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**WOMEN'S ROLE IN ECONOMIC DEVELOPMENT. INDIA'S CASE
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1. INTRODUCTION: AGENCY AND EMPOWERMENT

If we understand agency as the *power or freedom to exercise choice in one's actions, free from constraints of social structure* we can say without any doubt that women have a lack of agency in many part of the world compared to men. Women's movements have start focusing in agency aspect in the last years. Before this, the main worry was the well being which means the state of being comfortable, healthy or happy. Wellbeing depends on the coverage of basic necessities, love, sense of belonging to a community, natural environment, security self-stem...etc. Empowerment on the other side refers to *increasing the spiritual, political, social or economic strength of individuals and communities. It often involves the empowered developing confidence in their own capacities.* The power is determined by many variables such that having decision-making power, range of options to choose, ability to exercise assertiveness...etc.

After analyzing all these concepts definitions it can be clearly seen the interrelation that they have: well-being without agency is incomplete as no one can be comfortable or happy without being able to make their own free choices and being able to act without social constraints. Empowerment is going to be determinant in a full wellbeing for women.

The importance of women's empowerment will be described through out this paper firstly by depicting the bidirectional relationship between empowerment and economic growth. Secondly, an analysis of the main determinants of women's empowerment will be carried out to then focus in the main interest of the analysis: The multiplier effect that women's economic empowerment can have. This general setting would set the pace to start the particular analysis of India, on of the developing countries in which women still suffer a huge discrimination and the measures implemented in order to address inequality by the government through the 5 years plans will be described. In the next par an analysis carried out by Mamta Murthi, Anne-Catherine and Guio Namur Jean Drèze: MORTALITY, FERTILITY AND GENDER BIAS IN INDIA: A District Level Analysis in 1995 will be use as an inspiration.

After the collection of actual state-wise data after provided by the Census of India 2011, a regression analysis will be implement of the effects of several variables regarding women's empowerment such as women literacy rate, labor or poverty, have on fertility rates, child mortality rates and female disadvantage in child survival. After having analyzed the variables that influenced the most women's empowerment. Finally the focus will be put on how the women's situation has been affected by the international crisis and the prospects of the future of Indian women.

Women's empowerment and the full development of their agency have been in the sight of international organizations for quite a long time now. Since the first World conference organized by the United Nations in 1975, 3 more have taken place: Copenhagen (1980), Nairobi (1985) and Beijing (1995). The number of countries participating at these conferences has increased gradually reflecting the increase in the awareness of the importance of this subject, from 133 in the first one to 189 in the last conference. Even if all the conferences meant great steps toward the achievement of gender equality, the last one held in Beijing meant a significant turning point. The adoption of the Beijing Declaration and the Platform for Action by 189 countries represents the real concern of the international community to speed up the process and change the path in achieving real objectives in sex equality regarding many critical areas like education, power and decision making, human rights, violence, poverty and health among others. After Beijing's conference, reviews have taken place in order to analyze the progress made and the objectives reached. For instance, in mid 2013 the UN Economic and social council asked

for a review of the implementation of the plan in order to analyze the situation in a session that will take place during the present year: Beijing+20 reflecting the keep on track of the process that has not been left aside.

Another reflection of the concerned of the international community is the inclusion of 2 millennium development goals that concerns women status and wellbeing. Promoting gender inequality and empower women and improve maternal health are two of the objectives set by the United Nations to be reached throughout this millennium.

But why is so important to promote women's agency and empowerment for the international community?

Asking for women empowerment and therefore for gender equality can have two rationales. First, equality must be valued as a goal by itself. Kofi Annan said¹ that the full participation of women to all levels of decision- making is a basic human right and as any other human right it should be promote and reached.

But the actual gender inequality should be avoided not only because is not equitable or fair but also because it can be an instrumental for other development goals and will have positive effects in the whole society. Quoting Amartya Sen in his book *Development as freedom*, 1999 women need to be seen as active agents of change and no longer as passive recipients of welfare enhancing help.

2. WOMEN'S EMPOWERMENT AND ECONOMIC GROWTH

Along this section it will be developed the bidirectional relationship between the economic empowerment and agency of women and economic growth. Gender inequality is more present in countries in which the income level and the degree of development, so as this countries developed, will the inequalities decrease as a natural consequence or special policies addressing the lack of women empowerment are needed? On the other side, which are the factors that affect the most women's free choice and status and what are the effects that these factors entails for the overall society and economic development?

2.1 From economic development to women's empowerment.

The channels through which economic development can lead to the promotion of equal treatment of the sexes are several.

Firstly, as economic development progresses the GDP of the country grows and so does the GDP per capita. This increase in the household resources, relaxes the constraints they face on a daily basis reducing the situations in which the parental figures face extreme circumstances in which they need to take decisions at the margin of subsistence that according to the empirical research, end most of the times by harming women. These empirical researches are hard to carry on, regarding the data collection as households under circumstance may behave in a way they would do not if they weren't observe.

It is hard to observe on a "normal condition" life whether boys and girls are treated differently but when facing extreme conditions the evidence leave no doubt.

¹ On the forty-ninth session of the Commission on the Status of Women marking Beijing +10

For example, a study found that girls in the poor neighborhoods of New Delhi have the more than double probability to die from diarrhea reflecting the largest discrepancies in gender-specific mortality rates of the country²

Another empirical example in India proves that during periods of droughts, the excessive mortality rates of girls spikes and reflecting again sex inequality.³ This fact can be explained with the argument that the family when facing an inconvenient situation, need to reallocate the existing resources to the increasing need and this reallocation most of the times harms girls. This study also proves that those households, which had assets in order to sell, and therefore a net of security in case of an unexpected event didn't show an increase in the relative mortality. So a conclusion can be draw, the economic development that entails more resources for families and for example and easier access to an insurance would lead to a reduction in the sex discrimination.

Economic development is linked with improvements in technologies and better healthcare services, which reduce the chance that women die at a young age. The natural duty that women carried out when giving birth is not a discriminatory factor, but it also makes women face a risk position that men don't. The maternal mortality rate is obviously higher in less developed regions one of the main reasons is the lack of medical assistance: According to the United Nations, in 2012 40 millions of births were not assisted by skilled and professional personnel. The introduction of sulfa drugs (a drug to treat infections during the pregnancy) reduced maternal mortality in 36% in the 1930's in the US. The total access to pharmaceutical components is not possible if the government can give this support and this is only an option when economic development is in place.⁴

The improvement in the access to health that is led by economic development will therefore decrease the maternal mortality rate, improving the women's life expectancy.

Another consequence that follows what was describe above, is that the increase in the life expectancy makes the household invest more in their education. In developing countries the lower life expectancy of girls reduce the investment made on them, as it can be perceived as a waste of money. The higher the income of the country, the better healthcare system and therefore the higher life expectancy. An increase in the girl's life expectancy may change the perception inside the household about the investment that is made towards boys and girls and girls. Jayachandran an Lleras- Muney, reflect this fact in a study carried out in Sri Lanka in 2009⁵. They estimate that an increase of 0,11 in educational years is reached every time that girl expectancy is reached. Maternal mortality is also influenced by economic development in a positive ways as it means the diffusion of technological innovations that reduce the chances of death.⁶

One more of the positive effects that economic development can have on women are through the development of their social and legal rights. A strong correlation has been

² Khanna, R., A. Kumar, J. F. Vaghela, and J. M. Puliyl. 2003.

³Rose, Elaina. 1999.

⁴ Jayachandran, Seema, Adriana Lleras-Muney, and Kimberly V. Smith. 2010.

⁵ Jayachandran, Seema, and Adriana Lleras-Muney. 2009.

⁶ Doepke, Matthias, and Michele Tertilt. 2009.

empirically proved between these two variables. The legal rights of women expand in many areas such as property rights, access to land, violence against women...etc. as GDP increases. Moreover, all throughout history the expansion of these economic rights has always been before the access of women to political rights (that would increase even more the power of change that women can have, taking the empowerment inside the household to empowerment in their community or society. An example of the empirical data proving this fact is the negative correlation of 0,4 that was found in analysis carried out across countries between the lack of rights and GDP per capita.⁷

Even without getting really in depth in the analysis, is important to mention that economic development can also be a weapon against women. For instance, China a country that can be consider as an economic success in the last decades, still has sex ratios skewed in favor of boys. Economic development and the availability of new technologies can make less expensive the cost of discriminating against women for example the self-selective abortions.

It has been described along this section the main channels through which development has a positive effect on gender equality with empirical research to support this arguments but is this enough or specific policies targeted at improving women's conditions are needed?

Most of the reasons and factors that affect and increase the discrimination against women are linked with the perception that societies have of them. This conception is rooted inside the culture of societies and something that is hard to change even with economic development. The bias against women is still present even in develop countries. So policies targeted to change this are needed to reach full gender inequality. But, what are the main determinants of women's empowerment in which policy implementation need to focus?

2.2 From empowerment to economic development and demographic change.

2.2.1 Main determinants of women's empowerment

- **Access to full employment decent work and education**

When the social and income level is so low that asset accumulation and saving are not an option, labor is the only resource to make a living. According to the International Labor Organization (ILO) a decent work involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families; better prospects for personal development and social integration; freedom for people to express their concerns, organize and participate in the decisions that affect their lives; and equality opportunity and treatment for all women and men. The lack of a decent work has been identified by the ILO to be one of the primary causes of poverty but also affect women's empowerment and status compared to man's one.

⁷ Doepke and Tertilt (2009)

The importance of labor to reach women's empowerment and reduce gender inequality is the economic independence is linked to a decent work. The perception of who contributes how much for the family prosperity inside the household in developing countries can determine the structure of decision making. Most of the times, women devote their times to unpaid work inside the household. This contribution even if as necessary for the family prosperity as a wage, is less visible and may harmed the decisional power of women, favoring the men's one. A woman who can exercise her decisions inside the household is an empowered woman and as it will be seen later on, it does not benefit only them. But,

According to the data and reports provided by the ILO, women's still have a lot of trouble to access to a decent work. Even when women access to the labor market, the different benefits that they obtain compared to men are due to the constraints of the labor market and the concentration of women in vulnerable forms of work, the occupational in gender segregation, the wage gaps and the unequal divisions of paid an unpaid work.

Deepen a little bit more in these constraints that women face, firstly the segregation they suffer can be horizontal or vertical. Horizontal segregation limits women to access to certain sectors or occupation while vertical segregation is linked with occupational hierarchies. The wage gap is also an important fact as it's estimated that women earn a 16,5% less than men (International Trade Union Confederation, 2008) at a global level.

While the presence of women in paid work as increase in the last decades, the presence of men in unpaid work has not followed the same pattern. The care work that is usually carried out more by women than by men, is still unpaid even though the debate about including it in the national accounts.

Governments in developed countries have set up policies in order to make easier to reconcile the work and the family responsibilities by introducing the part time job, but this option is mainly taken by women while men spent longer period of working day in the market-oriented work. In developing countries many poor women see themselves forces to take up self-employment, as the only way to reconcile the domestic responsibilities and the income need.

Nowadays the world labor market is characterized by a proliferation of the non-standards forms of work, which means a reduction of formal employment (full-time, regular contracts labor legislation) in favor of precarious job that lack of social protection. The deregulation of markets and the downsizing of the public sector as a part of the economic liberalization has made that the new employment in recent years, especially in developing countries, is linked with the "informal" economy. The proportion of women with an informal work and concentrated among lower quality jobs is much greater than the proportion of men.⁸

The most powerful way to fight against all these constraints that women have to face in the labor market is through **education**. Education is a key tool to open women's minds and widen their horizon vision. Through education women can see themselves as something else than childbearing machines and decide to access to the labor market and try to earn a wage outside the household. Moreover, there are empirical evidences of the transformative effect and power of education in promoting gender equality and women empowerment.

⁸ International labour organization (ILO) 2012. 'Statistical Update on Employment in the Informal Economy'. Geneva

Estimates indicate that women's wages can rise between 10/20% with only an extra year of schooling.⁹

But education does not only positively affect the labor market opportunities of women. More educated women tend to have a greater power of decision inside the household and in the community. They get more involved in the social life and are more interested in everyday life of its community and this fact, can greatly affect the structure of households and communities reducing the anti-female bias.

- **Access to land, housing and other productive resources: Ownerships rights**

The roots of the unequal access to land is mainly due to discriminatory inheritance practices and the limited access they have to the market and the land reforms that tend to be gender-bias. In many developing countries Africa and Asia, the inheritance line is patrilineal which means that property passes by to and through male members. Also, the marital property regimes left women in these countries in a vulnerable position in the case of marital breakdown or death of the husband. These two facts can be reflected in the following testimonies taken from the 2012 World Development Report: Gender equality and development. *“Divorced women come to their parental home after divorced but they get not alimony or share of the property from the husband side...In some cases they are forced to remarry an elderly man so that they can earn a living”* Adult women, India. *“When you die, your property is distributed by your relatives, and does not go to your wife or daughter. If you have a son, all the property will belong to the son”* Young woman, Afghanistan.

The accumulation of assets is therefore impossible in this situation, which make women completely depending on men through marriage. Promoting ownership's rights makes women less dependent on man making them able to developed an economic activity, be active in social life or have political presence in their communities. When they see themselves independent and able to earn a living, then marriage is not anymore the only option and they can truly develop their own decisions and choices.

The promotion of women's access to land and property (including housing) determines the capacity to ensure agricultural productivity and the assurance of livelihood. The lack of access to and control overland and property has been increasingly linked to poverty, migration, violence and HIV¹⁰. The evidence that increasing women's access to immoveable resources can have multiple positive effects to women, to their families (children's health and education) and to the community as a whole in terms of productivity gains and welfare benefits¹¹

- **Access to financial resources**

Access to financial resources gives the freedom of smoothing consumption overtime according to the different circumstances or events that can happen throughout life. The women's access to financial services is key in allowing them to benefit from economic

⁹ Psacharopoulos, G., and H. A. Patrinos (2004).

¹⁰ Agarwal, Bina and Pradeep Panda. 2007.

¹¹ Quisumbing and de la Brière, 2000

opportunities and make free choices in every moment of their lives depending on the circumstances.

Unfortunately, formal financial services with their high interest rates, have failed to meet the needs of the low income countries as their coverage tend to be biased against poor people due to the cost and limited benefits for financial provider. Women's as they have less freedom to decide they also have less access to credit. The development of microfinance is just the answer to the unsuitability of commercial banking. Micro finance is micro in the sense that the amount of money exchanged is small but not in the scale of operations. According to the World Bank, in 2007, such organizations reached 154,8 million clients, of whom 106,6 million were among the poorest when they took their first loan. Microfinance has made an improvement in the gender bias of access to financial market thanks to the high ratios of repayment that women offer relative to men (DeAghion and Morduch, 2004) but not all these organizations have focused in reducing this gender gap.

In India women's group-mediated lending has stronger and positive effect in the likelihood of girls going and staying in school than individual borrowing. Channeling the loans through women's increased its power in decision making and bargaining power. (Holvoet, 2004-2005)

- **Access to social protection**

As it has been described all along this section, social protection is another way to make women more independent from men. Providing a net of support for women can make a difference especially in the case of marriage making it as not the only possible option. The global social protection floor that is gender responsible can mean relieving the charge women have on domestic issues (children, sick and elderly people care) giving them more freedom for decision-making and therefore more empowerment.

Even if according to the article number 22 of the Universal Declaration of Human rights, social security is a human right there is a lack of it in many developing countries.

- **Macroeconomics**

Employment, education, ownerships rights, access to financial resources and social protection can make a change in women status as described above but the framework that is set by the governments through the general lines of their policies have the greatest impact on gender equality and the empowerment of women's. By establishing the rules of the game, governments become the cornerstone in making a change in the world.

The effect that macroeconomic policies can have in individuals and societies can be really different depending on the specific factors and circumstances; one of these factors is the sex.

The distributional consequences of economic growth strategies, monetary, fiscal, trade and investment policies need to be taken into account by the governments in order to implement policies that are responsible in terms of gender.

According to several researches that have carried out, economic growth can have a positive or a negative effect in women depending on the type of growth policies¹². The effects also depend on the variable that we are looking at. For example, it has been proved that the correlation between economic growth and women's employment with a positive employment elasticity of economic growth. For the period of 1991 to 2003 the changes in employment associated with changes in growth was positive and greater for women than for men.¹³

But economic growth can also be a boost to drive up gender inequality. If we consider the economic growth that results from the privatization of public services, prices will be higher limiting therefore women's and girl access to these services.

Also, in an export-oriented market with the following characteristics: labor intensive manufacturing, highly mobile firms, severe price competition and union activity barely existent, the employer can fix low wages for women according to their productivity as the number of educated women available to work exceeds thoroughly supply.¹⁴

Monetary policies can also have different impact depending on the gender, mainly through two channels: the labor market and the access to credit.

The interest rate policies that have been put in place in the recent economic history in order to control inflation have affected women's employment in developing countries. After a study carried out considering several periods of inflation from 1970 to 2003 in 17 countries with low or middle income, in 71% of the cases employment was contracted more for women than for men.

The availability of credit supply to the less privilege, including women, can be reduced through tight monetary policies, high real interest rates and the deregulation of financial markets, three key points of the recent macroeconomics trends. The growth in micro finance is linked to the lack of many commercial banks adapting to the special characteristics of the least privileged creditors.

The fiscal policies and the public sector have an important role in gender equality. The revenue recollections and reallocation of resources can have differential effects on men and women. Tax system can perpetuate gender inequalities through wages and disposable income as they can change the way women and men allocate their time to formal, informal and unpaid work.

An income-tax system with higher tax for higher income and joint filling (one revenue for both spouses) can discourage women to participate in the labor market. As working will mean to pay higher taxes.¹⁵

Even more important is the role of government in the reallocation of resources through budget as these are important mechanism to endure that women benefit from public sector expenditure. The cuts in governmental expenditure associated with fiscal austerity and the privatization in social protection involves a decrease in social help (children daycare, hospitals.) Investment by imposing user fees on services and utilities will lead to an increase in the time that women have to invest in taking care of the children, the sick or the elderly people in their families.¹⁶

¹² Berik and Rodgers 2008

¹³ (Kapsos, 2005)

¹⁴ (Seguino, 2009)

¹⁵ (Elson, 2006)

¹⁶ (Razavi, 2007)

The women's voice and representation in economic decision-making has proved to have positive effects in several researches. For example, the results of a study carried out in local governments of India say that elected women leaders allocate resources to public goods more likely than men and that they achieve result at a lower price¹⁷. But unfortunately, even these evidences women still underrepresented in governments and therefore cannot influence the decisions that are being made in resource allocation.

2.2.2. The multiplier effect of economic empowerment. Evidence in the literature.

The multiplier effect that women's empowerment is not longer a mystery for the international community and economic researchers but id something that still ignore by the general public. The positive effects that developing agency and the free choices of women do not only entail a better position of women themselves but also can improve the status of the whole communities and make significant progress towards development.

Let's start this analysis with following statements. According to an analysis carried out by the UN-ESCAP¹⁸ based on a simulation exercise on several Asian countries, the costs of gender gaps to the whole society are between 42-47bn and 16bn-30bn a years for inequalities in the labor market and education respectively. The evidence is not only for developing countries as it has been estimated that the global economy losses 9tn¹⁹ every year due to these inequalities. The IMF also ratifies this argument with several research that claim that reducing gender gaps particularly in the labor market would lead to an increase in the GDP of countries, for instance a 5% for the USA, 12% for UAE, 9% for Japan and 34% for Egypt. The greatest the gap, the higher the benefit that the economy obtain when this one is reduced.

A pretty obvious conclusion after these statements is that reducing the gaps in gender inequality would lead to a greater economic growth and the extra money that the economy would have could be invested in other areas enhancing even more economic growth creating a ripple effect. Just by implementing policies addressed to this problem, not only women would be able to developed in a full way their capacities but the whole economy would stop being drag out.

The importance of women's status is also going to have a direct effect on children, as the caretaking burden is usually bear by them. Among all the recent studies that have been carried out recently, the conclusions of the one²⁰ carried out in developing countries that wanted to extract the extent of the relevance of women's status and agency in child nutrition. 36 developing countries were included and the regression results don't left any doubt: Women's empowerment has a positive effect in the nutrition level of children as the decision level inside the household is taken more into account: As women are more educated and earn and outside wage the contribution to the family is more visible and their decisions are taken more into account. Moreover in south-Asia the increase in the women's power influence positively on both long and short-term nutritional status of children. Closing the gap and bringing women status to the same level as women, this would lead to decrease the underweight rate for children by around 13% percentage points that accounts for a reduction of 13.4 millions malnourished children. The multiplier effect here affect

¹⁷ (Beaman and others, 2008)

¹⁸The Economic and Social Commission for ASIA and the Pacific is the United Nations arm for regional development in this region.

¹⁹ Analysis carried out by the NGO Action's Aid in its campaign Close the gap! Whose objectives are to reduce gender inequality in the labor market

²⁰ Quisumbing, A. (2003)

future generations of a country by making child healthier and decreasing the mortality rates of kids.

Another channel through which children are affected by gender inequality is education. The fact that women are more educated, make them more able to take care of their widening their knowledge about how to react in case of an illness, to prepare the adequate food...etc. Higher level of education that leads to a better preparation for the labor market makes fertility rates go down: more educated women see their capabilities developed and have more ambitions and dreams than being a wife and a mother. The time they devote to study or working is a time that is not invested in childbearing making the average kids that a women has decrease. This can be clearly seen in a comparison between the north and the south: In the "north" the fertility rates have been around or below the replacement level for quite some years now not only because of the contraception methods or the family planning awareness but also because women are involved in many other activities that limit the time of their lives that they expend in childbearing activities. In the "south", the fertility rates are still far above the replacement level as women are perceive to be only valuable in their roles of mothers and wives.

Regarding the property rights land access can notably reduce a household's risk of poverty. A women that can have access to land is a more protected women, more independent and less dependent form their husband or marriage. Moreover it has been empirically proved to have a great effect in the household productivity. The misconception that women are less productive than men in managing resources is completely out of what happens in real life.²¹

These examples among others, represents the importance f promoting women empowerments in order to achieve a better and more developed society and an economic, demographic and ethic level. The United Nations has ratified the need of reaching empowerment as prerequisites in order to reach all the other MDG.

Once the general framework for women's empowerment has been describes, the next step is to focus on India the country of interest of this paper.

3. INDIA'S SPECIFIC SITUATION

To analyze women's situation in India is important to first describe the environment in which they have to live. With a 1.2bn population, India belongs to the group of lower income countries with a huge growth potential. Characterized by a great interregional diversity regarding economic conditions and demography, India has been in the last decades one of the countries that has grown more in the world.

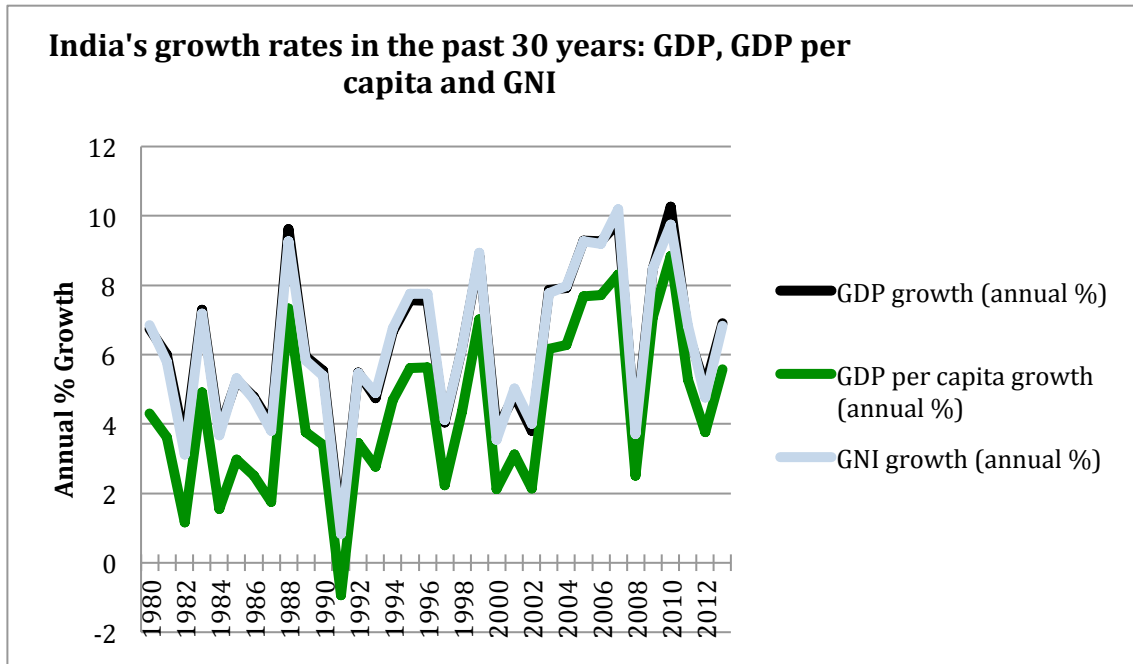
3.1 General economic variables

Looking at the historical growth rates would lead to a better understanding of India's path in the last 30 years. The GDP growth rate for the last 30 years has not reached negatives values. The average growth for the period accounts for 6,24%. If we decompose this figure to focus on the average growth of each period the biggest growth accounts for the most recent decade in which the growth was 7,2% in average while for the 2 first decades it was 5,6 and 5,7 % respectively. In 2010, the GDP growth reached it highest value: 10,2%. As it can be see in the graph, the trend of the GNI (sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net

²¹ (Deere and others 2004)(Katz and Chamorro, 2003)

receipts of primary income) has follow pretty much the same pattern of the GDP growth. The GDP per capita growth rates have been more faint reaching even a negative growth in 1991 with $-0,93\%$ rate. The average growth rate for the period for the 3 decades is $4,37\%$, which is below the GDP growth. Overall the trend has been positive for the 3 variables.

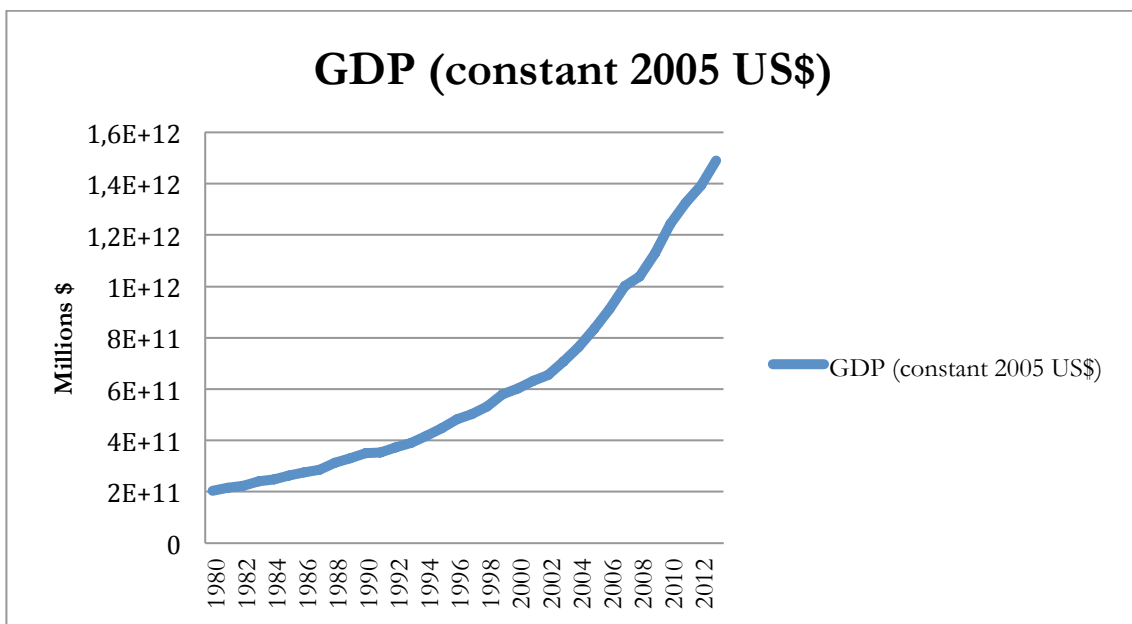
Figure 1: India's growth rates: GDP, GDP per capita and GNI. (1980-2012)



Source: World Bank DATABASE

<http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators>

Figure 2: GDP evolution (1980-2012)



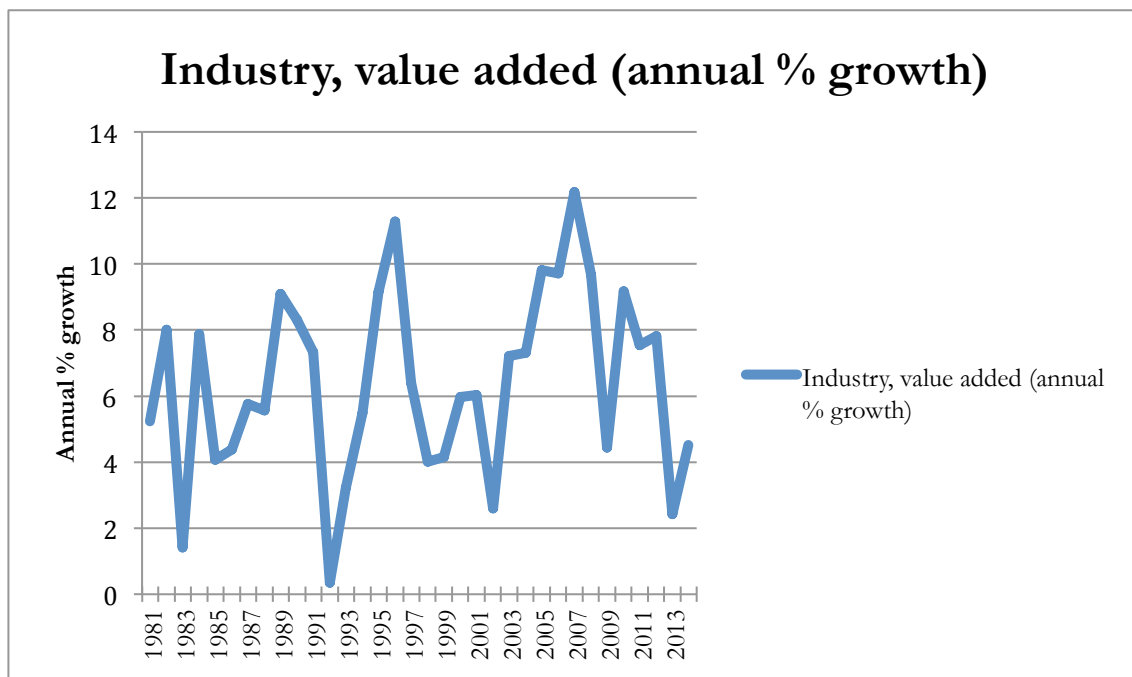
Source: World Bank DATABASE

<http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators>

As figure 2 reflects, the sum of the gross value added by all resident producers in the Indian economy has had a clearly upward trend that has intensified in the last decade. Starting at 203.969.544.371 the overall value has reached 1.489.775.951.438 \$.

Oppositely the trend of the growth of industrial value added based on constant local currency has been much more volatile (Figure 3). It can be seen in this variable the downward pike that occurred in 1991. The average growth rate for the industrial value added account for this 30-year period 6,4%, 2 percentage points above the average growth of the GDP. In the last years starting in 2009 it can be observed a downward trend that recovers in the last year of this analysis.

Figure 3: Annual growth trend of the industry value added (1981-2013)



Source: World Bank DATABASE

<http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators>

3.2 Human development indicators

It is important to keep in mind the heterogeneity of a country as big as India. The situation of development is not the same among regions. While some regions characteristics, both in the economic and the demographic area, resemble more to any European developed countries, others still in the path to development and can be considered their world regions. In order to have a more clear vision of this heterogeneity, it is depicted in the chart

below some of the variables that are taken into account when talking about development. One of the most developed regions Kerala (south west) is compared with two of the least developed ones, Odisha (east) and Madya Pradesh in central India.

The first variable analyzed is the life expectancy that in Kerala is 74,2 years while for Odisha and Madya Pradesh. For the same country a regional difference of the life expectancy rate of almost 12 years perfectly reflects the delays on development that some regions are suffering. For the mortality rates, the differences are not so remarkable as for Kerala the rate is 2,6 and for Odisha is lower 2,2. The fertility rate in Kerala of 1,8 is much lower than for Madya Pradesh 3,1, approaching more to developed countries.

The level of education is another variable that has to be taken into account when analyzing the development of a region. For Kerala it accounts for the 93,91 % while for Odisha and Madya Pradesh is far behind: 70,6 and 72,9 % respectively reflecting the great interregional differences that affect India. This regional heterogeneity makes it compulsory to implement different policies to the different states, which can be a problem due to the administrative shortages of the Indian Government.

Table 1: Comparison in development variables among the most and least development states in India.

		Life expectancy	Child Mortality rate ²²	Fertility rate	Schooling rate
Most developed	Kerala	74,2	2,6	1,8	93,91
Least developed	Odisha	63	2,2	2,2	70,6
	Madya Pradesh	62,4	3,1	3,1	72,9

Source: Open government data (OGP) Platform of India
Census of India,2011

According to the World Bank the Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within and economy deviates from a perfectly equal distribution. The closer the Gini Index from zero, the more equal is the society. In the case of India the GINI index figure is 0,336. This number alone cannot tell a lot but a comparison with the historical values.

As we can see in the table 2, since 1981 there has been a trend of convergence in India's Human Development Index *-measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions²³-* and the world one. The difference has decreased from a 39,28% to a 19,11%. The speed of growth has been greater in India as the increase in the HDI, with an overall growth for the period of 61,76%. The world's path has been slower with a growth of "only" 21,42%. This last fact shows the potential of India and why it is part of the countries with the biggest potential in terms of growth and development.

²² Child mortality rate (0-4 years): Expressed as a rate per 100 children surviving to 12 month of age.

²³ Definition taken out the website of the United nations development program
<http://hdr.undp.org/en/content/human-development-index-hdi>

Table 2: Human development Index- India and world comparison.(1981-2011)

Year	HDI-India	HDI-World	Difference
1981	0,34	0,56	39,28%
1991	0,41	0,59	30,50%
2001	0,46	0,63	26,98%
2011	0,55	0,68	19,11%

3.3 Cultural constraints, gender gap and demographic variables of India

Once the general set of the Indian environment is time to go back to the subject of interest of this paper: Women. Even if the Indian constitution recognizes equal rights for men and women, the patriarchal traditions and customs are still in place being the main cause of women's discrimination nowadays. Even though women are better off now than 20 years ago (as it will be shown in the next section), there is a long road ahead to reach gender equality and women's empowerment.

3.3.1 Culture and religion.

The **dowry tradition**- greatest exponent reflecting the culture of India's regarding women- in which the bride's family has to give the groom's family money or gifts, was made illegal in India in 1961 in practice it is present in most marriages and is one of the main causes of discrimination against women. The dowry is seen as an instrument to climb the social ladder and accumulate wealth and when calculates only takes into account the man education and future earning potential. The bride's education and earning potential is only important regarding her role as a wife and mother. It is important to highlight that dowries can exceed the annual salary of an Indian family meaning an economic catastrophe for poor families with more than one daughter wide spreading the preference of son instead of daughters are they are less costly to raised.

The treatment of men and women in a society is the reflection of their beliefs and cultures like in the case of India. Society general perception goes with the idea of men being an asset while women are a liability. The man is consider able to earn money and provide support to aging parents, carry on the family line and plays an important role in death rituals of the Hindu religion. On the other hand women are generally considered as not capable of having an earning power and therefore economically and emotionally dependent on men and a loos of money because of the dowry tradition.

As it has been said before, India's heterogeneity is present in every area of society including society and the Muslim influences in India has also undermine the women's status in India.

To have a clear vision of the actual situation in India and the progress that has been made in the last *two decades* we will look at the literacy rates of men and women, the survival rates, the death rates of children below 5, the presence of women in political positions and the wage gap comparing the present and the past values.

3.3.2 Literacy rates and gender gap in India

The overall change throughout the 1981-2011 is much more relevant for the female literacy rates than for the male ones. While the growth for men is 45,56% for women it goes up to 119,79% reducing the gender gap from 26,6 to 16,70. But this enormous improvement can not blind the fact that only 65,5% of women are literate while the world average is at 79,7% and the level in developed countries is nearly 100%. This numbers reflected the long way to go that is ahead.

Table 3: Literacy rates and gender gap in India.

Year	Male	Female	Gender gap
1981	56,4	29,8	26,6
1991	64,1	39,3	24,8
2001	73,3	53,7	21,6
2011	82,1	65,5	16,70

Source: Open government data (OGP) Platform of India

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3.3.3 Infant mortality rate sex comparison

According to the World Bank the infant mortality rate is the number of infants dying before reaching tone year of age, per 1000 live births in a given year.

Table 4: Infant mortality rate by sex in India (1981-2011)

Year	Male	Female
1981	113	115
1991	81	80
2001	64	68
2011	43	46

Source: Open government data (OGP) Platform of India

As we can see in the table 4, the decrease in infant mortality rate in these 30 years is considerable with a reduction of 61,94% for men and 60% for women.

Regarding the **demographic transition** from high birth and death rates of a preindustrial economy to low birth and death rates of an industrial economic system. Last Census of India carried out in 2011 shows a decline in both birth and death rates. Total fertility rates dropped from 2.9 in 2001 to 2,62 in 2011 while the death rates went down from 8,74 to 7,48 in the same period. Another remarkable trend is that the gender balance has deteriorated in recent times, especially among the youth's. For example, the number of girls per 1000 boys for the age group from 5 to 9 years has fell from 920 to 889 reflecting a growing widespread gender imbalance.

3.3.4 *Women's political participation*

Women's political participation in India nowadays can be a key instrument in order to improve the position of women as a whole. Unluckily, according to an analysis of the Election Commission of India, in the last election that took place in 2014, from the 543 seats at the *Lok Sabha*, Indian parliament, only 59 are occupied by women that represents only a 10,86 % while the average of the world is set at 21%.

3.4 Gender oriented policies in India

After the independence from the British Empire, growth and development in India were addressed through centralized and integrated national economic programs: The five years plans (FYP). Such plans, had already been implemented by the Soviet Union and the rational is to set up a centralized planning system in order to reach some objectives that would lead to an estimated growth. The institution responsible for implementing this plans is the Planning commission set up in 1950 with the original functions of analyzing the existing resources of the country and the way to increase them in an effective way in order to meet the country's growth needs, identifying the factors that could delay the development and controlling the process. As the plans have evolved to be more and indicative guidance, the planning commission functions have also evolved through an integrative role of building strategic visions for the long-term future.

The first FYP was based in the Harrod-Domar Model which states that economic growth of a nation depends on the net national savings and the national capital-output ratio (amount of capital needed to produce one unit of output). The rational is as follows: A higher level of savings would enable greater investment that would lead to large capital stock. The increase in capital stock would increase the output level and therefore the income causing economic and development growth. At this time the main issues to addressed were the food shortages and the inflation. The main focus was put on agriculture to reach price stability. The objectives were reached and the target growth was even surpassed.

The analysis of this programs it's interesting for this paper because they set the objectives and the policies to address the country growth. The linkage between women and economic growth and welfare has already been proved, so the importance given in this programs to reach equality and sustainable and fair growth will determine the policies implemented to improve the social status of women in India. But, do this plan focus enough on women's empowerment? How the awareness of the importance of this subject has evolved since the first FYP to the last one? It's important to highlight that the global interest on the implications and economic consequences of implementing economic policies that foster

gender gap reduction have been at the core of the policy debate since the 90's and this increase of awareness is also seen in the evolution of the five-year-plans.

For simplicity, along this analysis only the main measures and policies regarding women empowerment will be described. All the data and information included comes from the government of India, more specifically from the planning Commission that has been providing reports for each FYP and a research article focus on the presence of women in these FYP'S.²⁴

During the earlier plans women's were considered as par of disadvantage groups the same way as disabled, aged or destitute ones. The welfare approach in which women's are just passive recipients of aid instead of active agents of change was follow in order to address their situation. This perception dominated until the 70's but the publication of the Towards Equality Report in 1974²⁵, meant a turning point and from the 6th FYP on the conception of the role of women in development changed considerably.

The 6th year plan that took place from 1980 to 1985 included for the first time a "women and development" chapter and strategies in order to improve the access of women to education, employment, healthcare and economic independence were implemented. In the 7th plan, the most important measure regarding women status was the creation of the department of Women and Child Development as part of the Ministry of Human Resources Development that would be in charge of implementing and controlling the process of all the policies addressing sex inequality and women's empowerment. The Beijing conference held in 1995 made a difference in the 9th year plan (1997-2002) in which the main progress was the Women's Component Plan that state that the Central and the State governments had to make sure that not less than 30 per cent of the funds/benefits are earmarked for women under the various schemes of the 'women-related' ministries/departments". The WCP was the precursor of the gender budgeting implemented during the 10th FYP. Gender budgeting delved into gender responsive budgets and public policies. Is a way of formulating the budget ensuring that policies and allocations are going to be gender responsible.²⁶

A Committee of feminist economist was set up during the eleventh plan (2007-2012) to ensure the continuity of the process of public resources allocation and public policies was on the right track.

Nowadays the FYP that is guiding the Indian development is the 12th one and it will last until 2017. Under the title *Faster, more inclusive and sustainable growth*, the social aspect regarding women's agency guiding India today are the following ones:

The 12th FYP focus on "structural transformation—not only in the women and child related direct policy and program interventions, but also more generally in the policies and programs of the many sectors that impact upon women and children especially those from the weaker sections or whose individual circumstances make them the most vulnerable."²⁷

Some of the measures taken were the followings:

²⁴Women in twelfth five year plan in India: An Analysis Satarupa Pal Dept. of Bengali
<http://planningcommission.gov.in/plans/planrel/index.php?state=planbody.htm>

²⁵ Report of the Committee on the status of women in India published by the department of social wellfare part of the Minstry of Education&Social wellfare. Government of India

²⁶ Gender Budgeting - Ministry of Women and Child Development wcd.nic.in/genbud.htm

²⁷ Twelfth Five Year Plan (2012–2017) Social Sectors Volume III

Table 5: Gender oriented policies in the 12th FYP

Area	Measures
Legal	<ul style="list-style-type: none"> • Several legislation would be reinforced: Minimum wages, equal remuneration, maternity benefits act. • Enforcement through controls and audits.
Access to land	<ul style="list-style-type: none"> • Access to land will be ease through the implementation of several policies such as promoting land titles in governmental transfers, support through credits for poor women when purchasing or leasing from the market joint land titles in all government land transfers, credit support to poor women to purchase or lease land from the market, legal awareness and support and strengthen the inheritance shares. Women group purchase would be promoted through 50% loan and 50% grant.
Education	<ul style="list-style-type: none"> • Skill development would be used as a way to avoid stereotypes teaching girls not only the “traditional” skill but also the emerging ones. Programs to skilled women in several Jobs such as plumbers, electronic technicians....
Social protection and health	<ul style="list-style-type: none"> • Special focus on single women: quota of jobs in the public and private sector reserved for them. • Improvement of medical insurance, post-retirement pensions. • Committees ageist sexual harassments in school and workplace
Rural Areas	<ul style="list-style-type: none"> • Creation of the Mahila Kisan Jahakatikaran Paryojana a subcomponent of rural health mission that will addressed the specific attention needed to empower women in the rural areas. Improvement of women’s skill in this area through educational programs in order to instruct them in new technologies to improve productivity.
Public Sector	<ul style="list-style-type: none"> • Review of the format ant implementation of the gender budgeting in order to make it more gender purposive. Formal prebudget consultations to women’s group would be needed to do by the Ministry of Finance

4. EMPIRICAL ANALYSIS

In 1995 Mamta Murthi, Anne-Catherine Guio and Jean Drèze²⁸ carried out a district level analysis in India which examined the factors that influences total fertility, child mortality and gender bias in child mortality in India: *Mortality, Fertility, and Gender Bias in India: A District-Level Analysis*. The analysis took into account variables that are closely related with women's empowerment and agency such as the literacy rates or their presence in the labor market and also variables referring the development of the areas such as poverty or urbanization.

This analysis has been taken as reference and use as an inspiration in order to develop this section of the paper even though the data and the analysis that will be carried out is developed in a much shallow way.

The purpose is to analyze with the most recent data as possible the main determinants in TFR that according to the bibliography revised it is one of the variables that reflect better women's empowerment. With the objective of determine the factors that nowadays have the greatest influence on it. On the other hand gender related variables would be used in order to determine its influence in poverty rate with the objective of identifying which area needs to have a greatest focus in policy implication in order to reduce poverty.

4.1 Data and variables

In the original analysis the data is collected from a sample of 296 districts located in 14 of the most populated states in India at the time. After an exhaustive analysis of the different Indian's databases, the data²⁹ has been obtained directly for the states (Annex A). 20 states out of the 28 composing the Federal Union of India are included which represents 94,68% of the total population, making the data very representative.

The variables taken into account are among the variables that according to literature and what has been describe along this paper can have an influence in women's empowerment.

- Total fertility rate: TFR

Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing and bear children in accordance with current age-specific fertility rates.

- Under 5 mortality rate: U5MR

Under five mortality rate is the probability per 1000 that a newborn child will die before reaching the age of five, if subject to age-specific mortality rates of the specified year.

²⁸ Mamta Murthi, Indian economists is the World Bank's country director for central Europe and the Baltic countries and has focus her economic career inn poverty reduction and development.

Anne-Catherine Guio, an expert in socio economic research that nowadays works for Center of European policy studies.

Jean Drèze is an Indian origin economist, expert on poverty reduction in India and close collaborator with Amartya Sen. (Already mentioned along this paper)

²⁹ Data collected from the Census of India 2011 or through the platform Open Government Data India.

- FD

Female disadvantage refers to the bias that can happen in child survival defined as the excess of female deaths over male deaths by age 5.

$$FD = 100 \left(\frac{Q5f - Q5m}{Q5f} \right)$$

- Female literacy/Male literacy rate

Percentage of female/males age 15 and above that can, with understanding, read and write a short, simple statement on their everyday life. It is calculated by dividing the number of female/male literates aged 15 years and over by the corresponding age group population and multiplying the result by 100.

- Female labor force participation

Participation rate is the proportion of the female population ages 15 and older that is economically active. It represents the number of women present in the labor market divided by the total labor force, multiplied by 100.

- Urbanization

Represents the percentage of population that lives under urban areas per state.

- Poverty

There are several indexes that can help t measures the rate of poverty in a country or state. In the original analysis taken as reference the one used is the Sen index³⁰, which accounts for the number of poor, the depth of their poverty and the distribution of poverty within the group. Even though it is a more complete index, it lacks of intuitive appeal³¹ and as the purpose of this analysis is simplicity the headcount ratio would be used. This indicator is simply the proportion of people living below the poverty line from the total population.

- Share of health to total household expenditure

The original analysis in order to measure the access to healthcare services was the proportion of villages with access to medical facilities. But in this case, the proportion of health to total household expenditure will be used as it can measure the health care expenditure but also the higher is the proportion, the higher is the income of the family as it has more resources to be allocated.

- Percentage of the population

The ratio of population of each Indian state in the total population of India

³⁰ Index developed by Amartya Sen in 1976.

³¹ Deaton 1997

4.2 Regression model

The two dependent variables that are going to be used in order to develop the regression model are the total fertility rate and the poverty rate. For both variables the analysis carried out can be divided in 2 parts:

1. Firstly an analysis of the dependent variables in order to analyze the possible multicollinearity of the dependent variables using the correlation matrix.
2. Then, the hypothesis testing for the coefficient by accepting or rejecting the null hypothesis that states that the betas for the model are zero, which means that the variables do not have an influence in the total fertility rate or poverty rate (Independent variables). (ANOVA and F-statistic) Once it is determined if some of the variables have an effect, it will be need to account for such effect to do so an individual analysis of the coefficient to know the sign and the degree of influence of the explanatory variables in the dependent variable and if this influence is statistically significance. (Coefficients and p-values)

Along the analysis the theoretical references as support has been extracted from the book Six Sigma Statistics with Excel and Minitab published by Issa Bass (2007)

4.2.1 Total Fertility Rate as the dependent variable

In this model the independent variables whose effect is going to be consider in the total fertility rate are:

- Female literacy rate
- Male literacy rate
- Female labor force participation
- Urbanization rate
- Poverty rate
- % Of the total population represented by the state

Table 6: Correlation Matrix for fertility

	Female lit. Rate	Male lit. Rate	Female labor force	Urb.	Poverty	%of the total pop. Rep.
Female lit. rate	1					
Male lit. rate	0,900	1				
Female labor force	0,194	0,320	1			
Urb.	0,580	0,560	-0,123	1		
Poverty	-0,570	-0,534	-0,308	-0,488	1	
% of the total pop. Rep.	-0,261	-0,239	-0,236	-0,139	0,287	1

As it can be seen in the table that includes the correlation value existent among the independent variables include in the model, the only value that give sign of multicollinearity. Multicollinearity refers to a situation where at least two independent factors are highly correlated and an increase in one of them can lead to an increase or decrease in the other one. This can make inaccurate the interpretation of the coefficient of determination. In this model, the only two variables that are positively highly correlated are female and male literacy rates. For all the other values the correlation is not remarkable.

1. Hypothesis testing for the coefficients.

As stated before, the null hypothesis of the independent variables not having an effect on the TFR will be analyze in this part. The purpose of this analysis is to reject it to prove the dependent variables have an effect on it. On the ANOVA table display below, the calculated F (8,7588) is much higher than the critical value F (0,00065). Therefore, the null hypothesis is rejected and the conclusion is that at least one of the independent variables is correlated to the total fertility rate.

Table 7: Anova results for fertility

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	7	5,954568687	0,85065267	8,758844832	0,000657756
Residual	12	1,165431313	0,097119276		
Total	19	7,12			

To analyze the variables whose coefficients are significant and have an influence on the total fertility rate, the significance level will be fixed at an interval of 95% confidence, rejecting the null hypothesis if the variable's p-value is lower 0,05. In this case the meaning will be that the explanatory variables have an effect in the variable of interest in this case the fertility rate.

According to the coefficient of determination R^2 , (0,836315.) In this regression model, 83,63% of the variability of the TFR is explained by the independent variables. This fact makes the model an adequate one to draw conclusions from.

Looking at the results on the table below, it can be seen that they coincide with the intuitions and other studies named along this paper, the variable that have the largest effect in the total fertility rate is the female literacy. Without getting into the numerical details, the negative slope of the female literacy coefficient represents the reducing effect that this variable on the total fertility rate with statistical significance.

The female labor force participation also has a negative and statistically significant effect on the total fertility rate.

Table 8 coefficient results for fertility

	<i>Coefficients</i>	<i>Standard error</i>	<i>T-stat</i>	<i>P-value</i>
Intercept	0,578711913	1,685023914	0,343444332	0,737206458
Female literacy	-5,129991604	1,902701119	-2,696162605	0,019446923
Male literacy	6,55441617	3,267678748	2,005832481	0,067955822
Female labor force	-1,609046445	0,707444728	-2,274448279	0,042098433
Urbanization	-0,649689106	0,528899896	-1,228378209	0,242852488
Poverty	1,458662062	0,864946293	1,68641923	0,117516602
Share of health expenditure	-0,138810319	0,081733914	-1,698319733	0,115203224
% Of population	4,344537976	2,141922155	2,028336074	0,065319545

A surprising result comes from the male literacy rate that according to the analysis seems to have a positive and statistically significant effect on total fertility rate. An increase in the Male literacy rate will also increase the total fertility rate. This can be explained by the fact that if male literacy rate increases while female literacy stays constant, men are going to be seen as more prepared than women to work outside the house becoming the breadwinner and therefore having a greater power of decision, in family planning, inside the household. The women would just accept the decisions of the men, as it would see herself as a childbearing object with no other option.

4.2.2 Poverty rate as the dependent variable

For the poverty rate, the independent variables to be consider are the following ones:

- Total fertility rate
- Under 5mortality rate
- Female disadvantage

1. Correlation Matrix

Table 9 Results for poverty rate

	<i>TFR</i>	<i>U5MR</i>	<i>FD</i>
<i>TFR</i>	1		
<i>U5MR</i>	0,726212934	1	
<i>FD</i>	0,021700153	0,281298355	1

According to the correlation matrix, the two variables in which multicollinearity could be found is between the total fertility rate and the U5MR even if a 0,70 correlation is high, is lower than the one we found in the total fertility analysis.

2. Hypothesis testing

According to the result obtain the ANOVA table depict below, we can reject the null hypothesis of the independent variables, TFR, U5MR and FD, not having and effect on the poverty rate. The calculated F (9,45) is much higher that the critical value for F (0,0007) so it can be concluded that at last one of the independent variables is gong to be correlated with the poverty rate.

Table 10 ANOVA results for poverty rate

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	0,150983515	0,050327838	9,457327862	0,000786282
Residual	16	0,08514513	0,005321571		
Total	19	0,236128646			

The explanatory variables included in the model are the ones that have been the independent variables in the other parts of the analysis TFR, the U5MR and FD. Even though this variables explains only 63,94% of the variability of the poverty rate and including more variables would make the model a much more accurate one, the purpose is to identify the women-related variable which influence the most the poverty rate.

Table 11 Coefficient results for poverty rate

	<i>Coefficient</i>	<i>Standard error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	-0,039572666	0,0704093	-0,562037483	0,58187933
tfr	0,054678089	0,041383824	1,321243038	0,069344584
u5mr	3,455667786	1,470529212	2,349948412	0,031938995
fd	-0,006652726	0,003417411	-1,946715035	0,205004346

The total fertility rate and infant mortality variables have a positive and statistically significant effect on the poverty rate. Which means that an increase in the variables would lead to consequent effect on the poverty rate. As the poverty rate is the proportion of

people that are leaving below the poverty line, the objective would be to focus on policies that if not addressed increase the poverty rate the most. The female disadvantage seems not to be statistically significant in this model.

In this concrete case, if the under 5-mortality rate increases by 1 percentage point the poverty rate reach and increase of almost 3 and half percentage point. For the total fertility rate and increase of its value would also lead to an increase in the poverty rate, but in this case the effect would be less significant.

According to the results of this analysis policy implementation should put a special focus on reducing child mortality rate by improving the literacy of women to teach them how to correctly address the health issue that their babies can have, improving the access to medical facilities or ensuring a water infrastructure that would improve the living conditions of the communities. Conditional cash transfers on medical revisions would mean an incentive for families to keep track on their baby's health. Also as it has been said along the analysis women are tend to be the ones taking the more favoring decisions for heath kids so empowering their power of decision the ways that has already been described would also help t reduce poverty and there fore promote development. Even if the effect of TFR on poverty seems to be smaller, no reduction on this rate can be negligible and the government should also implement policies for its reduction ensuring always the replacement level to avoid what has been happening lately in the developed countries.

5.POLICY IMPLICATIONS IN GENDER EQUALITY. SPECIAL FOCUS ON CRISIS PERIODS

As part of the global interrelated economic network that characterized the world nowadays, India couldn't isolate itself from the financial crisis that hit the world in 2008. As women's equality is deeply influenced by the policy implementation of governments and these policies depend on the economical environment of the country, an analysis of how the crisis has affect women in India is of high interest in order to identify the constraints and the opportunities in policy making in order to reduce the gender gap. For the analysis of the general trends of the crisis in India the reference documents used would be an analysis carried out by the Columbia global center, South Asia of the University of Columbia and another of made by Asian Development Bank Institute.

The initial argument that a developing country like India could remain unaffected by the crisis was proved wrong when its economy was hit by the crisis through the withdrawal of capital having a negative effect in the balance of payments and leading the country to one of the highest current account deficits of history. The measures to addressed these issues were three stimulus packages that were looking to boost demand through a tax relief and an increase in public spending in order to create employment. Also the Reserve Bank of India took measures to address the liquidity and lack of capital inflow issues.³²

The dynamics that can affect women's empowerment and independence when an economic crisis arrives go in two periods. The first one is the hit of the economic crisis itself and second, the austerity measures implemented by the government.

Developing countries have a huge dependence on first world countries as the second ones are the source of remittances, mainly in the form of cash transfers, and because the export oriented economy depends on the demand of these countries. In India the decrease in capital inflows plus the already existing high inflation, caused mainly because of the food and fuel prices were the two cornerstones of the crisis.

Even though the absence of more complete sex-disaggregated data make it more difficult to assess the real and complete impact of economic crisis on women and girls there are some rationales and plausible intuitions regarding the impact. As it has been previously mentioned, the decreased household income makes families face higher constraints in the resource allocation and women are the ones supporting the burden of these decisions. (They are the first ones that see a decrease in the food quality or quantity or are forced to drop out school).

The changes in the trade dynamics and the decrease in demand by developed countries affect deeply the export oriented industry that is made up 60-80% of women workers in low and middle income countries.³³ The increasing unemployment in this sector, add to the need of extra sources of income make women more vulnerable to accept any kind of job and probability of exploitation increases. The consequences are a shift from the formal to the informal sector in which the number of hours is higher, the wages are smaller and the social protection is nearly nonexistent. Another way of getting extra income for women is to resort to sex labor that can lead to an increase in the VIH rates.

The worldwide way of facing the crisis has been in general the austerity that penalizes health and social expenditure. Even in India the cuts in health and social expenditure make women to be the ones burdened by these cuts more than men as they are more willing to be the ones in charge of the caring responsibilities of kids and the elderly. Even though the banking sector in India was not as affected as other countries, the problems of liquidity were in place and the cuts in credit occur affecting more women than men, as they are seen as a riskier lending.

The combination of the unemployment or precarious employment conditions plus the burden of housework and limited access to credit increase the dependence of women on men in times of crisis. Enlarging the gender gap and harming women's empowerment.

Focusing on India, the three packages mentioned above response was a countercyclical policy that focus on government spending in order to stimulate the economy. But sometimes, growth policies can harm gender equality instead of relieving it. This can happen in the case in which policies are not gender oriented and focus only in sectors which employ mainly men and don't put the emphasis needed in social protection to provide a welfare net that benefits women. For instance the social expenditure of India in 2010, was only 1% of the GDP a really low percentage for a developing country in which poverty and equality are still very present affecting the least privileged inhabitants, especially women. But what kind of action would be the more adequate one to face an economic crisis while keeping gender equality and women empowerment as a priority?

According to the United Nations and the United States Agency for International Development, the availability of accurate data needs to be addressed to improve the control and monitoring and to assess the effect of the crisis and of the policies implemented.

³³ The economic crisis: the impact on women. Washington, DC, United States Agency for International Development.

Table 11

AREA		
Safety net program	Health and nutrition	Food subsidies, health insurance programs and cash transfers
	Care	Child-care services and support for the elderly
	Education	Conditional cash transfers to ensure girls remain in school
Labor market		Strategies focused on improving women skills that at the same time meet the market demand.
Financial access	Bank policies	Impose a certain quota in credits that need to be given to women
AREA		
Safety net program	Health and nutrition	Food subsidies, health insurance programs and cash transfers
	Care	Child-care services and support for the elderly
	Education	Conditional cash transfers to ensure girls remain in school
Labor market		Strategies focused on improving women skills that at the same time meet the market demand.
Financial access	Bank policies	Impose a certain quota in credits that need to be given to women

The first step, according to this report, would be to analyze the particular impact of the crisis in women and how it has widened the existing gender inequalities in the immediate term but also in a longer term. A key point is to deeply analyze and implement the kind of policy that encourage both genders and not to implement policies that only focus on growth and can perpetuate the inequalities. Some of the policies that would reduce the gender gap and increase women empowerment while addressing the main issues that women need to face when an economic crisis arises can be seen in the following chart

An additional comment on these measures examples should be made to reach a better understanding. The effects of these policies are going to depend on the initial inequality cause, what was the reason why women or girls were in a disadvantage position regarding education, labor force, financial access. Etc. In most of the developing countries in which gender inequality is still really high, the effect of the policies displayed in the chart above are going to be effective if the social and cultural values enable it. For example a policy that looks for promoting girl's schooling will only foster development through an increase in women's labor force if families believe that girls need and deserve the same level of education that boys. Even if the cash transfer would definitely improve female schooling, the effect won't be as strong and complete as it could be if the idea of equality was widespread and interiorized by the society.³⁴

Cultural values and social norms are the base of any country and society in the world and they determine all the other factors that characterized a society including the economic ones. This is why a special attention should be put in promoting social and cultural transformation so that the gender-oriented policies have a complete effect in economic

³⁴ The technical information up to this part of the section has been extract from :
 United nations: Impact of the global economic crisis on women, girls and gender equality, August 2012.
 USAIDS: The Economic Crisis: The Impact on Women, 2009

growth and the main tool to do so is through education. Implementing programs in which teaching boys and girls to treat each other in a similar way, providing them the same values will result in a generational change is the main focus, will result in a generational change that would be beneficial to the overall society and economic growth. Another channel through which changes in the social view of women can happen is through the political presence of women. Examples of how women can executed public responsibility positions can trigger positive effects on girls as role models and on the other hand make men aware of the capabilities of women. But again is inevitable to come back to education because education and literacy are key determinant in women accessing political power. The international community institutions and governments of developed countries can have a determinant effect on these changes. But the recurrent mistakes happening are related to the fact that gender unequal countries see the effort of this institutions and countries to reach equality as an attack to the national culture and a try to expand and impose the "north" cultures. Policies and programs need to understand the idiosyncrasies of each culture and not representing a threat to its elimination, respecting cultures and at making progresses and changes in order to improve women's conditions should be the two mains pillars of the global gender oriented policies.

6. CONCLUSIONS

Along this paper it has been proved that asking for gender equality and the total abolition of the gender gaps in many aspect of society is not only a matter of fairness or social justice but also something that can be beneficial for the overall society through economic growth, efficiency or cost reductions. The bibliography revised and the statistical analysis carried out support this theory that was the main issue of this project.

It is clear that as economic growth arises the inequalities in a society decreases but gender equality is not a natural consequence of an increase in the level of income. This can be proved by the gender inequalities that remain in developed countries. Therefore the inequalities that harmed women's every day are not only linked to economic level of the country but also to the cultural an societal norms that are harder to change as they are enrooted in people's mind as it has been seen in the case of India.

By implementing policies that promote women's to be at the same level as men in economic countries the whole society can have a benefit. Positive effects in total fertility rates, children mortality rates, children health status or GDP has been shown along this work proving that improving women's conditions in the society will lead to the convergence between north and South.

The role of governments in changing the situation is the cornerstone of the subject. Changing the legal framework that allows women to have a full access to education, work, credit or land will eventually lead to a cultural change in which women and men will be at the same level.

The international community and national governments of developing countries already know what need to be done to address this issue. In order to reach the two MDG regarding women the process needs to be speed up to achieve real objectives.

It is also need to widespread the important role of women's in economic development to the overall society and not leave the subject only present in the discussion of the economic community or international organizations.

There's a long road ahead to reach the full empowerment of women and gender equality but having as support all the economic analysis that proved the positive effect of women's empowerment in development, now it is time to take real action to reach real objectives that will lead to an improve in the overall society welfare of developing countries.

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