0.13	0.12	0.20
UKI6	0.50	0.07	0.19	0.32	0.04	0.13	0.12	0.19
UKI7	0.51	0.08	0.19	0.32	0.04	0.13	0.12	0.20
UKJ1	0.44	0.07	0.05	0.34	0.07	0.08	0.03	0.15
UKJ2	0.45	0.10	0.05	0.34	0.07	0.08	0.03	0.16
UKJ3	0.44	0.11	0.05	0.34	0.07	0.08	0.03	0.16
UKJ4	0.45	0.08	0.05	0.34	0.07	0.08	0.03	0.16
UKK1	0.40	0.13	0.02	0.34	0.06	0.12	0.23	0.19
UKK2	0.38	0.08	0.02	0.34	0.06	0.12	0.23	0.18
UKK3	0.38	0.12	0.02	0.34	0.06	0.12	0.23	0.18
UKK4	0.41	0.14	0.02	0.34	0.06	0.12	0.23	0.19
UKL1	0.32	0.07	0.05	0.32	0.08	0.19	0.16	0.17
UKL2	0.31	0.08	0.05	0.32	0.08	0.19	0.16	0.17
UKM2	0.35	0.08	0.08	0.32	0.01	0.01	0.20	0.15
UKM3	0.32	0.10	0.08	0.32	0.01	0.01	0.20	0.15
UKM5	0.35	0.08	0.08	0.32	0.01	0.01	0.20	0.15
UKM6	0.36	0.23	0.08	0.32	0.01	0.01	0.20	0.17
UKNO	0.30	0.07	0.07	0.42	0.00	0.13	0.06	0.15

**Table 2.** Country and region scores by domain and overall FemAI

NUTS_CODE	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	FemAI
AT	63.31	63.44	63.88	55.00	79.84	73.99	62.28	65.96
AT11	60.57	48.58	65.42	47.90	75.51	87.32	69.52	64.97
AT12	64.99	64.22	62.42	54.50	77.57	78.37	57.86	65.71
AT13	62.07	68.62	66.87	61.51	75.94	64.60	60.16	65.68
AT21	60.76	52.77	65.26	47.90	80.57	72.87	52.53	61.81
AT22	61.25	53.91	65.96	59.02	77.37	77.21	62.79	65.36
AT31	64.58	60.90	61.78	52.95	83.07	72.93	66.38	66.08
AT32	66.35	52.60	62.34	55.72	87.13	78.86	62.33	66.47
AT33	63.73	52.58	61.68	56.35	85.90	72.93	71.18	66.34
AT34	64.44	52.18	62.40	54.41	84.15	75.72	61.13	64.92
BE	56.96	59.83	60.67	64.28	72.33	62.83	56.81	61.96
BE10	52.62	56.63	52.98	68.02	70.79	46.78	51.12	56.99
BE21	57.44	60.66	72.73	62.63	76.72	70.33	70.05	67.22
BE22	56.60	59.46	67.87	62.63	76.15	75.98	65.37	66.29
BE23	62.82	64.71	67.89	62.63	79.07	68.23	63.04	66.91
BE24	64.11	69.51	69.74	62.63	79.31	63.84	59.27	66.92
BE25	60.99	60.85	62.27	62.63	79.70	75.62	71.64	67.67
BE31	60.38	64.74	50.46	63.18	67.74	51.36	25.54	54.77
BE32	48.44	46.71	45.14	63.18	61.68	47.46	44.36	50.99
BE33	49.82	51.64	50.52	63.18	60.71	54.32	40.10	52.90
BE34	54.87	44.91	50.21	63.18	67.51	54.50	46.59	54.54
BE35	54.89	58.74	48.26	63.18	61.17	70.69	44.90	57.41
BG	40.01	39.49	17.71	49.70	40.08	58.39	30.27	39.38
BG31	31.89	17.28	20.23	49.70	28.18	61.00	23.95	33.18
BG32	37.30	33.93	7.52	49.70	32.36	58.07	21.61	34.36
BG33	35.15	36.67	14.08	49.70	35.61	57.82	35.45	37.78
BG34	36.51	21.21	19.81	49.70	30.68	61.72	37.65	36.75
BG41	48.30	59.40	19.13	49.70	46.47	52.86	27.94	43.40
BG42	38.22	35.39	20.42	49.70	51.62	62.77	32.14	41.47
CY	49.47	56.07	49.74	23.73	76.27	55.42	47.41	51.16
CY00	49.47	56.07	49.74	23.73	76.27	55.42	47.41	51.16
CZ	50.33	53.51	32.88	30.07	60.35	63.12	50.62	48.70
CZ01	61.90	70.28	43.64	40.93	68.69	57.79	52.66	56.56
CZ02	50.58	53.23	29.57	31.12	65.56	63.49	44.38	48.27
CZ03	49.23	52.62	39.25	30.29	61.68	62.07	42.23	48.19
CZ04	45.42	33.62	20.27	27.66	49.15	60.22	42.16	39.79
CZ05	49.18	53.70	32.83	29.42	58.83	60.05	55.48	48.50
CZ06	50.23	57.02	27.22	29.56	62.54	75.18	57.44	51.31
CZ07	48.12	52.88	39.94	26.02	58.23	67.77	57.62	50.08
CZ08	47.14	51.45	30.11	31.12	56.44	54.02	46.90	45.31

NUTS_CODE	dim1	dim2	dim3	dim4	dim5	dim6	dim7	FemAI
DE	68.92	51.51	64.46	63.37	69.16	70.40	61.37	64.17
DE11	73.57	55.03	67.66	60.63	69.83	69.51	62.85	65.58
DE12	71.89	52.93	67.66	60.63	69.83	69.51	62.85	65.04
DE13	72.50	51.96	67.66	60.63	69.83	69.51	62.85	64.99
DE14	73.77	54.83	67.66	60.63	69.83	69.51	62.85	65.58
DE21	77.50	59.19	66.94	57.81	68.60	76.12	67.20	67.62
DE22	69.95	36.25	66.94	57.81	68.60	76.12	67.20	63.27
DE23	71.03	38.15	66.94	57.81	68.60	76.12	67.20	63.69
DE24	69.03	41.44	66.94	57.81	68.60	76.12	67.20	63.88
DE25	72.55	53.16	66.94	57.81	68.60	76.12	67.20	66.05
DE26	71.78	43.20	66.94	57.81	68.60	76.12	67.20	64.52
DE27	70.80	50.00	66.94	57.81	68.60	76.12	67.20	65.35
DE30	70.25	57.64	67.18	70.44	72.95	74.19	64.10	68.11
DE40	65.77	50.20	63.54	67.77	68.00	62.60	53.59	61.64
DE50	65.84	36.28	52.49	69.44	74.15	70.76	62.89	61.69
DE60	73.40	54.33	60.15	64.20	71.97	60.15	52.57	62.40
DE71	72.00	54.72	63.33	59.27	70.71	75.14	54.72	64.27
DE72	69.58	46.34	63.33	59.27	70.71	75.14	54.72	62.73
DE73	69.73	40.01	63.33	59.27	70.71	75.14	54.72	61.84
DE80	61.29	48.72	64.55	61.96	66.76	75.82	70.95	64.29
DE91	65.47	49.95	64.05	62.97	70.15	70.81	66.48	64.27
DE92	65.96	46.52	64.05	62.97	70.15	70.81	66.48	63.85
DE93	66.92	43.79	64.05	62.97	70.15	70.81	66.48	63.60
DE94	65.73	45.27	64.05	62.97	70.15	70.81	66.48	63.64
DEA1	66.71	47.06	64.33	58.48	67.52	65.34	58.86	61.18
DEA2	69.59	52.19	64.33	58.48	67.52	65.34	58.86	62.33
DEA3	66.73	47.00	64.33	58.48	67.52	65.34	58.86	61.18
DEA4	66.89	46.04	64.33	58.48	67.52	65.34	58.86	61.06
DEA5	64.93	46.29	64.33	58.48	67.52	65.34	58.86	60.82
DEB1	68.03	45.60	65.16	71.97	69.84	76.34	59.95	65.27
DEB2	69.41	39.89	65.16	71.97	69.84	76.34	59.95	64.65
DEB3	67.88	49.71	65.16	71.97	69.84	76.34	59.95	65.84
DEC0	65.97	38.57	62.42	64.31	68.82	76.10	47.12	60.47
DED2	67.18	47.55	60.18	62.64	70.91	67.58	62.81	62.69
DED4	63.05	40.59	60.18	62.64	70.91	67.58	62.81	61.11
DED5	65.79	47.42	60.18	62.64	70.91	67.58	62.81	62.47
DEE0	60.27	46.19	54.40	57.69	65.90	60.85	40.09	55.05
DEF0	66.59	49.15	65.45	62.53	69.13	74.65	64.95	64.64
DEG0	63.83	44.86	60.44	70.48	68.65	74.23	70.12	64.66
DK	77.28	77.58	67.96	68.66	64.37	83.15	74.72	73.39
DK01	82.41	86.93	70.15	70.49	65.47	79.05	73.47	75.42
DK02	73.23	71.02	63.68	71.63	61.07	81.77	64.07	69.50
DK03	74.45	70.50	67.20	61.34	65.26	84.43	76.72	71.41
DK04	76.54	76.69	68.78	65.91	63.18	85.88	80.40	73.91
DK05	73.60	68.90	67.56	73.92	66.75	88.58	77.49	73.83
EE	56.76	68.53	41.64	47.26	35.99	62.65	46.39	51.31
EE00	56.76	68.53	41.64	47.26	35.99	62.65	46.39	51.31

NUTS_CODE	dim1	dim2	dim3	dim4	dim5	dim6	dim7	FemAI
EL	25.63	48.08	18.63	29.88	55.46	43.61	39.59	37.27
EL30	30.44	55.47	23.45	47.41	53.00	29.11	36.11	39.29
EL41	20.81	21.17	19.68	28.23	55.02	55.50	43.48	34.84
EL42	28.70	29.99	19.68	26.92	55.02	55.50	43.48	37.04
EL43	26.40	45.94	19.68	29.22	55.02	55.50	43.48	39.32
EL51	24.08	38.46	14.35	22.77	56.08	56.30	45.73	36.83
EL52	23.98	50.91	14.35	34.22	56.08	56.30	45.73	40.22
EL53	12.36	29.15	14.35	19.68	56.08	56.30	45.73	33.38
EL54	22.24	33.90	14.35	38.82	56.08	56.30	45.73	38.20
EL61	21.67	42.91	16.46	22.11	58.57	43.64	35.52	34.41
EL62	28.93	21.16	16.46	22.45	58.57	43.64	35.52	32.39
EL63	14.87	41.15	16.46	24.25	58.57	43.64	35.52	33.49
EL64	18.71	36.80	16.46	22.77	58.57	43.64	35.52	33.21
EL65	26.55	30.26	16.46	30.93	58.57	43.64	35.52	34.56
ES	40.97	49.77	44.75	70.52	78.38	66.39	50.67	57.35
ES11	41.34	55.34	44.43	68.42	72.87	68.45	53.63	57.78
ES12	42.50	50.11	44.43	67.80	72.87	68.45	53.63	57.11
ES13	44.05	61.12	44.43	61.43	72.87	68.45	53.63	58.00
ES21	49.93	70.81	45.23	73.94	83.89	70.03	52.38	63.74
ES22	47.99	58.69	45.23	84.43	83.89	70.03	52.38	63.23
ES23	45.03	51.33	45.23	68.89	83.89	70.03	52.38	59.54
ES24	45.25	55.49	45.23	70.07	83.89	70.03	52.38	60.33
ES30	53.55	59.36	56.67	67.96	84.15	67.79	52.37	63.12
ES41	39.80	54.51	43.81	67.36	77.89	62.83	46.76	56.14
ES42	30.76	39.83	43.81	67.47	77.89	62.83	46.76	52.76
ES43	25.20	42.67	43.81	72.23	77.89	62.83	46.76	53.06
ES51	48.54	49.35	46.77	67.44	82.35	67.25	47.73	58.49
ES52	37.76	48.05	46.77	72.55	82.35	67.25	47.73	57.50
ES53	47.73	43.24	46.77	75.86	82.35	67.25	47.73	58.70
ES61	28.14	40.99	35.50	73.64	70.99	65.21	53.61	52.58
ES62	35.29	41.94	35.50	62.76	70.99	65.21	53.61	52.19
ES63	27.06	15.02	35.50	70.52	70.99	65.21	53.61	48.27
ES64	19.74	21.80	35.50	70.52	70.99	65.21	53.61	48.20
ES70	31.41	47.55	44.81	76.67	69.48	61.96	52.31	54.88
FI	69.78	78.34	64.82	75.64	66.21	76.98	74.57	72.34
FI19	67.93	76.04	63.24	75.63	62.75	78.69	76.13	71.49
FI1B	76.22	81.93	69.04	82.13	70.12	75.18	73.01	75.38
FI1C	67.29	78.65	60.97	76.60	65.41	76.09	73.37	71.20
FI1D	65.04	75.50	64.92	74.53	65.33	78.23	76.09	71.38

NUTS_CODE	dim1	dim2	dim3	dim4	dim5	dim6	dim7	FemAI
FR	54.44	63.16	45.01	68.71	71.84	52.09	57.61	58.98
FR10	63.81	69.72	42.57	69.77	75.92	50.60	55.56	61.14
FR21	47.68	49.12	45.56	68.63	69.24	52.56	51.24	54.86
FR22	48.73	47.95	45.56	70.30	69.24	52.56	51.24	55.08
FR23	48.98	55.45	45.56	69.42	69.24	52.56	51.24	56.06
FR24	52.60	62.00	45.56	67.75	69.24	52.56	51.24	57.28
FR25	51.37	52.01	45.56	69.42	69.24	52.56	51.24	55.91
FR26	50.34	54.87	45.56	68.48	69.24	52.56	51.24	56.04
FR30	47.27	52.14	43.82	70.30	71.20	59.72	53.53	56.85
FR41	50.26	58.16	50.42	68.63	68.00	51.69	58.64	57.97
FR42	54.42	58.01	50.42	68.63	68.00	51.69	58.64	58.55
FR43	55.60	55.24	50.42	68.48	68.00	51.69	58.64	58.29
FR51	55.86	69.28	46.89	69.13	72.36	52.10	63.76	61.34
FR52	53.73	69.73	46.89	69.03	72.36	52.10	63.76	61.09
FR53	50.18	57.80	46.89	68.47	72.36	52.10	63.76	58.79
FR61	52.80	63.83	41.50	68.47	74.45	40.84	49.64	55.93
FR62	56.49	69.14	41.50	64.25	74.45	40.84	49.64	56.62
FR63	56.94	62.04	41.50	68.47	74.45	40.84	49.64	56.27
FR71	57.84	74.00	44.90	68.50	71.41	56.25	68.64	63.08
FR72	52.61	59.50	44.90	68.50	71.41	56.25	68.64	60.26
FR81	48.49	61.95	45.40	64.25	72.52	55.46	59.14	58.17
FR82	52.61	57.94	45.40	69.69	72.52	55.46	59.14	58.97
FR83	51.62	43.34	45.40	68.50	72.52	55.46	59.14	56.57
HR	36.63	46.84	24.99	39.68	47.20	47.91	27.65	38.70
HR03	35.70	44.89	27.57	42.48	50.08	54.36	36.77	41.69
HR04	37.07	47.10	23.75	38.26	45.81	44.80	23.29	37.15
HU	44.04	43.00	19.88	8.88	44.92	55.04	37.57	36.19
HU10	52.15	55.85	17.44	10.13	52.36	40.51	30.65	37.01
HU21	43.73	44.80	15.69	10.29	47.07	60.95	42.86	37.91
HU22	43.92	44.37	32.05	7.86	49.78	57.17	36.41	38.79
HU23	39.10	32.76	25.99	7.95	45.06	68.30	33.97	36.16
HU31	38.03	25.96	10.93	9.60	33.96	51.26	32.60	28.91
HU32	37.20	35.45	23.70	9.55	37.32	58.06	39.77	34.44
HU33	40.99	43.44	17.95	6.33	40.69	70.36	52.24	38.86
IE	59.05	63.50	78.80	39.25	78.29	74.41	64.28	65.37
IE01	52.64	56.61	80.47	39.25	78.38	72.68	62.45	63.21
IE02	61.25	64.64	78.19	39.25	78.23	75.03	64.96	65.94
IT	34.20	37.73	35.58	46.71	65.93	53.46	39.40	44.72
ITC1	40.17	42.33	37.60	50.48	72.45	52.05	46.92	48.86
ITC2	42.84	31.24	37.60	36.94	72.45	52.05	46.92	45.72
ITC3	37.79	38.85	37.60	43.31	72.45	52.05	46.92	47.00
ITC4	42.35	44.46	37.60	51.05	72.45	52.05	46.92	49.55
ITF1	29.91	42.52	32.77	34.61	53.18	50.86	34.54	39.77
ITF2	29.76	29.26	32.77	34.12	53.18	50.86	34.54	37.78
ITF3	18.22	20.89	32.77	57.53	53.18	50.86	34.54	38.28
ITF4	19.03	28.33	32.77	37.16	53.18	50.86	34.54	36.55
ITF5	26.84	38.32	32.77	32.97	53.18	50.86	34.54	38.50

NUTS_CODE	dim1	dim2	dim3	dim4	dim5	dim6	dim7	FemAI
ITF6	17.67	28.44	32.77	39.97	53.18	50.86	34.54	36.77
ITG1	18.00	18.63	33.82	48.14	62.41	55.97	35.51	38.92
ITG2	30.06	36.76	33.82	40.80	62.41	55.97	35.51	42.19
ITH1	46.93	42.34	35.46	48.77	69.48	52.12	38.89	47.71
ITH2	44.00	47.98	35.46	39.62	69.48	52.12	38.89	46.79
ITH3	39.33	46.34	35.46	46.62	69.48	52.12	38.89	46.89
ITH4	40.11	47.36	35.46	53.65	69.48	52.12	38.89	48.15
ITH5	43.16	46.53	35.46	57.57	69.48	52.12	38.89	49.03
ITI1	40.56	45.99	37.06	55.95	69.80	58.12	38.83	49.47
ITI2	37.76	47.88	37.06	49.69	69.80	58.12	38.83	48.45
ITI3	36.54	45.87	37.06	50.78	69.80	58.12	38.83	48.14
ITI4	37.90	46.35	37.06	48.55	69.80	58.12	38.83	48.09
LT	55.25	62.87	21.86	36.44	41.18	50.90	29.62	42.59
LT00	55.25	62.87	21.86	36.44	41.18	50.90	29.62	42.59
LU	68.40	69.20	60.28	46.04	78.14	69.79	62.18	64.86
LU00	68.40	69.20	60.28	46.04	78.14	69.79	62.18	64.86
LV	51.26	59.37	32.80	32.18	21.03	54.91	35.12	40.95
LV00	51.26	59.37	32.80	32.18	21.03	54.91	35.12	40.95
MT	38.79	44.97	58.41	20.45	78.15	73.76	54.43	52.71
MT00	38.79	44.97	58.41	20.45	78.15	73.76	54.43	52.71
NL	70.13	69.74	77.38	62.63	76.18	67.42	71.69	70.74
NL11	66.06	70.74	73.71	62.38	75.09	72.30	77.36	71.09
NL12	65.07	64.45	84.04	66.44	79.90	77.14	82.00	74.15
NL13	65.04	59.80	65.16	50.22	75.91	68.04	55.38	62.79
NL21	66.92	69.28	80.10	74.82	76.68	75.48	81.67	74.99
NL22	68.10	68.78	82.17	68.97	74.87	65.63	71.54	71.44
NL23	65.20	60.25	75.61	54.69	76.40	39.52	57.69	61.34
NL31	77.37	78.45	80.36	75.76	77.50	71.87	77.61	76.99
NL32	74.82	74.55	72.82	66.72	77.59	66.02	71.34	71.98
NL33	70.14	69.53	80.04	65.80	75.39	67.95	67.18	70.86
NL34	69.02	52.97	78.99	54.23	74.38	66.63	78.62	67.84
NL41	69.66	67.44	75.68	56.10	75.15	66.89	68.76	68.52
NL42	66.48	64.73	71.78	53.59	76.95	64.71	75.96	67.74
PL	42.50	54.22	32.82	39.06	45.90	63.09	47.86	46.49
PL11	44.11	53.72	40.84	47.58	37.28	57.04	40.91	45.93
PL12	49.46	63.82	27.80	50.84	46.61	65.11	49.84	50.50
PL21	44.50	48.64	36.94	28.46	48.66	65.63	52.88	46.53
PL22	41.88	54.58	38.81	45.46	44.79	57.00	47.99	47.21
PL31	38.36	38.23	28.23	29.99	48.01	78.77	55.92	45.36
PL32	37.31	34.76	24.16	39.49	38.30	65.57	39.86	39.92
PL33	37.98	35.46	34.60	32.96	46.03	61.16	49.09	42.47
PL34	40.99	42.29	25.06	32.96	47.81	70.67	62.97	46.11
PL41	42.55	36.08	36.02	37.53	48.35	68.09	50.67	45.61
PL42	39.44	43.74	34.90	40.77	43.48	60.49	49.10	44.56
PL43	41.32	29.98	31.47	47.44	50.08	50.18	54.84	43.62
PL51	42.66	50.80	26.05	45.09	47.63	50.73	41.09	43.44

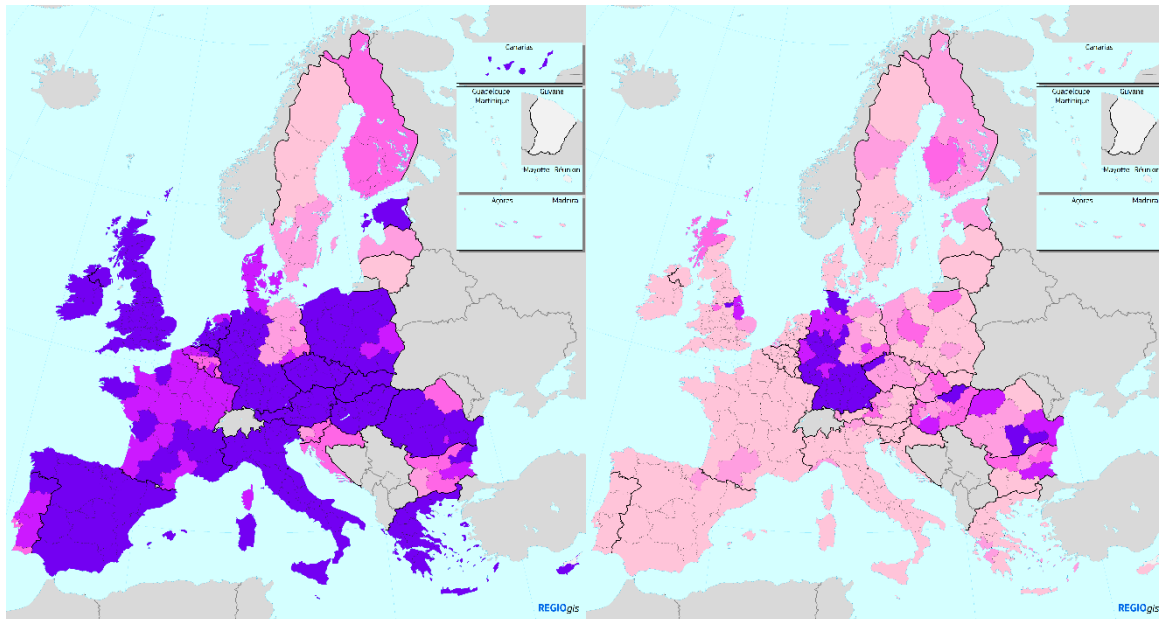
NUTS_CODE	dim1	dim2	dim3	dim4	dim5	dim6	dim7	FemAI
PL52	39.56	37.08	21.93	24.73	43.71	64.63	30.26	37.41
PL61	39.28	35.98	40.32	33.81	52.25	62.49	41.63	43.68
PL62	35.86	27.37	33.07	52.13	44.70	62.58	44.55	42.89
PL63	43.86	44.46	31.39	30.30	48.95	67.40	51.33	45.38
PT	50.14	50.93	31.21	61.40	46.74	56.85	41.46	48.39
PT11	46.77	48.85	27.93	61.40	46.52	58.22	41.72	47.34
PT15	52.48	41.87	32.54	61.40	47.93	61.35	47.50	49.30
PT16	51.53	52.37	30.03	61.40	46.53	55.99	39.92	48.25
PT17	54.44	56.16	35.32	61.40	48.94	51.89	42.57	50.10
PT18	47.86	38.99	30.41	61.40	43.86	63.10	33.67	45.61
PT20	46.36	13.05	36.99	54.23	39.81	67.10	51.24	44.11
PT30	47.35	21.04	32.50	52.89	40.37	61.02	46.24	43.06
RO	36.66	27.29	25.06	30.84	31.99	48.80	42.31	34.71
RO11	38.68	30.37	28.21	30.57	32.83	70.97	58.25	41.41
RO12	36.05	20.29	21.73	29.34	43.32	49.59	35.82	33.73
RO21	38.84	26.59	29.64	30.50	21.85	38.18	47.09	33.24
RO22	31.34	14.30	29.03	30.37	26.09	44.91	36.91	30.42
RO31	32.59	20.75	20.27	32.32	27.21	45.90	32.08	30.16
RO32	46.83	49.77	30.80	32.95	32.10	40.71	45.24	39.77
RO41	31.89	27.07	19.08	31.65	37.12	50.34	45.39	34.65
RO42	34.31	35.78	19.47	29.79	44.86	57.18	40.05	37.35
SE	79.30	83.54	59.36	88.47	65.83	68.50	69.28	73.47
SE11	85.07	86.74	61.61	89.78	69.11	61.53	66.77	74.38
SE12	76.52	83.41	56.30	89.72	66.99	72.10	71.55	73.80
SE21	76.28	82.26	64.17	88.55	61.26	69.67	72.08	73.47
SE22	77.31	84.85	57.12	88.38	64.90	72.30	66.21	73.01
SE23	79.62	84.61	61.72	89.68	64.95	64.17	73.31	74.01
SE31	75.11	74.28	53.91	86.31	65.85	68.69	57.98	68.88
SE32	75.90	74.30	60.08	85.80	61.21	78.59	78.36	73.46
SE33	78.07	80.96	57.18	88.00	68.69	82.67	68.84	74.92
SI	51.18	66.58	47.23	54.08	68.95	64.57	38.86	55.92
SI03	48.42	61.74	46.23	54.08	65.94	64.12	38.05	54.08
SI04	54.28	71.83	48.40	54.08	73.11	65.09	39.84	58.09
SK	40.96	44.60	33.45	32.45	54.27	61.68	53.63	45.86
SK01	55.05	50.89	37.98	36.10	56.84	57.32	58.28	50.35
SK02	42.99	49.43	33.10	34.03	55.52	62.50	52.24	47.12
SK03	38.30	40.98	32.22	29.79	53.05	61.22	56.27	44.55
SK04	34.65	36.73	33.29	31.65	53.33	62.56	51.56	43.40

NUTS_CODE	dim1	dim2	dim3	dim4	dim5	dim6	dim7	FemAI
UK	67.36	61.79	79.87	56.88	73.91	75.54	54.99	67.19
UKC1	60.92	48.94	90.22	56.88	68.04	76.05	53.92	65.00
UKC2	62.87	54.27	90.22	56.88	68.04	76.05	53.92	66.04
UKD1	66.74	50.48	81.10	56.88	70.47	79.65	51.38	65.24
UKD3	65.70	58.68	81.10	56.88	70.47	79.65	51.38	66.27
UKD4	64.97	64.41	81.10	56.88	70.47	79.65	51.38	66.98
UKD6	69.15	57.95	81.10	56.88	70.47	79.65	51.38	66.66
UKD7	64.67	54.36	81.10	56.88	70.47	79.65	51.38	65.50
UKE1	61.48	51.91	82.29	56.88	68.30	74.28	48.36	63.36
UKE2	67.22	56.47	82.29	56.88	68.30	74.28	48.36	64.83
UKE3	61.49	54.12	82.29	56.88	68.30	74.28	48.36	63.67
UKE4	63.11	58.91	82.29	56.88	68.30	74.28	48.36	64.59
UKF1	65.74	53.57	79.55	56.88	71.02	73.73	51.30	64.54
UKF2	64.81	59.16	79.55	56.88	71.02	73.73	51.30	65.21
UKF3	62.24	42.03	79.55	56.88	71.02	73.73	51.30	62.39
UKG1	66.87	57.46	83.87	56.88	76.38	74.53	60.63	68.09
UKG2	63.29	56.92	83.87	56.88	76.38	74.53	60.63	67.50
UKG3	58.17	49.86	83.87	56.88	76.38	74.53	60.63	65.76
UKH1	67.56	50.24	79.38	56.88	78.51	78.97	54.16	66.53
UKH2	70.27	64.43	79.38	56.88	78.51	78.97	54.16	68.94
UKH3	63.66	58.30	79.38	56.88	78.51	78.97	54.16	67.12
UKI3	82.13	78.07	74.70	58.87	79.94	66.81	55.89	70.92
UKI4	76.25	75.77	74.70	58.87	79.94	66.81	55.89	69.75
UKI5	70.95	65.55	74.70	58.87	79.94	66.81	55.89	67.53
UKI6	76.79	69.79	74.70	58.87	79.94	66.81	55.89	68.97
UKI7	73.69	69.93	74.70	58.87	79.94	66.81	55.89	68.55
UKJ1	74.93	70.03	79.62	56.88	74.19	70.93	59.25	69.41
UKJ2	71.34	68.94	79.62	56.88	74.19	70.93	59.25	68.74
UKJ3	69.76	64.20	79.62	56.88	74.19	70.93	59.25	67.83
UKJ4	65.81	64.63	79.62	56.88	74.19	70.93	59.25	67.33
UKK1	70.77	68.33	79.76	56.88	75.40	80.03	52.86	69.15
UKK2	66.15	59.71	79.76	56.88	75.40	80.03	52.86	67.26
UKK3	65.09	58.75	79.76	56.88	75.40	80.03	52.86	66.97
UKK4	64.74	61.93	79.76	56.88	75.40	80.03	52.86	67.37
UKL1	61.20	56.65	76.67	59.04	73.30	70.94	55.35	64.74
UKL2	66.19	64.47	76.67	59.04	73.30	70.94	55.35	66.57
UKM2	68.61	68.19	77.05	58.60	71.86	84.40	55.25	69.14
UKM3	66.01	60.75	77.05	58.60	71.86	84.40	55.25	67.70
UKM5	70.02	57.19	77.05	58.60	71.86	84.40	55.25	67.77
UKM6	63.55	50.07	77.05	58.60	71.86	84.40	55.25	65.83
UKN0	63.45	55.57	81.11	50.80	77.80	79.38	72.31	68.63



## ANNEX III. FemDI & FemAI maps by domain

FemDI maps for the dimensions "Work & Money", "Knowledge", "Time" and "Power"



**Female disadvantage in the work and money dimension, 2018**

Low index = low disadvantage  
High index = high disadvantage

- 0 - 0.15
- 0.15 - 0.20
- 0.20 - 0.25
- 0.25 - 0.30
- > 0.30
- no data

The index measures the difference between the performance of men and women in a region. Low scores mean that women score the same as men or outperform them. High scores mean that women are at a significant disadvantage in that region.

Source: JRC

0 500 km

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**Female disadvantage in the knowledge dimension, 2018**

Low index = low disadvantage  
High index = high disadvantage

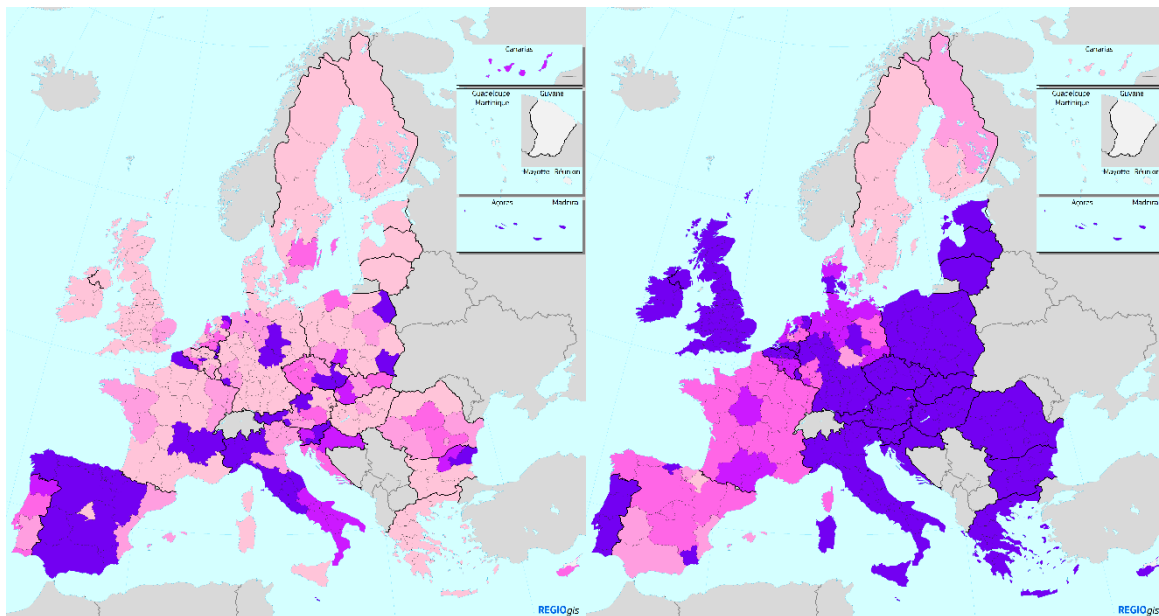
- 0 - 0.15
- 0.15 - 0.20
- 0.20 - 0.25
- 0.25 - 0.30
- > 0.30
- no data

The index measures the difference between the performance of men and women in a region. Low scores mean that women score the same as men or outperform them. High scores mean that women are at a significant disadvantage in that region.

Source: JRC

0 500 km

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**Female disadvantage in the time dimension, 2018**

Low index = low disadvantage  
High index = high disadvantage

- 0 - 0.15
- 0.15 - 0.20
- 0.20 - 0.25
- 0.25 - 0.30
- > 0.30
- no data

The index measures the difference between the performance of men and women in a region. Low scores mean that women score the same as men or outperform them. High scores mean that women are at a significant disadvantage in that region.

Source: JRC

0 500 km

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**Female disadvantage in the power dimension, 2018**

Low index = low disadvantage  
High index = high disadvantage

- 0 - 0.15
- 0.15 - 0.20
- 0.20 - 0.25
- 0.25 - 0.30
- > 0.30
- no data

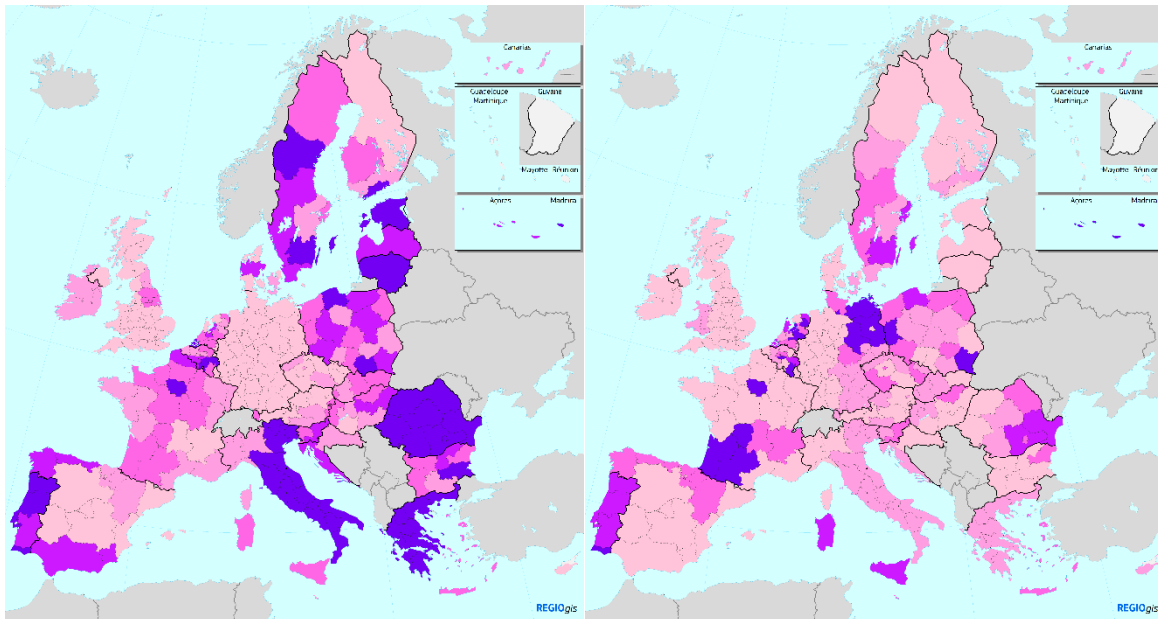
The index measures the difference between the performance of men and women in a region. Low scores mean that women score the same as men or outperform them. High scores mean that women are at a significant disadvantage in that region.

Source: JRC

0 500 km

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## FemDI maps for the dimensions "Health", "Safety, Security & Trust" and "Life Satisfaction & Quality"



**Female disadvantage in the health dimension, 2018**

Low index = low disadvantage  
 High index = high disadvantage

- 0 - 0.15
- 0.15 - 0.20
- 0.20 - 0.25
- 0.25 - 0.30
- > 0.30
- no data

The index measures the difference between the performance of men and women in a region. Low scores mean that women score the same or more as men perform them. High scores mean that women are at a significant disadvantage in that region.

Source: JRC

0 500 km

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**Female disadvantage in the safety, security and trust dimension, 2018**

Low index = low disadvantage  
 High index = high disadvantage

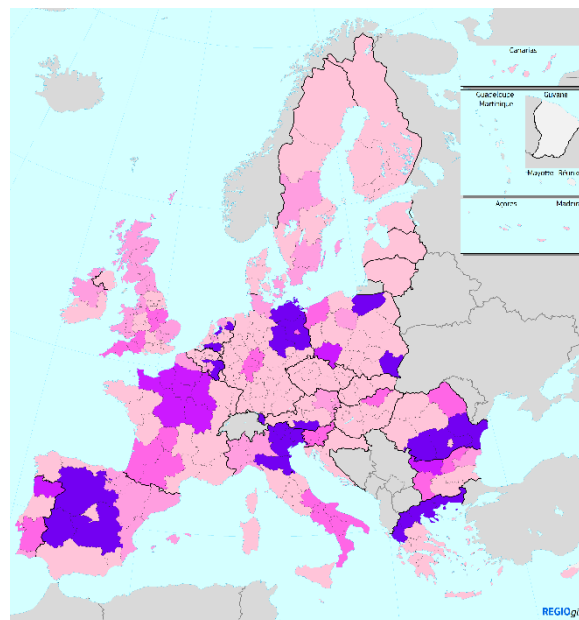
- 0 - 0.15
- 0.15 - 0.20
- 0.20 - 0.25
- 0.25 - 0.30
- > 0.30
- no data

The index measures the difference between the performance of men and women in a region. Low scores mean that women score the same or more as men perform them. High scores mean that women are at a significant disadvantage in that region.

Source: JRC

0 500 km

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**Female disadvantage in the life satisfaction and quality dimension, 2018**

Low index = low disadvantage  
 High index = high disadvantage

- 0 - 0.15
- 0.15 - 0.20
- 0.20 - 0.25
- 0.25 - 0.30
- > 0.30
- no data

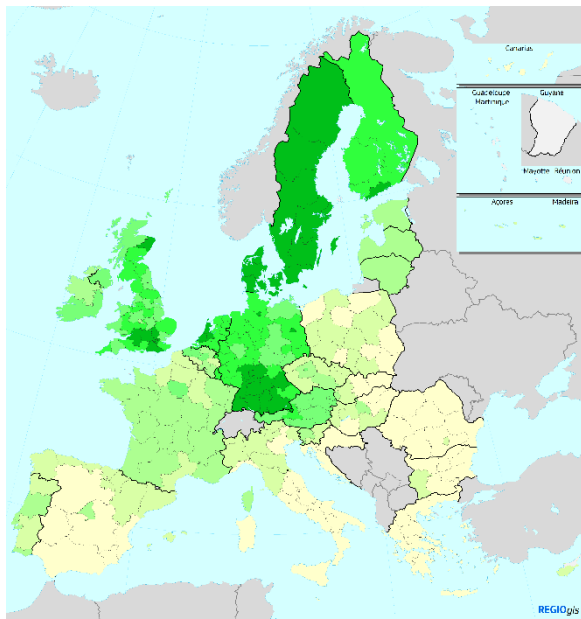
The index measures the difference between the performance of men and women in a region. Low scores mean that women score the same or more as men perform them. High scores mean that women are at a significant disadvantage in that region.

Source: JRC

0 500 km

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FemAI maps for the dimensions "Work & Money", "Knowledge", "Time" and "Power"



Female achievement in the work and money dimension, 2018

Low index = low achievement  
High index = high achievement

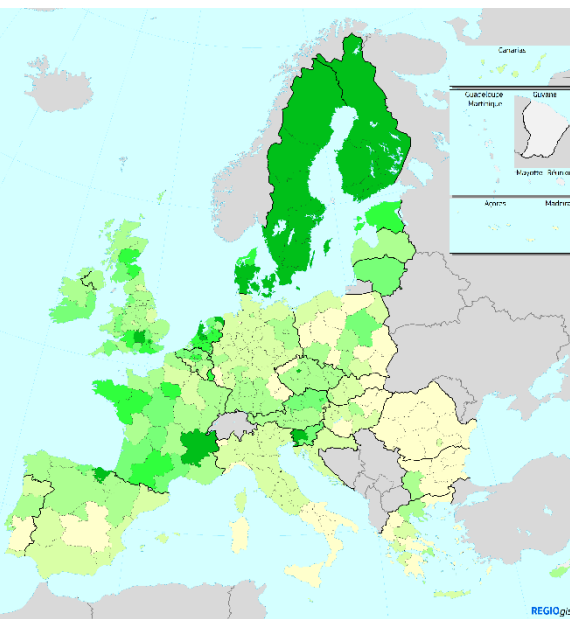
0 - 40	65 - 70
40 - 50	> 70
50 - 60	no data
60 - 65	

This index measures the regional differences in achievement relative to the region with the highest female achievement. If women score as well as those in the region with the best performing women, the index is high. If women score much lower than those in the region with the best performing women, the score is low.

Source: JRC

0 500km

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Female achievement in the knowledge dimension, 2018

Low index = low achievement  
High index = high achievement

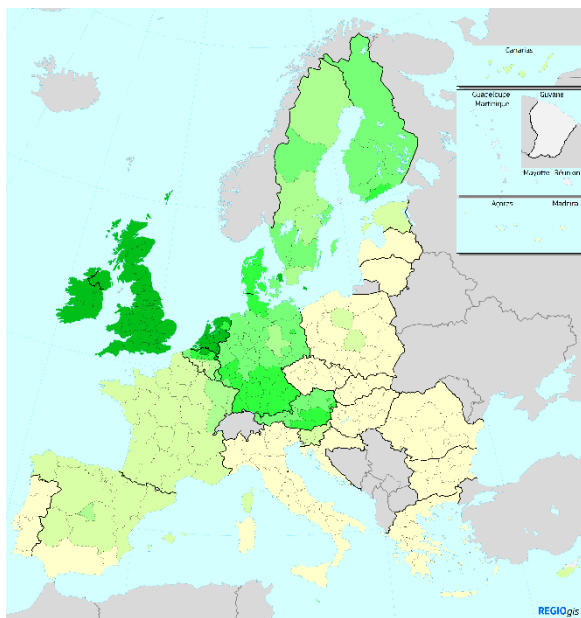
0 - 40	65 - 70
40 - 50	> 70
50 - 60	no data
60 - 65	

This index measures the regional differences in achievement relative to the region with the highest female achievement. If women score as well as those in the region with the best performing women, the index is high. If women score much lower than those in the region with the best performing women, the score is low.

Source: JRC

0 500km

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Female achievement in the time dimension, 2018

Low index = low achievement  
High index = high achievement

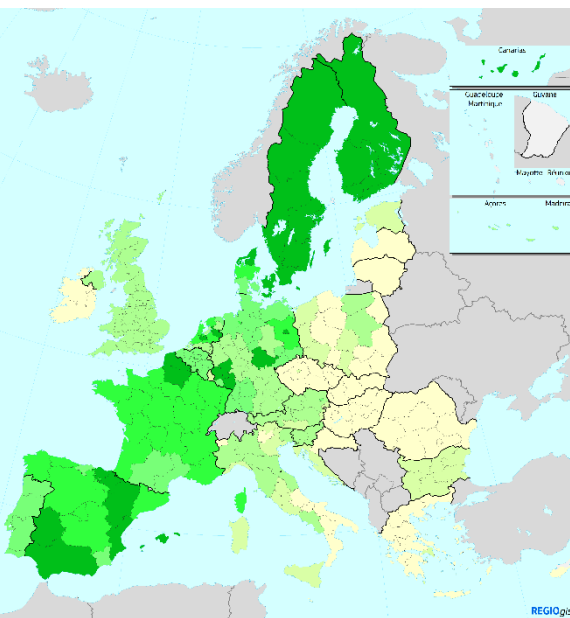
0 - 40	65 - 70
40 - 50	> 70
50 - 60	no data
60 - 65	

This index measures the regional differences in achievement relative to the region with the highest female achievement. If women score as well as those in the region with the best performing women, the index is high. If women score much lower than those in the region with the best performing women, the score is low.

Source: JRC

0 500km

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Female achievement in the power dimension, 2018

Low index = low achievement  
High index = high achievement

0 - 40	65 - 70
40 - 50	> 70
50 - 60	no data
60 - 65	

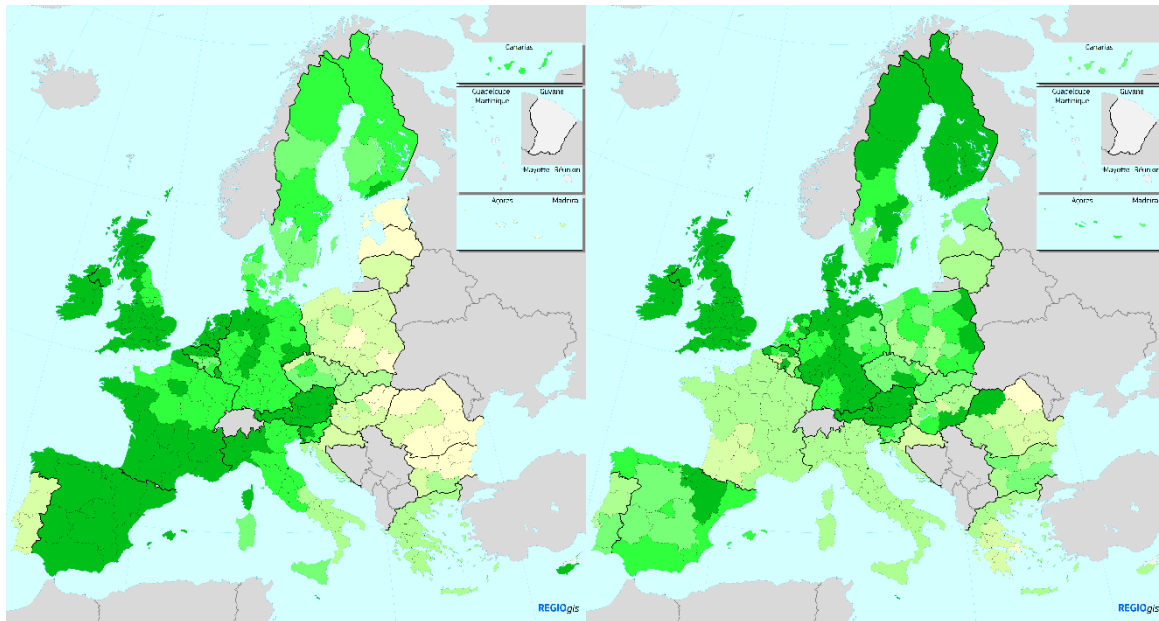
This index measures the regional differences in achievement relative to the region with the highest female achievement. If women score as well as those in the region with the best performing women, the index is high. If women score much lower than those in the region with the best performing women, the score is low.

Source: JRC

0 500km

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# FemAI maps for the dimensions "Health", "Safety, Security & Trust" and "Life Satisfaction & Quality"



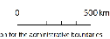
Female achievement in the health dimension, 2018

Low index = low achievement  
 High index = high achievement

0 - 40	65 - 70
40 - 50	> 70
50 - 60	no data
60 - 65	

This index measures the regional differences in achievement relative to the region with the highest female achievement, if women score as well as those in the region with the best performing women, the index is high. If women score much lower than those in the region with the best performing women, the score is low.

Source: JRC



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Female achievement in the safety, security and trust dimension, 2018

Low index = low achievement  
 High index = high achievement

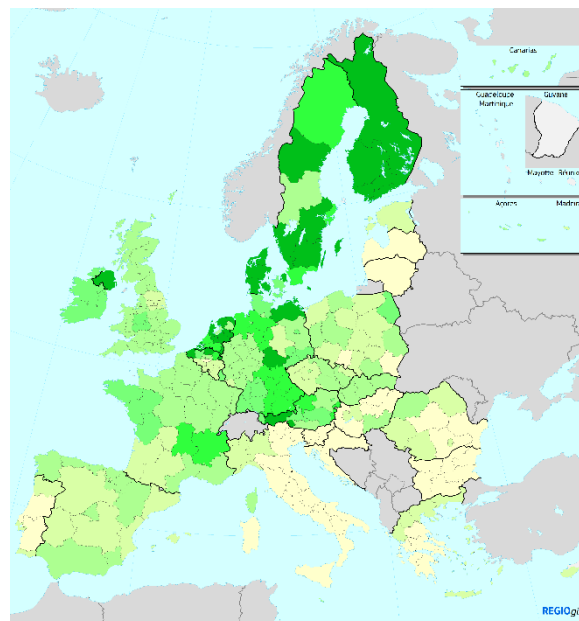
0 - 40	65 - 70
40 - 50	> 70
50 - 60	no data
60 - 65	

This index measures the regional differences in achievement relative to the region with the highest female achievement, if women score as well as those in the region with the best performing women, the index is high. If women score much lower than those in the region with the best performing women, the score is low.

Source: JRC



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Female achievement in the life satisfaction and quality dimension, 2018

Low index = low achievement  
 High index = high achievement

0 - 40	65 - 70
40 - 50	> 70
50 - 60	no data
60 - 65	

This index measures the regional differences in achievement relative to the region with the highest female achievement, if women score as well as those in the region with the best performing women, the index is high. If women score much lower than those in the region with the best performing women, the score is low.

Source: JRC



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