

CAN WE MEASURE GENDER INEQUALITIES?

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Abstract: The aim of this paper is to examine the effort to standardize measurement of gender inequality by way of creating an innovative new gender inequality index (GII). Most of the questions and explanations in this paper evaluate the ability of GII indicator to capture the true picture of gender inequality. In order to provide a comprehensive view of gender-related issues faced by each country the paper underlines the need of including other dimensions such as wage differences, occupational segregation, unpaid work, access to and control over material resources, etc.

Keywords: equal opportunities, gender inequalities, GII

1 Introduction

The importance of the principle of equal opportunities is quite normal in the minds of people and the idea of the implementation of equal rights for men and women in all levels of society and economy has been gradually adopted. The basic aim is to use such measures and policy instruments, which contribute to greater equality and equal chances in access to opportunities for both sexes. To do this, it is necessary find out a full picture of the gender inequality. A necessary assumption for fulfilling the concept of gender equality is to find such a right approach, which in the bright light reveals the true level of inequality.

The United Nations under its Development Programme (UNDP) has introduced an innovative new gender inequality index (GII) in 2010. This index is one of the three experimental indices¹ described in The Human Development Report². The main objective is to bring innovations in measuring inequality and poverty, based on belief that gender inequality is still strong barrier to human development. The GII is unique in including set of variables measuring disadvantages for women that have been neglected until now.

Although the initial attempts to create conventions focusing on gender equality date back to the forties the first global gender indices were created in the nineties. The Gender-related development index (GDI) and the Gender empowerment measure (GEM)³ were launched in 1995 with the belief that collecting and analyzing data show the gender disparities and demonstrate the importance of significant negative effects on sustainable development.

The aim of this paper is to use the new GII for further analysis to show how to construct a valid and reliable gender index. The need to use multi-dimensional aspects in the construction of the index is strongly emphasized as a necessity to eliminate the severe data limitations. The object of interest is also to identify the strengths and weaknesses of the examined index. This article uses GII as an indicator that shows a role of women in society. The main task of the paper is to define limitations of the current index and to explore potential addition of the concept.

2 Previous indices

As I mentioned, there have been two indices⁴ to measure gender equality since 1995. The first one, gender-related development index (GDI), shows inequality using three indicators: life

expectancy, educational attainment and adjusted real income. The methodology used imposes a penalty for inequality. It means that the greater the gender disparity the lower level of GDI. The calculation of the first indicator uses minimum and maximum values for female (27.5; 87.5 years) and male (22.5; 82.5 years) life expectancy at birth. An educational attainment is divided into two observed variables. The GDI gives two-thirds weight to adult literacy and one-third to combined primary, secondary and tertiary enrolment. The last step in calculation of GDI refers to estimated income which is the most complicated part, because of the lack of data on disparities between men and women in earned income and even on wages in some areas. At the end an adjustable parameter called ϵ is used, which represents penalty for inequality.

The relationship between the HDI and GDI is very close; they have the same base measurements focused on expansion of capabilities. Basically, GDI is the HDI adjusted. Using comparable data from the participating countries is built ranking according to gender inequality. It is hardly surprising that gender inequality exists in every country, but significant progress has been achieved since 1970.⁵

The second index, gender empowerment measure (GEM), is based on gender balance in decision-making. Promoting equal access for women to resources such as employment opportunities, political and economic participation indicates the existence of inequalities between male and female in a different dimension than reflects GDI. Measurement focuses on looking at the three basic indicators - female and male shares of parliamentary seats, female and male shares of positions as legislators, managers and of professional and technical positions, female and male estimated earned income.⁶ The difference between the perceptions of a common indicator - estimated earned income- is that while the GDI pursues an individual's ability to earn income, GEM captures what the level of economic independence of women is.

These two measures are certainly not the only indices that are used to detect gender inequality.⁷ But their wide range of countries and easy availability meant that they became a suitable source of data for the public debate on disproportion between men and women in many areas of human behaviour. This public debate helped to increase the general awareness that gender equality in its entirety can be a key to improving livelihoods and social, economic and political situation of many countries.

Both the GDI and the GEM as constructed does not provide a sufficient measure of women's status. Weaknesses of these indices appear in several key points. Gender inequality and its adverse effects on social progress cannot be truly captured by specifically incorporated variables. The criticism concerns the choice of variables that are separate indicators rather than to be able to show evidence of gender inequality as a whole. Therefore, we should be careful in the evaluation of the relationship between gender equality and economic development. The main weakness can be identified as the construction of indices themselves.

In the case of GEM, access to administrative and management positions has ambition to reflect decision making power of men and women in society. Female share in high labour market positions, in parliaments, management does not demonstrate the actual amount of power that is entrusted to women in their

⁵ Positive trend in GDI values and in other variables investigating women conditions (level of literacy, participation in the economy, representation in parliament, etc.) was examined in several studies; See: (Forsythe; Korzeniewicz; Majid; Weathers; Durrant, 2003); (Gray; Kittilson; Sandholtz, 2006); (Apodaca, 1998)

⁶ Human Development Reports, official internet page

⁷ For example: a, The Gender parity index (GPI) used by The United Nations Educational, Scientific and Cultural Organization (UNESCO) to measure females' and males' level of access to education at primary, secondary and tertiary school. (UNESCO, official internet pages); b, The Gender Equity Index 2009 (GEI) computed by Social Watch, classifies countries and ranks them according to indicators in three dimensions, education, economic participation and empowerment. (Social Watch, official internet pages)

¹ The Inequality-adjusted Human Development Index (IHDI), The Multidimensional Poverty Index (MPI) and The Gender Inequality Index (GII)

² Human Development Reports, official internet page

³ Human Development Reports, official internet page

⁴ Source of the whole paragraph: Human Development Reports, official internet pages

positions. High representation of women in national parliaments should not be blindly pursued goal. First, real political and economic power of women can hardly someone measure, but it might help to look at female share in lower level of public authorities, municipalities, unions and other organizations and companies in private sector. (Dijkstra, 2001) Second, proportion of women in national governments in certain countries may be very small just because it is the result of their tradition and customs. Then this is not a gross injustice that can be righted by granting women a specific quota of representatives in parliament. Increase female representation in parliament in less developed countries should be in accordance with their principles formed by traditions instead of violent and rapid changes.

The choice of indicators is at least questionable (Moser, 2007). Some of them, for example estimated earned income, does not tell us anything about intra-household resource distribution, which may reinforce income differences. Another overlooked fact is women's unpaid work which should be included somehow. Other limitations of measurements have been recognized as well (Stanton, 2007). Still, we should bear in mind, that the creation of such indices has had a positive impact. As an experimental work, both of them have caused a raising interest and attention among academics and policy makers on this issue.

3 New index

Due to the mentioned shortcomings in the measurement these two indices (GDI, GEM) occurred attempt to develop a new improved index. The alternative measure was named Gender inequality index (GII) and it represents a major step towards monitoring gender inequality and reflecting various dimensions of disadvantages for women.

3.1 How to calculate GII

The index shows the loss in human development results from inequality between men and women. The GII captures women's disadvantage in three dimensions - reproductive health, empowerment and the labour market. It ranges from 0, which indicates no inequality, to 1, which indicates absolute inequality in all measured dimensions. More the gender equality, more GII is close to 0.⁸ The index is innovative in efforts to be a universal measure of women's status. What is new is the use of multidimensional approach which is more meaningful to compare the status of women cross-nationally with respect to particular aspects in included countries. At the same time, we suggest that the choice of one indicator or another can make an important difference for the ranking of countries and hence the overall empirical results.

Reproductive health as a one of components of the GII measures maternal mortality ratio and adolescent fertility rates. First one can reliably detect health care that women receive during childbirth. Many women lose their lives due to inadequate antenatal care and prevention involves regular medical visit by pregnant women. The adolescent fertility rate measures number of births to women aged 15 - 19. High level of both indicators occurs especially in developing countries as implies recent work Reynolds; Wong and Tucker (2006). Poor access by couples to information about family planning and such services to prevent early motherhood cause that babies born to teenagers who are facing greater risk of complications during pregnancy. Adolescent mothers and their children usually live under conditions of poverty, family instability and life uncertainty. Moreover motherhood also limits women to obtain higher education. Limited opportunities for better education have a negative effect on women's employability in the future.

Like the previous index GEM, GII highlights women's representation in parliament. The proportion of seats held by women in national parliaments can be described as an indicator of agency. Low levels of female participation in the national parliaments of most countries results from inadequate women's

educational achievements and political parties and electoral systems, which enhance the ability of men to access to political leadership. A much stronger barrier of women's opportunities to participate in politics is existence of gender stereotypes and cultural norms in countries where men play a dominate role in the political arena for long time.⁹

Parliamentary representation of women is closely associated with their educational attainment and vice versa. Next GII component reflects differences between men and women in such areas as educational attainment. The increase in educational attainment resulted in increased opportunities for women in labour market, in improved the long-term socioeconomic well-being of women and in possibility to participate in public life. Educated women are expected to achieve greater satisfaction of applying a full spectrum of their rights and of their professional success and career.

Labour force participation as last described indicators of GII, measures female involvement in paid work.¹⁰ Focussing on recent trends, it is clear that labour force participation rates of women have globally remained steady in the two decades (1990 - 2010).¹¹ However, sub-regional trends in the case of women show great variation. It is generally accepted idea that increase in female labour force participation goes along with the improvement socio-economic status of women and enhancement their economic or financial independence.

3.2 What lies outside of GII interest?

In fact GII is not perfect, but so far the great attempt and challenge to capture true gender inequality. There exists still need to find a source of information that indicates differences in the distribution of achievements between women and men in the countries around the world in order to enhance awareness and public debate about inequalities. The relationship between gender equality and development has been supported in several studies¹², which show positive effects of greater female participation on the economy. Attention to the same opportunities for men and women comes from the conviction that the advancement of women has a significant impact on the growth of nations.

The gender inequality is multifaceted and therefore only a composite index can capture all aspects of it. That is why the multidimensional approach is right way to avoid shortcomings and misinterpretations cause by indices consisting of a few indicators. The GII has ambitions to provide a comprehensive view of gender-related issues faced by each country. The index is innovative in one essential point: it includes five indicators and three dimensions. It is useful to measure multidimensional concept which takes into account these aspects of gender inequality. More dimensions capture gender inequality in a much broader perspective and explain issue in its entirety.

Although the aim is to define important aspects of gender equality and inequality there are still significant conditions which lie outside general interest. Most neglected aspects are information related to labour force participation. First, GII does not look at wage differences. Differences in wages between men and women are of great importance because it affects a large number of people. In general, women's wages are lower than men's wages everywhere, but the gender pay gap is not uniform cross-nationally. (Polachek; Xiang, 2009) The gender wage gap varies considerably across countries not only in Europe. Although part of gender pay gap can be explained by the differences in education, age, skills, experience, but some persistent differences cannot be explained by objective reasons. Part of the wage gap remains unexplained and potentially related to discrimination¹³ and Glass Ceiling phenomenon¹⁴.

⁹ See Paxton and Kunovich (2003) for further details.

¹⁰ The labour force is economically active population who is either employed or unemployed (but actively seeking work and currently available for work) - labour force classification from ILO, official internet pages

¹¹ Mrkić (2010)

¹² See European Commission (2010a) and Mason and King (2001)

¹³ See Levine (2004: pp. 5-9) for further details about the unexplained portion of the gender pay gap

¹⁴ The Glass Ceiling describes an invisible barriers that affect women in their rising to the decision making positions in an organization and that result in less frequent promotion of women.

⁸ Human Development Reports, official internet page

Second, we should include a measure of the degree of occupational segregation by gender in the labour market. This is significantly important in light of the fact that the male occupations tend to be higher paying, with greater promotional opportunities and better conditions of employment. Anker's (1998) analysis affords us the opportunity to understand occupational segregation by sex in the world. In the first place job segregation refers to different characteristic such as personal quality, educational attainment and skills. Occupations for women are strongly consistent with gender roles and stereotypes at the same time. Traditional gender stereotypes are determined by cultural assumptions that women are well-suited to particular occupations.

Gender roles affect men and women in other ways. Specifically, gender stereotypes influence how men and women spend their free time and it has decisive influence on the division of household labour and childcare as well. Housekeeping and infant care presents an obstacle to the participation in the labour market and to the gain a material satisfaction for women. Housework, care of children and care of elderly relatives describe women's unpaid work which is indispensable financial support to the entire economy. Several explorations¹⁵ show that the value of these home-produced goods and services contributes to economic well-being.

Focus on the proportion of time devoted to unpaid work awakes interest in measurement and valuation of non-market work and probable connection to the distribution of family income among married couples. The women's share of family income is closely related to access to material resources. The ownership of economic assets by women and men is another important issue not included in GII. With greater ownership and control over economic assets women are less likely to experience poverty (in case of a divorce or the death of the partner) and are better able to withstand financial crises and care for their children. Women who own property or have access to ownership of land, housing and other assets are better positioned to improve their status and gain equal opportunities and become economically independent which provide them significant benefits. That is why we consider material possessions to be a crucial implication.

Following relevant issue to women's well-being, violence against women, presents manifestation of the denial of women's equality and dignity. Gender-based violence is still widespread and associated with low socio-economic status of women. Women face up to different types of domestic violence with miscellaneous consequences for them and for those who witness it, especially children. Data provided by World Health Organization (WHO) give evidence of a proportion of women who had experienced physical or sexual violence by intimate partners that ranges from 15% to 71%.¹⁶

The last mentioned dimension is a matter of law, particularly how the law can advance women's rights. One of the possible options on how to prevent discrimination against women is to implement the requirement of equal treatment in legislation. First of all, equality of rights between women and men must be enshrined as an essential principle. Legal shortcomings and barriers that hinder protection of human rights should be identified and eliminated mainly at national level. Although it is only an administrative weapon, it has big impact on human behaviour in society and allows create the awareness of Right and Wrong. Almost everyone can distinguish Right from Wrong but experiences have shown that it is necessary to confirm these rights in the constitution.

The latest developments of anti-discrimination legislation and policy in individual countries are very different. There still exists insufficient current legal protection against discrimination in the world. However, several countries have implemented the requirement of equal treatment of women and men into their national and regional legal systems recently. The principle of equal treatment between women and men, which is essential to respect such fundamental rights, has become hallmark of the European Union's gender equality policy¹⁷. EU emphasizes the importance of full implementation of greater promotion of

gender equality in new legislation and encourages Member States to strengthen their efforts to extend present legal framework.

The above analysis points to necessity of including other dimensions such as wage differences, occupational segregation, unpaid work, access to and control over material resources, violence against women, anti-discrimination laws, that govern the way people can expect to be treated with regards to their sex. Further we should add female share in lower level of public authorities, municipalities, unions and other organisations and companies in private sector in order to determine true picture of political and economic power of women. The aim was to define important aspects of gender equality and inequality that may be captured by multidimensional index. These possible extensions of GII get us closer to index which provides an adequate and relevant comparative measure of women's status.

It is pointed out that in real life we are confronted by many difficulties, from lack of empirical information to the subjective perception of inequality. Mentioned dimensions and aspects of gender inequality are difficult to discover due to data constraint. Most data are not available for large number of countries. The ability to identify women's status is limited by an absence of sex-disaggregated data and by the way in which the data are collected. Data limitations appear especially in developing countries where it has been assumed that data-collection processes are inadequate and trustworthy (Bradley; Khor, 1993). This means that unobserved factors lead to an incomplete or partial understanding of the inequality. To overcome these barriers it is necessary to strengthen national statistical systems and implement reliable statistical methods. Access to data is vital to gender-equality analysis and hence there exists urgent need for collection of required figures for measuring women's status.

4 Conclusion

It is essential to develop an overall index in order to capture significance of gender inequality. It should be emphasized that the construction of a composite index is not a straightforward process. It works with assumptions that have to be evaluated prudently in order to capture all possible effects among factors and to find out the relationship between the parameters inside the model.

In this paper, a new way to measure gender inequality was introduced. The effort to create a relevant tool to capture gender inequalities has become a significant challenge for everyone involved. It is generally recognized that concept of gender equality is a pervasive phenomenon and important issue in itself that results in finding such a right approach, which in the bright light reveals the true level of inequality. The main reason for measuring the size of the mentioned problem is a prerequisite for identifying the best solutions.

The paper showed how essential was initial attempts to create benchmarks and indicators to compare the achievements in women's equality around the world. At the beginning of the paper, two previous indices are presented. Both of them do not provide a sufficient measure of women's status, as is clear from the evaluation. That is why the alternative measure, named GII, was constructed. This attempt represents a major step towards monitoring gender inequality and reflecting various dimensions of disadvantages for women. The GII has ambitions to provide a comprehensive view of gender-related issues faced by each country, but this paper highlights its shortcomings and limitations.

The analysis points to necessity of including other dimensions such as wage differences, occupational segregation, unpaid work, access to and control over material resources, violence against women, anti-discrimination laws, that govern the way people can expect to be treated with regards to their sex. The extension of the GII provides a more compact picture of gender inequality.

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