

GSI - GENDER SENSITIVITY INDEX

measuring gender equality at a regional level

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With the greetings from italian delegation composed by Tindara Addabo, Sara Mazzucchelli, Dino Giovannini

The Positive effects of reducing Gender gaps in terms of growth and GDP (Gross domestic product) growth are known. (i.e for Italy = +7%) By 2050, improving gender equality would lead to an increase in EU (GDP) per capita by 6.1 to 9.6%, which amounts to ≤ 1.95 to ≤ 3.15 trillion.

Improvements in gender equality would lead to an additional 10.5 million jobs in 2050, which would benefit both women and men. About 70% of these jobs would be taken by women (EIGE, 2017)

Achieving gender equality requires medium-long term policies and a mixed strategy. All strategies have in common 2 key factors:

- 1. the centrality of the territorial dimension in a wider context
- 2. the specifics role of regional administrations, headers of vocational training and social policies (they decide how and how much to invest in measures and interventions for gender equality).

It is, therefore, important to identify and evaluate:

- The starting point of any regional reality;
- The path to take;
- How to correct the measures taken.



Built on the basis of the Global gender gap model OECD index, the index :

- put together the relevant factors that define a territory "Gender sensitive" (labor market, services, institutional governance and policy choices);
- determine the degree of relevancy;
- measure the combination in each region.

The composition of the indices, based on official and standardized information bases, allows you to designate **a ranking** between reality at different levels of gender equality implementation.

The index does not respond only for purposes of research and monitoring, but it is also a tool for regional administrations that, through the monitoring of individuals components can be supported in improving their score, that is, in the better implementation of their policies.

The GSI working group, leaded by Inapp, was composed by: Valentina Cardinali (Inapp), Tindara Addabo, Giovanna Badalassi (CAPP - University of Modena and Reggio Emilia), Gisella Facchinetti and Tommaso Pirotti (University of Salento).



Operationally, the outcome of the GSI, obtained through a specific methodology, is a number ranging from 0 to 1, based on which it is possible to have a ranking of the Italian regions in terms of "gender sensitivity " – to be periodically monitored.

To achieve this synthesis, the GSI index consists of two aggregate macro-indicators:

• RGEI Regional Gender Equality Index (which measures the structural aspects of the labor market and services of the reference territories)

• GSIP Gender Sensitivity Index of Policies (Measuring Policies and Policy Choices) The two macro indicators are clearly correlated. Each macro indicator consists of a set of indicators on different dimensions in terms of context or policies.





MACROINDICATORS

RGEI Regional Gender Equality Index





MACROINDICATORS

GSIP - Gender Sensitivity Index of Policies





MACROINDICATORS: tabs of dimensions and indicators

RGEI Regional Gender Equality Index

DIMENSION	INDICATORS	
Paid work	 employment rates unemployment rates activity rates 	
Labor income, poverty and retirement income	 Net earnings net pension income incidence of income poverty on the total of unipersonized families by gender of the householder 	
Political participation and apical positions	 employed in the supervisory position on the total employed Incidence of female enterprises on total enterprises Incidence of administrative and electoral female charges at regional, provincial and municipal level 	
Time distribution	 housework and care work, total hours of work 	



MACROINDICATORS: tabs of dimensions and indicators

GSIP - Gender Sensitivity Index of Policies

DIMENSION	INDICATORS
	• nursery coverage index
work life helence	 elderly care index for integrated home care
work-me balance	• expenditures for the reconciliation and support of women's work
	The regulatory corpus
	regional specific legislation on equal opportunities
	⁻ regional legislation for social and / or work policies with reference to
	specific gender policies
	regional legislation against violence against women
	regional legislation on times and times of cities
governance	
5	The Institutional Structure
	Presence of regional institution for Equal Opportunities
	• Monitoring
	Regional-provincial gender budgeting index



In order to have a numeric indicator that represents the degree of achievement of region in terms of gender sensitive policies we used the fuzzy logic by designing a Fuzzy Expert System.

Fuzzy system is useful when we deal with complex matters, when dependencies between variables are too much complicated, or too badly defined, to admit the use of classical instruments and mathematical models. These issues arise normally in biology, economics, finance and automation and in all multicriteria and multidisciplinary issues.

From a mathematical point of view, the FEs are function approximators, between all the variables of Input (in our case the microvariables chosen by the experts) and those of output.

Relevant is the process of giving "weight" to the indicators



GSIP - Gender Sensitivity Index of Policies: the role of fuzzy system . Giving the wages...

DIMENSION	weight	INDICATORS AND Weight
work-life balance	+2	 nursery coverage index (+2) elderly care index for integrated home care (+1) expenditures for the reconciliation and support of women's work (+1)
governance	+0,5	 The regulatory corpus (+2) regional specific legislation on equal opportunities regional legislation for social and / or work policies with reference to specific gender policies regional legislation against violence against wome regional legislation on times and times of cities The Institutional Structure (+0,75) Presence of regional institution for Equal Opportunities

RGEI RESULTS





GISP RESULTS







GIS RESULTS

Although independent, RGEI and GISP are also positively correlated, which means that there is a relationship between change in structural indicators of the labor market and policies and policy choices.

Regioni	IREG 2013	ISGP 2013	IREG2010	ISGP 2010
Piemonte	0,47	0,43	0,43	0,42
Valle d'Aosta	0,44	0,5	0,45	0,53
Lombardia	0,38	0,41	0,45	0,41
Trentino-Alto Adige	0,37	0,42	0,42	0,41
Veneto	0,32	0,42	0,34	0,4
Friuli-Venezia Giulia	0,41	0,59	0,40	0,58
Liguria	0,42	0,46	0,42	0,46
Emilia-Romagna	0,43	0,58	0,47	0,58
Toscana	0,37	0,47	0,38	0,46
Umbria	0,37	0,6	0,39	0,56
Marche	0,43	0,44	0,43	0,44
Lazio	0,40	0,43	0,33	0,42
Abruzzo	0,30	0,42	0,33	0,42
Molise	0,37	0,33	0,26	0,33
Campania	0,31	0,23	0,19	0,21
Puglia	0,35	0,41	0,22	0,41
Basilicata	0,23	0,38	0,26	0,37
Calabria	0,35	0,42	0,26	0,42
Sicilia	0,36	0,15	0,27	0,08
Sardegna	0,45	0,41	0,24	0,38
ITALIA	0,39	0,4	0,37	0,4

POSSIBLE APPLICATIONS



At national level for programming measures "closing" territorial gaps

At regional level to improve the gender sentive approach making changes

Ranking is a virtuous "competition"



Can this tool be adapted to the network to compare and improve the performance of member States in terms of work life balance policies?

THANKS Valentina Cardinali – v.cardinali@inapp.org



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