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Gender Inequality Index –Conceptual Analysis

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ABSTRACT:

Gender inequality remains a major barrier to human development. Girls and women have made major strides since 1990, but they have not yet gained gender equity. The disadvantages facing women and girls are a major source of inequality. All too often, women and girls are discriminated against in health, education, political representation, labour market, etc.—with negative consequences for development of their capabilities and their freedom of choice.

Keywords: *Gender inequality, negative consequences, capabilities*

I. Introduction

Gender inequality remains a major barrier to human development. Girls and women have made major strides since 1990, but they have not yet gained gender equity. The disadvantages facing women and girls are a major source of inequality. All too often, women and girls are discriminated against in health, education, political representation, labour market, etc.—with negative consequences for development of their capabilities and their freedom of choice.

The GII sheds new light on the position of women in 160 countries; it yields insights in gender gaps in major areas of human development. The component indicators highlight areas in need of critical policy intervention and it stimulates proactive thinking and public policy to overcome systematic disadvantages of women.

II. Steps to calculating GII

It shows the loss in potential human development due to inequality between female and male achievements in these dimensions. It ranges from 0, where women and men fare equally, to 1, where one gender fares as poorly as possible in all measured dimensions.

The GII is computed using the association-sensitive inequality measure suggested by Seth (2009), which implies that the index is based on the general mean of general means of different orders—the first aggregation is by a geometric mean

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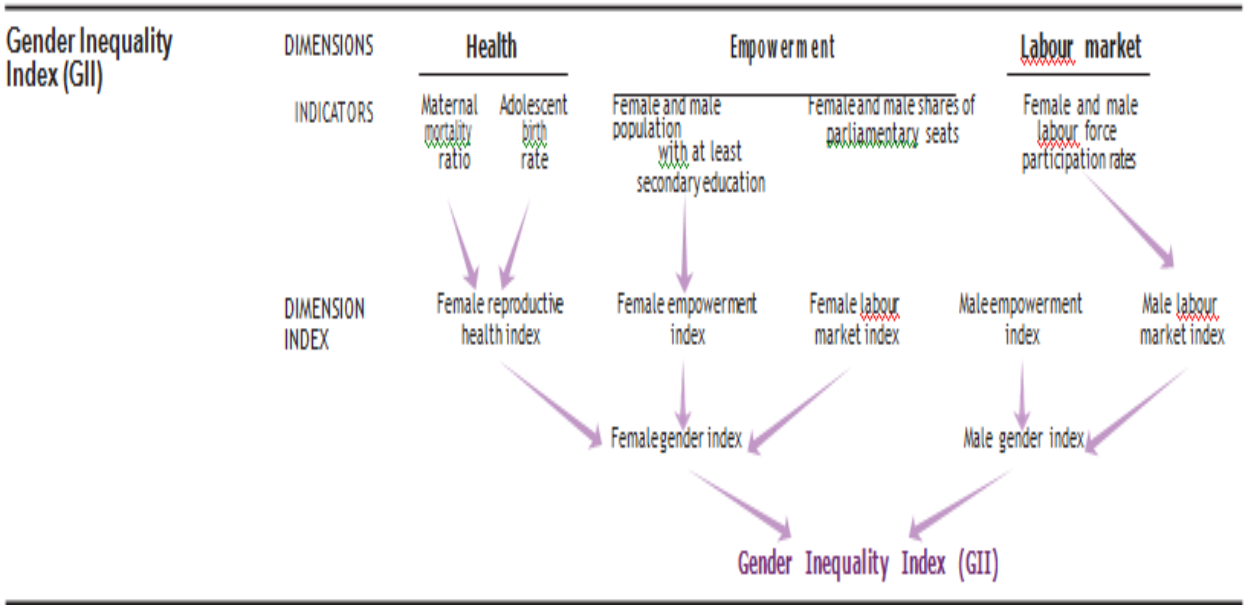
across dimensions; these means, calculated separately for women and men, are then aggregated using a harmonic mean across genders

- Step1.Treatingzerosandextremevalues
- Step2. Aggregatingacrossdimensionswithineachgender group, using geometric means
- Step3. Aggregatingacrossgendergroups, usingaharmonic mean
- Step 4. Calculating the geometric mean of the arithmetic means for each indicator
- Step 5. Calculating the Gender Inequality Index

III. Dimensions of Gender Inequality Index

The Global Gender Gap Index was first introduced by the World Economic Forum in 2006 as a framework for capturing the magnitude of gender-based disparities and tracking their progress over time. The rankings are designed to create global awareness of the challenges posed by gender gaps, and the opportunities created by reducing them. The methodology and quantitative analysis behind the rankings are intended to serve as a basis for designing effective measures for reducing gender gaps. The methodology of the Index has remained stable since its original conception in 2006, providing a basis for robust cross-country and time-series analysis.



The GII is an inequality index. It measures gender inequalities in three important aspects of human development—reproductive health, measured by maternal mortality ratio and adolescent birth rates; empowerment, measured by proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education; and economic status, expressed as labour market participation and measured by labour force participation rate of female and male populations aged 15 years and older. The GII is built on the same framework as the IHDI—to better expose differences in the distribution of achievements

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between women and men. It measures the human development costs of gender inequality. Thus the higher the GII value the more disparities between females and males and the more loss to human development

The dimensions are captured in one synthetic index, as to account for joint significance. According to the UNDP, none of the measures in the dimensions pertain to the country's development and therefore a less-developed country can perform well if gender inequality is low. The UNDP considers the dimensions complementary in that inequality in one dimension tends to affect inequality in another. Therefore, the GII captures association across dimensions, making the index association-sensitive, and ensuring that high achievement in one dimension does not compensate for low achievement in another dimension

Reproductive health

Permanyer notes that the GII is a pioneering index, in that it is the first index to include reproductive health indicators as a measurement for gender inequality. The GII's dimension of reproductive health has two indicators: the Maternal Mortality Ratio (MMR), the data for which come and the adolescent fertility rate (AFR).

WHO defines MMR as, Complications during pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in developing countries. The maternal mortality ratio represents the risk associated with each pregnancy, i.e. the obstetric risk. It is also a MDG indicator.

Measuring maternal mortality accurately is difficult except where comprehensive registration of deaths and of causes of death exists. Elsewhere, census, surveys or models have to be used to estimate levels of maternal mortality. Reproductive-age mortality studies (RAMOS) use triangulation of different sources of data on deaths of women of reproductive age coupled with record review and/or verbal autopsy to identify maternal deaths. Based on multiple sources of information, RAMOS are considered the best way to estimate levels of maternal mortality. Estimates derived from household surveys are subject to wide confidence intervals and long period rates (often for 10 year periods). Global and regional estimates of maternal mortality are developed every five years, using a regression model

With a low MMR, it is implied that pregnant women have access to adequate health needs, therefore the MMR is a good measure of women's access to health care. The UNDP expresses that women's health during pregnancy and childbearing is a clear sign of women's status in society.

Adolescent fertility rate (births per 1,000 women ages 15-19) in India was reported at 24.54 in 2016, according to the World Bank collection of development indicators, compiled from officially recognized sources

A high AFR, which measures early childbearing, results in health risks for mothers and infants as well as a lack of higher education attainment. According to the UNDP data, reproductive health accounts for the largest loss due to gender inequality, among all regions.

Empowerment

The empowerment dimension is measured by two indicators: the share of parliamentary seats held by each sex, which is obtained from the International Parliamentary Union, and higher education attainment levels, which is obtained through United Nations Educational, Scientific and Cultural Organization(UNESCO) and Barro-Lee data

sets. The GII index of higher education evaluates women's attainment to secondary education and above. Access to higher education expands women's freedom by increasing their ability to question and increases their access to information which expands their public involvement.

There is much literature that finds women's access to education may reduce the AFR and child mortality rates within a country. Due to data limitations the parliament representation indicator is limited to national parliament and excludes local government or other community involvement. Although women's representation in parliament has been increasing women have been disadvantaged in representation of parliament with a global average of only 16%.

Labor market participation

The labour force participation rate is calculated by expressing the number of persons in the labour force as a percentage of the working-age population. The labour force is the sum of the number of persons employed and the number of persons unemployed. Thus, the measurement of the labour force participation rate requires the measurement of both employment and unemployment. Employment comprises all persons of working age who during a specified brief period, such as one week or one day, were in the following categories: a) paid employment (whether at work or with a job but not at work); or b) self-employment (whether at work or with an enterprise but not at work). The unemployed comprise all persons of working age who were: a) without work during the reference period, i.e. were not in paid employment or self-employment; b) currently available for work, i.e. were available for paid employment or self-employment during the reference period; and c) seeking work, i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment.

The labor market dimension is measured by women's participation in the workforce. This dimension accounts for paid work, unpaid work, and actively looking for work. The data for this dimension is obtained through the International Labour Organization databases. Due to data limitations women's income and unpaid work are not represented in the labor market dimension of GII. In the absence of reliable earned income data across countries, the UNDP considers labor market participation a suitable substitute for economic aspects of gender inequality.

IV. Realities beyond GII – case study of India

The co-Founder of the Bill and Melinda Gates Foundation (BMGF), Mr. Bill Gates, has stated that Nigeria and India are the worse countries on the global gender inequality index, and that this may hamper the drive to improving human capital development and achieving the United Nations Sustainable Development Goal (SDG).

Gates, who stated this during a restricted teleconference held with select journalist across the world recently. said " countries that are interesting to look at are Gates, said, countries that are interesting to look at India and Nigeria, where the districts that are worst off are some of the toughest in the world, and the districts that are well off are actually almost exceeding the success of developed countries. even in the worst-off parts of low middle income countries, more than 99 percent of communities have seen an improvement in child mortality and schooling. yet, despite this

progress, persistent gaps in opportunity mean that nearly half a billion people-about one in 15 person-still do not have access to basic health and education, adding that majority of those affected are women and girls.

Gates mentioned that gaps between countries, districts, and boys and girls prove that the world's investments in development were not reaching everyone, adding that no matter where one is from, life is still harder for females than males. despite the gains in educational attainment, opportunities for girls are limited by social norms, discriminatory laws and policies, as well as gender-based violence, noting that to address this persistent inequality, countries should look at a new approach to development, targeting the poorest people to make up the most ground

Gender inequality is one of the most persistent evils of our times

Katrín Jakobsdóttir , the Prime Minister of Iceland said, millions of women across the world suffer from gender-based violence, harassment and discrimination. Recently emerged movements drawn attention to other forms of structural inequality, involving race and class, and the persistence of multiple discrimination. Within the global context, progressive policies on gender equality are now being tested and hampered by a hostile political climate. Women's bodies are being re-politicized in countries where the debate over women's reproductive rights and bodily autonomy should have been concluded decades ago. We are witnessing a return to aggressive nationalism and social regression and a systematic undermining of universal human rights, where women and minorities are usually the first in the firing line.

V. Critique

Although the Gender Inequality Index is a relatively new index that has only been in use since 2010, there are some criticisms of the GII as a global measurement of gender inequality. The GII may inadequately capture gender inequality and leave out important aspects or include unnecessary dimensions. The GII is a complex indicator with many components that are difficult for some to interpret or calculate.

Complexity

Klasen and Schüler as well as Permanyer argue that the complexity of the GII will make it difficult to interpret or understand for the professionals who would likely want to make use of it because so many non-linear procedures are applied to the data. Permanyer believes that simplicity is required in order for analysts, policy-makers, or practitioners to convey a clear message to the general public.

Klasen and Schüler claim that the GII is meant to represent a loss of human development, but the standard against which the losses are measured is not stated anywhere, unlike the GDI where the losses were measured against the HDI, making the HDI represent perfect equality. The UNDP explains that the complexity of the calculations are needed in order to maintain an association-sensitive measure, but Permanyer argues that alternative indices that are much less complex have also shown to be association sensitive.

Mix of indices

Both Klausen and Schüler as well as Permanyer argue that the GII mixes indices in a few ways which furthers the complexity and poses other issues.The measurement combines well-being and empowerment which becomes problematic in that it increases the complexity, lacks transparency, and suffers from the problem of using an arithmetic means of ratios. Permanyer argues that it also combines two different, absolute and relative, indicators within the same formula. For example, if the MMR is higher than 10 per 100,000 it is considered inequality. Yet, parliamentary representation is only considered inequality if there is a deviation from 50 percent. Therefore, if women and men fare equally in all dimensions the GII would not equal a zero value as it should. Permanyer gives an example for this problem:

Consider a hypothetical country with PRf = PRm, SEf = SEm, LFPRf = LFPRm and with the lowest MMR and AFR observed in the sample of countries for which data is available (MMR = 10, AFR = 3.8). In that case, that hypothetical country would have a GII value well above 0 (GII approximately 0.15).

Regional relevance

Permanyer also criticizes the GII for whether or not its assessment of gender inequality, and uses of the same set of indicators, are equally relevant or meaningful across all regions of the Globe. For less-developed countries the use of the MMR and AFR in the dimension of reproductive health may be penalizing although the loss may not be entirely explained by gender inequality. Less-developed countries performance in the reproductive health dimension may differ regionally or locally. Access to or use of health services can be influenced by socio-economic levels, public health policies, or social and cultural practices. In developed countries, specifically European countries, gender inequality levels are not very "robust to alternative specifications of gender-related indicators" and analysts and policy makers may choose specific methods to yield desired results.

Choice of variables

Klasen and Schüler briefly criticize the GII for its failure to capture the informal work and unpaid domestic or care work where women are primarily over-represented. In many underdeveloped societies women and girls spend the majority of their time in domestic work whereas men and boys spend far less, if any. Therefore, the if the GII lacks the capturing of the time women spend in unpaid labor, it is insufficient in capturing the true global disparities of women

VI. Dialogue on GII

Global Gender Gap Index

The **Global Gender Gap Index Report** was first published in 2006 by the World Economic Forum. The 2017 report covers 144 major and emerging economies. The Global Gender Gap Index is an index designed to measure gender equality. The report measures women's disadvantage compared to men, and is not a measure of equality of the gender gap. Gender imbalances to the advantage of women do not affect the score. So, for example, the indicator

"number of years of a female head of state (last 50 years) over male value" would score 1 if the number of years was 25, but would still score 1 if the number of years was 50. Due to this methodology, gender gaps that favor women over men are reported as equality and would not cause deficits of equality in other areas to become less visible in the score, excepted for life expectancy.

Basic Indicator of Gender Inequality

The BIGI scale provides an indication of the level of gender inequality in different countries. Indicators of gender inequality are useful for a variety of reasons. There have been various attempts to rank countries in regard to gender inequality. Each of the currently available has its shortcomings. In contrast, the BIGI aims to provide a simplified and *unbiased* measure by focusing on key indicators that are relevant to all men and women in any society. BIGI focuses on key ingredients of a good life.

Basic Indicator of Gender Inequality	Global Gender Gap Index
• Ratio in healthy life span	• Economic participation and opportunity – outcomes on salaries, participation levels and access to high-skilled employment
• ratio in overall life satisfaction	• Educational attainment – outcomes on access to basic and higher level education
	• Political empowerment – outcomes on representation in decision-making structures
• and ratio in educational opportunities during childhood	• Health and survival – outcomes on life expectancy and sex ratio.
	• Artificial Intelligence

With the rapid changes underway in today's labour markets, our analysis year 2018 also took a look at gender gaps in Artificial Intelligence (AI), a critical in-demand skill-set of the future. Based on collaboration with LinkedIn, we find that only 22% of AI professionals globally are female, compared to 78% who are male. These accounts for a gender gap of 72%, which has remained constant over the last years and does not at present, indicate a positive future trend. The implications of this finding are wide-ranging and require urgent action.

First, AI skills gender gaps may exacerbate gender gaps in economic participation and opportunity in the future as AI encompasses an increasingly in-demand skillset.

Second, the AI skills gender gap implies that the use of this general-purpose technology across many fields is being developed without diverse talent, limiting its innovative and inclusive capacity.

Third, low integration of women into AI talent pools—even in industries and geographies where the base of IT talent has a relatively high composition of women—indicates a significant missed opportunity in a professional domain where there is already insufficient supply of adequately qualified labour.

VII. Suggestion to improve the status of women

India scores poorly on the BIGI. The major problem is that girls fall behind enormously in regard to education. There is no other country with a comparable level of human development in which girls fall behind so much in terms of illiteracy. it is clear that, countries with a larger gender gap in education also have a lower Human Development Index (HDI) score. Urgent attention should be given to replacement of the factors brings inequality in the development of women. Within the global context, progressive policies on gender equality are now being tested and hampered by a hostile political climate. Women's bodies are being re-politicized in countries where the debate over women's reproductive rights and bodily autonomy should have been concluded decades ago. We are witnessing a return to aggressive nationalism and social regression and a systematic undermining of universal human rights, where women and minorities are usually the first in the firing line.

Ways for improvement are

- Both boys' and men's education and health need urgent attention. (As for Brazil, a reduction in violence will support this in addition to preventative health care and investment in educational resources.)
- A larger investment in basic education (i.e., increase percentage of GDP spent on basic education) would likely be a good first step. But given the large gender gap and generally high level of illiteracy (among both genders), enormous changes in educational policy and expenditure will be necessary to reduce India's gender inequality.
- "It (India) needs to make improvements across the board, from women's participation to getting more women into senior and professional roles," WEF said.
WEF also noted that India continues to rank third-lowest in the world on health and survival, remaining the world's least-improved country on this sub-index over the past decade. "In fact, India actually widens the gender gap on this sub-index this year."
- "Proactive measures that support gender parity and social inclusion and address historical imbalances are therefore essential for the health of the global economy as well as for the good of society as a whole," said Klaus Schwab, founder and executive chairman of the WEF
- Effective measures should be imparted to promote gender-equal inheritance systems, which were rare until recently, are now common across the world.

- Six key facts about the gender pay gap such as 1) The gender pay gap measures inequality but not necessarily discrimination, 2) In most countries there is a substantial gender pay gap,3) In most countries the gender pay gap has decreased in the last couple of decades,4) The gender pay gap is larger for older workers, 5) Women in rich countries tend to be overrepresented in the bottom of the income distribution – and underrepresented at the top, 6) The gender pay gap is smaller in middle-income countries – which tend to be countries with low labor force participation of women reveals that gender pay gap is universal in nature. There should be legal measures to improve the economic status of women by redressing gender pay gap. Looking beyond worker characteristics, Job flexibility, The motherhood penalty, Ability, personality and social norms, Structural changes in the economy, Discrimination and bias and psychological attributes and non-cognitive skills grounds for gender pay gap.

VIII. Conclusion

In order to improve the GII, it is important to first conceptualize the overarching context within which various factors operate. For women to be able to participate in the labor market, attainment of factors promoting empowerment, and improvement in reproductive health there should be systematic planning and execution of policies worldwide. The 2018 session of the United Nations Commission on the Status of Women reached a strong consensus on ways and means of achieving gender equality and the empowerment of rural women and girls. The "**agreed conclusions**" adopted by the Commission at its sixty-second session (E/2018/27) set out steps necessary to overcome persistent inequalities, discrimination and barriers faced by women and girls living in rural areas, and put forth concrete measures to lift all rural women and girls out of poverty and to ensure realization of their rights, well-being and resilience. Agreed conclusion include three areas such as firstly Strengthen normative, legal and policy frameworks (paragraphs 46 (a) to (l)); secondly, Implement economic and social policies for the empowerment of all rural women and girls (paragraphs 46 (m) to (iii)); and thirdly, Strengthen the collective voice, leadership and decision-making of all rural women and girls (paragraphs 46 (jjj) to (sss)).

References

1. Katrín Jakobsdóttir , September 17, 2019, CNN interview
2. **Economic inequality by gender** by Esteban Ortiz-Ospina ,February 19, 2018
3. Gender inequality – but not like you've seen it before August 13, 2019 - by Arthur Chrenkoff
4. Claudia Goldin in the article , A Grand Gender Convergence: Its Last Chapter
5. World Development Report (2012) Gender Equality and Development, World Bank. Available online from https://siteresources.worldbank.org

6. Blau, Francine D., and Lawrence M. Kahn. 2017. "The Gender Wage Gap: Extent, Trends, and Explanations." Journal of Economic Literature, 55(3): 789-865.
7. Goldin, C. (2014). A grand gender convergence: Its last chapter. The American Economic Review, 104(4), 1091-1119.
8. Regarding intergenerational transmission of gender roles, see Fernández, R. (2013). Cultural change as learning: The evolution of female labor force participation over a century. The American Economic Review, 103(1), 472-500.
9. Lundborg, P., Plug, E., & Rasmussen, A. W. (2017). Can Women Have Children and a Career? IV Evidence from IVF Treatments. American Economic Review, 107(6), 1611-1637.
10. Entmacher, J., et al. (2014). Underpaid and overloaded: Women in low-wage jobs. Washington, DC: *National Women's Law Center*.
11. https://newsday.co.tt/2019/01/08/gender-inequality-a-reality-check/