# A Critical Analysis of Global Inequality

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#### Abstract-

Global inequality refers to Income Inequality among the people&increment is a burning issue which attracts the researchers. Tackling the problem of inequality becomes challenge for countries. However, problem is unavoidable but can be reduced to maintain political, economic& social stability. Rising Avg. inequality with that gaps between standard of living between poor & rich people is one of the reasons for it. This research paper will provide study of Top 20 GDP share countries in terms of Global inequality. Growth analysis & rank based analysis classify countries according to relevant economic indicators. Inequality in economy impacts HDI growth negatively.

## **Keywords-Inequality; Human Development Index**

## Introduction -

Usually people think about the inequality in terms of distribution of wealth with them & other citizens which are nearby. However due to the globalization the whole world integrated & the idea of inequality goes beyond that. There are lot of movements withinproduction factors like l&&capital; standard of livingin

developed & developing countries which enforces to think about income distribution. Once the people start thinking from the point of view of the globalization inequality matters.

Global inequality is rising &many countries are taking efforts to reduce it. Some are successful & some are noe able to reduce inequality among population. The rising gaps between rich & poor people makes unequal distribution of wealth. Many economies are building on the backs of poor workers; being they are facing poverty on mass scale. The rising inequality creates impacts as economical catastrophes with social, politicalinstability.

As countries are on the path of growth, there is need to analyze it with poverty. Because growth & poverty are in inversely related factors. However, though the countries are becoming richer only few percentages of population are able to receive the benefits of the same which causes the income inequality.

In 2015, UN agrees on fact that there is a need to adopt Sustainable Development Goals to reduce the inequalities in countries.

## **Objectives** -

- To study concept of global Income inequality.
- To study relationship between GDP & Per capita income growth of the countries.
- To understand relationship between growth of the countries & inequality.

## **Data Analysis-**

In analysis of data on various economic indicators are selected from 2000-2017. The top 20countries according to their avg. GDP growth is taken for consideration. Countries are Australia (AUS), Brazil (BRA), Canada (CAN), China (CHN), France (FRA), Germany (GER), India (IND), Indonesia (IDN), Italy (ITA), Japan (JPN), Korea (KOR), Republic ofMexico (MEX), Netherlands (NLD), Russian Federation (RUS), Saudi Arabia (SAU), Spain (SPA), Switzerland (CHE), Turkey (TUR), United Kingdom (UK), United States (USA). Source is World Bank Data base country wise.

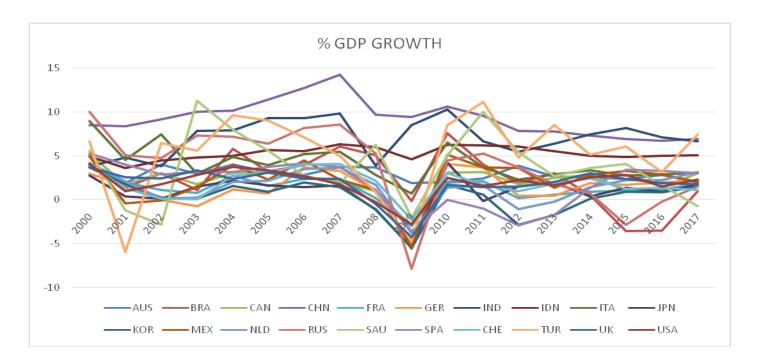


Fig. 1.1

In which developing & developed countries are taken for analysis. In GDP growth, China holds maximum growth with 9.65% in 2008. In 2001, Turkey has negative growth of -5.96%; being sold State-owned industries to balance the budget. As well as Turkey was facing massive unemployment, a lack of medicine, tight credit, slow production to fight inflation & increasing taxes. During Global financial crisis period developed countries depth down with negative growth rate except 5 developing countries.

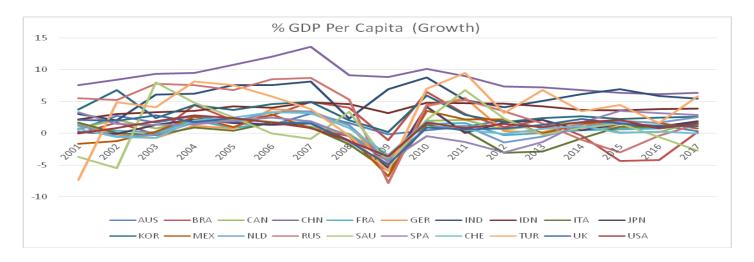


Fig. 1.2

Also, in GDP Per capita, China kept similar trend with highest growing from 2000-2017. After that India has +5% Avg. growth & Russia with Turkey grow at +3%. Saudi Arabia due to negative economic growth with respect of increasing imports in services & Brazil because of commodity prices felt with declining investment levels &devaluation of domestic currency. Higher percentage of countries have growth rate in range of 0 to 5%. But the fluctuations due to difference in population level. Spain were not able to generate job opportunities for youth population & also spent heavily on social security measures impacted negatively in growth from 2009-2013.

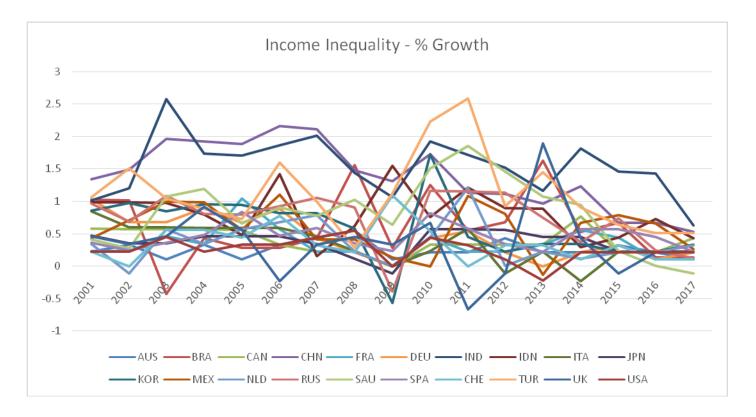


Fig 1.3

During Financial Crisis; highly developed nations had negative GDP growth impacted on risinginequality. & brought inverse relationship between HDI & Inequality growth. Resulting to Income inequality (GINI) & decreasing income generation opportunities. Within years China, India, Turkey on average are highest inequality in nature. But relative HDI rankings are, Turkey at 64 & China is 86; compare to that India is holding 130<sup>th</sup> Rank. It reflects China & Turkey develop themselves with HDI & India's rank is falling down. In 2008 (Korea)&2009 (United Kingdom) decline Income inequality & improved but GDP growth got decline as well.

Impacting factors in developed nations are financial,manufacturing sectors & service sector. With job losses to unequal distribution of Income; made gap on Expenditure pattern, Like Australia, Italy, Japan, Netherlands holds maximum growth in similar range maintaining sustainable development. United states & Euro nations made Quantitative Easing policies with objective to maintain social security measures with reduction of inequality. But there are various criticisms stating that benefits went majorly to richer section.

In terms of HDI, India & Indonesia holds more than 100 where as in GINI, it's Indonesia well distributed economy. Compare to that China & Indonesia holds similar trend as well. With population growth, Income distribution is a major factor. On growth perspective, Switzerland& Turkey is maximum. Netherlands is relatively similar to Avg. growth. Also, Germany & Russia developed their nation & generate employment.

## UNEMPLOYMENT -

An important determinantin Income Inequality; being the source of Income distribution. & unequal distribution arises majorly during the period of High Unemployment in nation. Spain is highly impacted nation with 16% avg. (Un Emp. % Total Labour force) between the period; which got highest point in crisis period with 26.09%. Developed nations are in the range of 4-8% avg., but the minimum avg. rate of 3.91% from India with least HDI rank reflects dependent of nation on social security measures of govt.

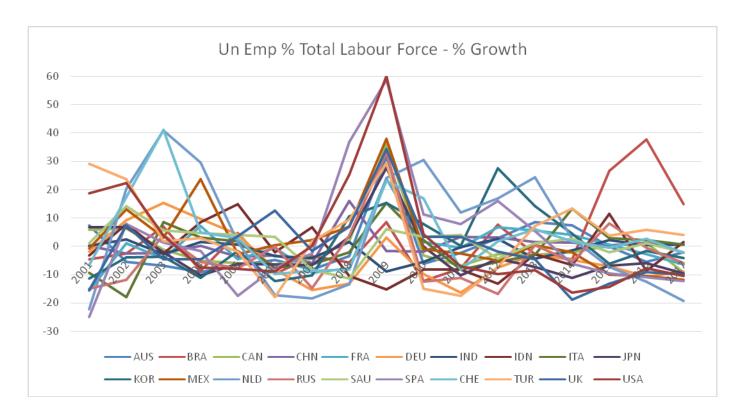


Fig. 1.4

UN Emp. % Youth is a core building economic development issue. In terms of growth rate major proportion of countries are in range from (-10 to 10) %. Within that period in 2003, Switzerland rise exponentially alone with 52% growth & Netherlands with 42% rate; external factors from both countries impacted it. Important impact is on 2009- Financial crisis with negative growth of youth unemployment in Spain 54%, USA 37%, Russia 32%, Canada 32%, Turkey 23%, UK 27%, Mexico 32%, Japan 26%, Australia 30%. Only India 5%, Indonesia 4%, China 1% has positive emp. growth; as these countries are youth oriented & next generation innovators. Youth generation Un emp. reduction reduces Income inequality. China, Germany, Korea, Japan, Mexico, Switzerland are in positive region with avg. growth less than 10%. France, Italy, Spain are facing highest youth Un emp. due to unequal age distribution & old age social security measures after 2009 – crisis. These countries are developing economic relationship with developing countries; as they are market of youth employment generation at lesser price with required skills. All the countries are facing inequality majorly due to this indicator.

## **CORRELATION of GROWTH RATE**

# <u>Un Emp. % Total Labour force & % Youth –</u>

Developed countries Un Emp. Growth are highly correlated with Youth population; because maximum proportion of old age people are still in work. Spain with 0.99 leading the relationship with that UK, USA, Australia, Canada, France, Mexico are following at same rate in range above 0.90. India & Indonesia are in relatively similar rate above 0.74 correlation within the indicators. Korea is having the least relationship with 0.15 being the major investment is going on R&D, Defense sector which requires youth population ideas.

Country Name	AUS	BRA	CAN	CHN	FRA	GER	IND	IDN	ITA	JPN	KOR	MEX	NLD	RUS	SAU	SPA	CHE	TUR	UK	USA
UN Emp % Total	0.96	0.94	0.97	0.98	0.91	0.92	0.74	0.80	0.30	0.92	0.16	0.96	0.95	0.91	0.54	0.99	0.76	0.98	0.92	0.98
& % Youth																				

Table 1.1

# Population Growth & Income Inequality -

Negative relationship of developed countries (Mexico, Netherlands, Japan, Russia, U.K. & Germany), as countries policies are focused on reducing inequality with less population. & targeting to control Inequality. It results to Sustainable Socio-Economic development. There is positive growth of Saudi Arabia & other oil producing countries because of natural resources belong under Richer section of society.

Country Name	AUS	BRA	CAN	CHN	FRA	DEU	IND	IDN	ITA	JPN	KOR	MEX	NLD	RUS	SAU	SPA	СНЕ	TUR	UK	USA
Pop. Gro.	-0.07	-0.02	-0.16	0.25	0.40	-0.22	0.28	0.37	-0.23	-0.03	-0.08	-0.33	-0.31	-0.31	0.80	0.11	-0.16	-0.02	-0.24	0.46
& Inc Inequ.																				

Table 1.2

# GNI Per Capita & Income Inequality –

China is leading with 0.91 correlation between indicators as growth in population & opportunity for generating income is inverse because of limited natural resources. Focusing on technical sector increases the national income & respective job opportunities are not increasing at same rate. Indonesia & Japan has similar correlation rate, with following leaders. U.K. & USA with other developed countries are at least correlation, which indicates growing sectors after crisis period.

Country	AUS	BRA	CAN	CHN	FRA	DEU	IND	IDN	ITA	JPN	KOR	MEX	NLD	RUS	SAU	SPA	CHE	TUR	UK	USA
Name																				
GNI Per	0.70	N.A.	0.64	0.91	0.42	0.44	0.51	0.89	0.53	0.80	0.65	0.39	0.66	0.78	0.67	0.30	0.71	0.35	0.14	0.25
Capita &																				
Inc Inequ.																				

Table 1.3

AVG. GRO	JWTH (	2000-20	<b>(</b> 7)						
COUNTRIES	GDP Per-	Population	UNEMP	UN EMP %	POVERTY	INEQUALITY	HDI	Loss in HDI	Income
	capita	Growth		Youth				due to	Shared by
								Inequality	lowest 109
Australia	1	1	1	1	N.A.	1	1	1	1
Brazil	1	1	1	1	1	1	1	1	1
Canada	1	1	0	0	N.A.	1	1	1	1
China	1	1	1	1	1	1	1	1	1
France	1	1	1	1	N.A.	1	1	1	1
Germany	1	1	0	0	N.A.	1	1	1	1
India	1	1	1	1	1	1	1	1	1
Indonesia	1	1	0	0	1	1	1	1	1
Italy	0	1	1	1	N.A.	1	1	1	1
Japan	1	0	0	0	N.A.	1	1	1	1
Korea, Rep.	1	1	1	1	N.A.	1	1	1	1
Mexico	1	1	1	1	1	1	1	1	1
Netherlands	1	1	1	1	N.A.	1	1	1	1
Russian	1	0	0	0	1	1	1	1	1
Federation									
Saudi Arabia	1	1	1	1	N.A.	1	1	1	N.A.
Spain	1	1	1	1	N.A.	1	1	1	1
Switzerland	1	1	1	1	N.A.	1	1	1	1
Turkey	1	1	1	1	1	1	1	1	1
United Kingdom	1	1	1	1	N.A.	1	1	1	1
United States	1	1	1	1	N.A.	1	1	1	1

Table 1.4

Table shows the relationship between countries via trends in Avg. growth between 2000-2017 of respective indicators. 1 denotes "Positive growth" & 0 denotes "Negative growth". Countries having 1 in UNEMP, UNEMP % Youth, Poverty & Inequality results as a Vicious circle of Inequality. Also having similar trend in Loss of HDI due to Inequality builds up a stronger negative relationship towards Inequality within HDI. Income shared by Lowest 10% gives answer about Income distribution & reduction of Income Inequality in phase of Negative growth rate.

Canada, Germany, Indonesia having "0" in UNEMP & UNEMP % Youth reflects the development in employment sector & reducing impacting factor with increasing income opportunity. Addition to that Population growth has inverse relationship with Inequality in Japan & Russian Federation; which does not make up as vicious circle. Australia, Brazil, China, France, India, Korea, Mexico, Netherland, Saudi Arabia, Spain, Switzerland, Turkey, United States & United Kingdom are keep developing in all in Inequality related indicators. Which can be verified as "1" in Income shared by Lowest 10% in all countries are growing & disparity due to that Income distribution develops as development rate to Inequality. France, Germany, Netherlands, India, Switzerland on an avg. of range of 3% in Income shared by lowest 10%. Indonesia is at least of all with less than 0.17% holding that share.

COUNTRIES	GDP Per-	Population	UNEMP	UN	POVERTY	INEQUALITY	HDI	Loss in HDI	Income
	capita	Growth		EMP %				due to	Shared by
				Youth				Inequality	lowest 10%
Australia	7	2	11	11	N.A.	19	2	16	7
Brazil	8	7	4	4	3	7	17	2	17
Canada	12	8	16	16	N.A.	12	6	15	10
China	1	14	12	12	7	2	18	4	18
France	19	13	8	8	N.A.	17	9	13	4
Germany	9	18	18	18	N.A.	11	3	17	3
India	2	4	14	14	2	1	20	1	1
Indonesia	3	6	17	17	5	5	19	6	19
Italy	20	17	7	7	N.A.	18	11	9	12
Japan	14	19	20	20	N.A.	14	8	11	8
Korea, Rep.	6	15	15	15	N.A.	8	10	7	9
Mexico	18	5	6	6	1	9	15	3	15
Netherlands	13	16	1	1	N.A.	15	5	18	2
Russian Federation	5	20	19	19	4	6	14	12	11
Saudi Arabia	15	1	13	13	N.A.	4	13	N.A.	20
Spain	16	11	2	2	N.A.	10	12	10	13
Switzerland	17	9	3	3	N.A.	16	1	19	5
Turkey	4	3	5	5	6	3	16	5	14
United Kingdom	10	12	10	10	N.A.	13	7	14	6
United States	11	10	9	9	N.A.	20	4	8	16

Table 1.5

On basis of Ranks; a country is being segregated keeping base of 20 countries. Top countries in a specific country is a challenge to them comparison to others. Table answer in detail basis to analyses between indicators.

China leading in GDP Per-capita growth in a positive manner but also need to get balance out with Inequality as a point below to India. Being HDI is also getting losses due to that relationship. India facing largest obstacle in Inequality comparison to other countries. With highest growth rate in Inequality which can also be seen in Income shared by lowest 10% & the bigger problem is HDI losses which needs to get corrected otherwise having GDP Per-capita growth without appropriate Income distribution will not make an Economic Developed nation. Netherlands is getting Negative growth in Youth unemployment due to unavailability Income generation opportunity. It is resulting in Total Unemployment in negative trends. Saudi Arabia commands in Population growth &Switzerland in HDI; but Saudi Arabia facing Inequality at higher growth rate.

CORRELAT	ΓΙΟΝ – AVG. GROWTH	I	
COUNTRIES	CORRELATION of GROWTH b/w	CORRELATION of GROWTH b/w GNI Per-	CORRELATION of GROWTH b/w UN
	Population Growth& Income Inequality	capita& Income Inequality	Emp % Total & % Youth
Australia	0	1	1
Brazil	0	1	1
Canada	0	1	1
China	1	1	1
France	1	1	1
Germany	0	1	1
India	1	1	1
Indonesia	1	1	1
Italy	0	1	1
Japan	0	1	1
Korea, Rep.	0	1	1
Mexico	0	1	1
Netherlands	0	1	1
Russian Federation	0	1	1
Saudi Arabia	1	1	1
Spain	1	1	1
Switzerland	0	1	1
Turkey	0	1	1
United Kingdom	0	1	1
United States	1	1	1

Table 1.6

COUNTRIES	CORRELATION of GROWTH b/w	CORRELATION of GROWTH b/w GNI	CORRELATION of GROWTH b/w UN
	Population Growth& Income Inequality	Per-capita& Income Inequality	Emp % Total & % Youth
Australia	11	7	6
Brazil	9	N.A.	9
Canada	14	10	5
China	6	1	4
France	3	14	14
Germany	15	13	11
India	5	12	17
Indonesia	4	2	15
Italy	16	11	19
Japan	10	4	12
Korea, Rep.	12	3	20
Mexico	20	15	7
Netherlands	19	9	8
Russian Federation	18	5	13
Saudi Arabia	1	8	18
Spain	7	17	1
Switzerland	13	6	16
Turkey	8	16	3
United Kingdom	17	19	10
United States	2	18	2

Table 1.7

Countries having negatively correlated between Avg. Growth of Population Growth & Income Inequality are Australia, Brazil, Canada, Germany, Italy, Japan, Korea, Mexico, Netherlands, Russian Federation, Switzerland &, Turkey, United Kingdom. Which shows as a positive development in reduction of Income distribution. These countries are utilizing available resources to solve the Economic central problems. Which can also see in their HDI growth rate. Rest are having positive trend which needs to be in focus as it results to Socio-Economic problems; which are faced down by future generations. Saudi Arabia is leading with these correlating factors. All the countries are getting positively correlation in GNI Per capita & Income Inequality growth; where leaders are China in GNI Per capita & Spain between Un Emp & Un Emp % Youth after Financial crisis. Also, Spain has lesser percentage of Youth, who are the innovators & employment generation for future generations. Spending more on the Social sectors also reduces the Government investment in Capital formation.

#### **Conclusion -**

From the year 2000-2017 the GDP of countries the performance of the countries ischanging. Few countries are showing maximum growth in particular year. The uneven growth of GDP is one of the major reasons to create imbalance in between the countries (Example –Turkey & china). If country is not able to generate the growth particular year it is creating impact on various aspects of the countries like lack of job opportunities, devaluations of currency, social security measures which can be a causes behind the global inequality. With the growth of the population distribution of income is one of major problem. As the population is growing there is need to generate the employment for the same. If the countries are not able to generate the same there will be problem of global inequality. As rich people will becomericher & poorer will be poor. Unemployment is one of the important indicators which influence the global inequality. As the number of population is growing & if there is absence of resources then in this situation there is need to generate the resources to save the people from the unemployment. Decreasing the unemployment is the only way to reduce inequality. Even the countries need to focus on HDI. If the country like India is lagging behind the other countries in terms of human development then such things can be one of the reasons of global inequality.

#### References -

An &, S. (2006). What do we know about global income inequality? Department of Economics, University of Oxford & St Catherine's College.

Esteban perez caldente, M. V. (2007). Global Imbalances & Economic Development. International Journal of Political Economy, 36 (4), 5-11.

Facundo Alvaredo, L. C. (2018). World inequality Report.

Francisco H.G. Ferreira, M. R. (2008, May). Global Poverty & Inequality A Review of the Evidence.

*Mialanovic, B. (n.d.). Global Income Inequality by the numbers: in History & now-AN Overview.* 

Zwane, E. A. (2006, feb). Globalization & poverty: what is the evidance.

www.worldbank.org