Investigating the Link Between Macroeconomic Factors and Income Inequality of Asian Countries

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ABSTRACT

The main purpose of the study was to analyze the impact of macroeconomic factors on income inequality. The panel data analysis is conducted on the sample data of 36 Asian countries. The data of 19 years from the period 2001 to 2019 is collected to analyze the impact of interest rate, economic growth, FDI and exports. The findings revealed the positive relationship between income inequality and economic growth whereas FDI and exports have negative relationship with income inequality. Result of the study implies that authorities should pay special attention to design policies that encourage inward FDI and increase exports.

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1. Introduction

Growing inequality have become talk of the town as the debate over 1% versus 99% have increased. Public hype over growing inequality have triggered the Occupy Wall Street movement. It also encouraged resistance towards international trade in countries having industrial economies. The political campaign of presidential election in USA in year 2019 also includes long political speeches to decide which candidate's policies favors the people that stands at the low level of income distribution. In Asian region the speedy growth of inequality has emerged as a matter of concern that needs attention of political leaders. Even countries like Japan and South Korea have comparatively less inequality but public concerns over raising inequality have highlighted this subject and economist and policy makers are concerned about uneven distribution of growth benefit among all classes of society because consistent disproportionate sharing of growing income may lead to lose public support for the policies related to economic growth. Even though uneven income distribution between poor and rich will also affect the speed of economic growth (Y. Yang & Greaney, 2017).

Since 1990 many developed, and some middle-income countries are experiencing the issue of raising income inequality including China and India. Countries where income inequality have increased represents 71% of the world population (UNDESA, 2020). Specially most of the

Asian countries are affected by raising income inequality. Although many countries are in the face of economic growth, but income and wealth concentration have been constantly increasing at the top. In past, rapid growth of Asian region was more equally distributed however in recent years Asia has failed to continue growth with equity momentum (Jain-Chandra, Kinda, Kochhar, Piao, & Schauer, 2016). Currently Gini index measures of inequality shows that change in income inequality in Asia is higher than other regions and crossed the level of world average inequality. Before Covid-19 pandemic Asian region were facing the challenge of rising income inequality but worldwide lockdown in the absence of right policies have put the economies at high risk of worsening the situation of income inequality (Jurzik et al., 2020). Expectations are Income inequality is going to rise for a medium-term and will harm economic growth (October 2020 Regional Economic Outlook: Asia and Pacific).

Although polices supporting Trade openness and financial openness are favorable to lower income inequality through encouraging capital-intensive production methods to increase productivity of labors (Lim & McNelis, 2014). Conversely, income inequality has a positive relationship with interest rate and economic growth. Whereas increase in interest rate lower the economic growth. It is important that policy makers should focus on the outcome of monetary policy if it is adopted to boost the economic growth because the implementation of expansionary monetary policy may increase the process of economic growth whereas it may also result in more uneven income distribution (Berisha, Gupta, & Meszaros, 2020; X. Yang & Shafiq, 2020). This study is conducted envision to provide the understanding of the impact of macroeconomic factors on Income inequality in Asia. Results of the study will help economist and policy maker to design polices that support even distribution of economic growth.

Therefore, the objective of this study is to investigate the macroeconomic determinants (interest rate, foreign direct investment, economic growth and exports) of income inequality of selected Asian countries. The novelty of this study is the investigation of the said relationships in a large and a new sample set of Asian countries. The significance of our study can be described in two ways, practical significance and academic significance. This study provides practical solution to the economists and policy makers of Asian countries. Due to the impact of COVID-19 pandemic on economy, policy makers are more concerned about the influence of macro-economic factors on income inequality because to give a boost to the economy many policies are designed to provide financial relief to the business sector but the impact of these policies on income distribution are ambiguous. On the basis of results of our study a better vision will be available for economists on the income inequality. This study will help economists to develop economic policies that will help in reducing the widening gap of uneven income distribution between poor and rich people in Asia.

This study also has academic significance. The research contributes in literature as our study investigate the macroeconomic determinants of income inequality of Asian countries. Many studies have investigated the contributing factors of income inequality in different regions of the world in different time periods. This study fulfills the gap of literature by providing the insights of income distribution of Asian countries with the data of recent years.

2. Literature Review
2.1. Theoretical Background

Theoretically, interest-income inequality nexus can be seen if interest rate increases it will increase the cost of debt for home loans and other liabilities for households. The top 1% income earning group of households have low level of debts and more savings so low-income households suffer more with raising interest rate. High income group is more benefited by increase in interest rate as returns on savings are increased and have less effects on liabilities

(Berisha et al., 2020). The lower income group at the bottom of distribution also suffer by unemployment if economic activity declines as a result of contractionary monetary policy called an Earning Heterogeneity channel and it affect income inequality (Coibion, Gorodnichenko, Kueng, & Silvia, 2017).

Whereas through Portfolio channel assuming high income group holds more financial assets and low-income group holds cash or more liquid assets may increase income inequality if interest rates declines because low interest rate increase financial asset prices which result in capital gains for rich class and decline in currency value due to inflation increase income inequality (Taghizadeh-Hesary, Yoshino, & Shimizu, 2020). Opposite of that expansionary monetary policy decrease the uneven income distribution by providing access to finance belongs to lower income group and lower the debt expenses. Returns on savings declines for high income group (Furceri, Loungani, & Zdzienicka, 2016; Mumtaz & Theophilopoulou, 2017; Shittu, Hassan, & Nawaz, 2018).

Furthermore, Kuznets hypothesis explained the link of economic growth with income inequality, stating that income inequality increases once the economy is at the beginning level of economic development because of speedy growth in income and at a certain level of development after rapid growth income distribution become more balanced (Kuznets, 1955) and rapid growth of income results in larger financial sector that also support economic growth but increase the income distribution gape because of increased earning opportunities by investment for rich as compare to poor. At a mature stage of development, financial sectors are more developed with higher growth rate than income inequality decreases (Greenwood & Jovanovic, 1990).

Moreover, understanding of Standard Trade Theory explains the link between exports and income inequality. It predicts that the international trade changes the demand of skilled and unskilled labors in different countries which leads to change in wages of skilled and unskilled labors based on the reason of Heckscher–Ohlin model (H–O model). According to H-O model a country's exports are based on the products that use the factors that are abundantly available in the country and import the products that use the factors that have short of supply in country. so, the countries with abundant labor supply exports the products in which the production require abundant supply of labor and import products which require skill and capital abundantly for its production. The transfer of production of labor-intensive products to labor abundant countries decrease the demand of low skill labor and import of high skill and capital-intensive products will increase the demand of high skill labor and affect the wage premium. The increment in wages of high skill labor resulted because of increased prices of export products lead by raising demand in international market and also lower the demand of low skill labors and their wages which affect income distribution in the country (Roser & Cuaresma, 2016).

The Stolper-Samuelson theorem the outcome of H–O model further explain the theoretical links between exports and income inequality. It explains that the increased prices of products that require more labor for production increase the labor prices and provide benefit to labor and decrease the demand and prices of products that require more skilled labor and capital in its production in developing world. The exports change the wage pattern with in the country according to the availability of low and high skill labor. In labor abundant developing countries exports increase the income of labor class. In general exports are beneficial for the factors of productions that are excessively available and unfavorable for the production factors that are scarce in the country (Silva & Leichenko, 2004).

To understand the FDI and Income Inequality relationship it is important to understand the channel that connect FDI with economic growth. The Theory of Internationalization while

explaining FDI states that FDI in the form Multinational enterprises increase capital, technology, Modern management, marketing skills, production, competition and so on (Dunning, 1993). Relating to famous Kuznets hypothesis, the income inequality increases in the initial developing phase of economy and after a certain stage of development income inequality starts declining (Kuznets, 1955). Empirical evidence shows that FDI contribute to economic growth of developing countries through capital formation, increasing employment opportunities, technological advancement, market expansion (Chen, 2016). In relation to economic development in developing countries, FDI increase income inequality when the economy is at the initial stage of growth.

Secondly FDI increase employment opportunities in the labor abundant developing economies. According to the Heckscher–Ohlin model and Stolper-Samuelson theorem, the developing economies having surplus of labor supply would attract FDI to gain maximum benefit from excessive supply of labor as an abundant factor of production (Lee & Vivarelli, 2006). The concentration of FDI in sectors that abundantly require low skill labor will increase the demand of low skill Labor leading to that it will increase the wage rate of labor. It will also create employment opportunities and increase income at lower level that would decrease income inequality.

2.2. Empirical Literature Review

Darvas (2019) examined the data of 145 countries from the period 1988 to 2015 to investigate the reason behind the decline of global income inequality. The decline in global income inequality was mainly contributed by the change in income per capita and increase in poor population along with increase in countries having more with-in country inequalities. The result of the 143 countries excluding China and India, for the period 1988 to 2015 showed that global income inequality in 2015 is higher than it was in 1988 and the decline in global income inequality was mainly contributed by the change in income per capita of china and India. On the other side with-in country income inequality has also increased in China and India.

Additionally, Berisha et al. (2020) studied the relationship of real interest rate and income inequality. To understand the relationship data was collected from BRICS economies for the period 2001 to 2015. Findings revealed that significant and positive relationship exists between income inequality and interest rate.

Adeleye (2020) reviewed the interest income inequality nexus through the channel of bank credit in Nigeria. To study the interest income inequality nexus, he examined the data from the period 1980 to 2015 and found that positive relationship exists between both variable however increase in interest rate reduces the volume of bank credit. 32 countries having developed, and emerging markets are selected to examine the effects of monetary policy on income inequality. Furceri et al. (2016) used the data from the year 1990 to 2013 and found a direct link between interest rate and income inequality. Contractionary monetary policy increased the income inequality in the sample of 32 countries.

Mumtaz and Theophilopoulou (2017) investigated the reason behind the increasing income inequality in United Kingdom. Year 1969 to 2012 selected as a period to analyze data. Results revealed that contractionary monetary policy has contributed to the increasing income inequality in UK and interest rate have a significantly positive affect on income inequality. Taghizadeh-Hesary et al. (2020) conducted a study in Japan, using the quarterly data from the period 2001 to 2017. In this study the relationship of monetary policy and income inequality is analyzed and come up with the conclusion that zero and negative rate of interest increased income inequality because of increase in asset prices and interest rate has negative relation with income inequality in the economy of Japan.

Y. Yang and Greaney (2017) explored the relationship of economic growth and income inequality in Asia- Pacific region. Data of different time periods from United States, China, Japan and South Korea has been selected to test how economic growth and income inequality are affected by trade openness. Study found that trade openness has diversified effects over income inequality and economic growth. Results show that from the period 1960 to 2012 in United States and from 1960 to 2010 in Japan trade openness reduced the gape of uneven income distribution and in China during the period of 1978 to 2013 it increased the income inequality whereas from 1963 to 2013 in South Korea trade openness has no significant effect.

Ghosh (2020) conducted a study to know the variation in income inequality influenced by economic growth volatility. The four-member countries of ASEAN, Malaysia, Indonesia, Thailand, Singapore and Philippine are selected to collect data from the period 1980 to 2015. Findings of the study suggested that volatility of economic growth have positive and significant relationship with income inequality.

Rubin and Segal (2015) analyzed the sensitivity of income of different income groups with economic growth in USA to understand the nexus between income inequality and economic growth. The data during the period of 1953 to 2008 were analyzed in the study and results of the study concludes that the income of the top income group is more sensitive to economic growth as compare to low-income group and a positive relationship exist between income inequality and economic growth in US economy. Roine, Vlachos, and Waldenström (2009) selected 16 countries to analyze the panel of entire twentieth century. To observe factors that drive income inequality in long term period, they divided the different level of earning population in to three groups and found that economic growth has positive relation with the high-income earning group which increase income inequality. It concludes that income and economic growth both have positive connection with income inequality.

Berisha et al. (2020) conducted a study to understand the link between income inequality and macroeconomic factors in BRICS countries. The data from the period 2001 to 2015 is used to understand the impact of income growth as macroeconomic factor on income inequality. Findings of the study revealed a positive relationship between both variables. Brida, Carrera, and Segarra (2020) investigated the bond of economic growth and income inequality in 38 countries from the period 1980 to 2015 and from the period 1980 to 2010 in 28 countries. Results found that negative relationship exist between both variables in developed countries and whereas in developing countries a positive relation exists between both variables.

Bogliaccini and Egan (2017) investigated the link between income inequality and FDI. The effects of foreign direct investment were analyzed with respect to different sectors and found that income inequality is much affected by FDI in services sector as compare to other sectors. Sixty middle-income countries were select to collect the data from the year 1989 to 2010 and results revealed that a positive relation exists between FDI and income inequality. 27 European countries were selected to analyze the relationship of income inequality and financial globalization (Bhatti & Fazal, 2020). FDI as financial variable was used to measure financial globalization from the period 1995 to 2009. Asteriou, Dimelis, and Moudatsou (2014) concluded in results that the income inequality is affected by financial globalization through foreign direct investment in European countries and there is a significant and positive connection exists between FDI and income inequality.

Khan and Nawaz (2019) studied the nexus between FDI and income inequality. The member countries of Commonwealth of Independent States (CIS) are selected to collect the data from the period 1990 to 2016. The result presented that increase in inward FDI decrease the

income inequality and a negative relationship exist between both variables in CIS member countries.

Adams and Klobodu (2017) selected the data of twenty-one countries from sub-Saharan Africa for the period 1984 to 2013 and analyzed how the pattern of income distribution is affected by capital flows. They used foreign direct investment to measure the impact of capital flows and found that FDI positively affect income inequality and have increased income inequality in sub-Saharan Africa. Income inequality increased in short-run as well as in long-run.

Chen (2016) in his study explained that Foreign direct investment in China has contributed to decrease urban-rural income inequality through job creation and FDI has inverse connection with urban-rural income inequality. The data of year 1983 to 2010 was analyzed to understand the influence of FDI on uneven income distribution in urban and rural parts of China. Cho and Ramirez (2016) have found that Foreign direct investment affects income inequality in nonlinear way. To understand the relationship data during the period 1990 to 2013 of selected 7 Southeast Asian countries were examined. The result concluded that over short period of time FDI increase income inequality and in Long-run it decreases uneven distribution in the selected sample (Shafiq, Hua, Bhatti, & Gillani, 2021).

Lim and McNelis (2014) sum up that foreign direct investment and foreign aid have insignificant impact over low income countries and can be beneficial for middle income countries to some extent. The impact of trade openness on income inequality depends on the level of development in country and trade openness along with increase in output par labor through investment in production capacity leads to economic growth and reduce income inequality. The results were concluded on the annual data of 42 countries from the period 1992 to 2007. The countries were selected on the basis of GDP per capita compared with the world's GDP per capita.

Zhu, Yu, and He (2020) investigated the level of income inequality in China affected by the export product structure and export destination structure. To explore the facts, the exports data of year 2013 were used. Income inequality with in the urban and rural areas of china influenced by exports was also examined and found that exports enhancement helps to reduce income inequality in the urban areas of china only. Due to the complexity of export product and destination structure export products are more concentrated in urban areas which increase uneven income distribution between urban and rural areas of china. Impact of exports on income inequality were analyzed by Khan and Nawaz (2019) in search of links between trade openness and income inequality. The data was collected for the period 1990 to 2016 from the member countries of Commonwealth Independent States (CIS). The analysis concluded that exports to developed and developing countries increase income inequality in CIS and have significantly positive relation with income inequality.

Le, Nguyen, Su, and Tran-Nam (2020) examined the correlation between exports diversification and income inequality in the sample of 90 countries over the period of 2002 to 2014. The outcome of the analysis shows that there is inverted U- shape relation exist between exports diversification and income inequality.

3.   DATA AND METHODOLOGY

In this research, 36 countries from total 48 Asian countries are selected for the analysis of data. Countries are selected on the basis of availability of data. The selected countries are listed Table 1 below.

Table 1
List of Countries in the Study Sample

No	Country Name	No	Country Name
1	China	19	Sri Lanka
2	India	20	Jordan
3	Indonesia	21	Azerbaijan
4	Pakistan	22	Tajikistan
5	Bangladesh	23	Israel
6	Japan	24	Laos
7	Philippines	25	Lebanon
8	Vietnam	26	Kyrgyzstan
9	Turkey	27	Singapore
10	Iran	28	Oman
11	Thailand	29	Georgia
12	Myanmar	30	Mongolia
13	South Korea	31	Armenia
14	Iraq	32	Qatar
15	Afghanistan	33	Timor-Leste
16	Malaysia	34	Cyprus
17	Yemen	35	Bhutan
18	Nepal	36	Maldives

This study gathered 19 years' data from 36 Asian countries during the sample period between 2001 to 2019, to understand the determining factors behind the raising income inequality in Asia. Income inequality is measured with Gini Index and dataset of Gini Index is obtained from Standardized World Income Inequality Database (SWIID Version 9.0, October 2020). The annual data of World Development Indicator (WDI) is used to measure all other variables which includes Interest rate, Economic growth, Foreign direct investment and Exports. The data of WDI is accessed from the website of World Bank. The study investigates the linear relationship considering the hypothesis of Kuznets curve which is the theoretical underpinning of our study relationships.

The statistical model used in this study is presented below:

$$INEQ_{it} = \propto \ + \beta 1\ INR_{it} + \ \beta 2 EG_{it} + \ \beta 3 FDI_{it} + \ \beta 4 EXP_{it} + \in_{it} \tag{1}$$

In the above statistical model INEQ denotes income inequality explaining the level of income distribution with in a population which is measured by Gini Index of World Income Inequality database where as INR denotes Interest Rate measured with annual rate of real interest; EG denotes Economic Growth measured with annual percentage of GDP growth; FDI denotes Foreign Direct Investment measured with net inflows of FDI as a percentage of GDP and EXP denotes Exports, measured with exports of goods and services as percentage of GDP.

The statistical techniques used in analysis are descriptive statistics, correlation Analysis, and panel data analysis. The statistical technique applied to organize, summarize and present data in a meaningful form is known as descriptive statistics. It summaries the information which is already known and exhibit data using tables, charts and graphs for presentation. Descriptive statistics majorly divided in to frequency distribution, measures of central tendency and measures of variability. Correlation analysis also explains the direction of relationship between quantitative variables. Positive correlation describes that both variable increase in the same direction whereas negative correlation means when a variable increases the other variable move in opposite direction and shows decreasing trend. Panel data sets are the union of cross sectional data and time series data, sometime referred as longitudinal data. It provides information about behaviors of individuals over time.

4. RESULTS AND ANALYSIS

The following Table 2 provides the information related to descriptive statistics of variables. The table of descriptive statistics contains mean, standard deviation, minimum and maximum values and total no of observations.

Table 2
Descriptive Statistics of Variable over the period 2001-2019

Variables	Mean	Std. Dev.	Min	Max	Observation
Gini	1.9357	.8075	.6	4.5	540
Interest	.0574	.0775	-.2013	.4433	452
GDP growth	.0697	.2262	-.3715	2.8013	537
FDI	.0559	.0456	-.141	.3447	540
Exports	.4381	.3597	.001	2.2899	503

The above table shows that the Gini index of inequality has the mean value of 1.9357 with standard deviation of .8075 and minimum and maximum value ranges between .6 to 4.5 with total 540 observations. Interest has the mean value of .0574 with standard deviation of .0775 and minimum and maximum value of interest ranges between -.2013 to .4433 with total 452 observations. Foreign direct investment has the mean value of .0559 with standard deviation of .0456 and minimum and maximum value of FDI ranges between -.141 to .3447 with total 540 observations. Gross domestic Product has the mean value of .0697 with standard deviation of .2262 and minimum and maximum value ranges between -.3715 to 2.8013 with total 537 observations. Finally, exports have the mean value of .4381 with standard deviation of .3597 and minimum and maximum value ranges between .001to 2.2899 with total 503 observations.

Table 3
Correlation Matrix of Independent Variables

Variables	Interest	GDP growth	FDI	Exports
Interest	1.0000			
GDP growth	-0.0378	1.0000		
FDI	-0.0252	-0.0816	1.0000	
Exports	-0.1254	0.0609	0.1674	1.0000

The above table 3 illustrate the correlation scores of our independent variables. Correlation scores of all independent variables are below the threshold level of 0.70. There is no score above than 0.70 therefore, the problem of multi collinearity does not exist in our model.

4.1. Panel data Analysis

The Modified Wald test is applied on the model to check the issue of heteroscedasticity in our model. The result of the test has the P-value of 0.0000 therefore the Ha is accepted for our statistical model. Thus, in accordance with the result of modified Wald test there is an issue of heteroscedasticity in our model that will be resolved with robustness.

Wooldridge test is applied on the statistical model and the result shows the p-value of 0.000 therefore the Ha is accepted for our model. Hence in accordance with the results of Wooldridge test the model is affected with the issue of autocorrelation that will be rectified with robustness test.

Furthermore, the breusch-pagan is applied to decide which model is appropriate for our model in between pooled OLS model or random effect model. The result of BP test applied on

our statistical model shows the p-value of 0.0000. Thus, the result of BP test conclude that Random effect model is appropriate for our model.

Further, to identify the appropriate model for our statistical model in between Random effect model and Fixed effect model, Hausman test is applied. The p-value of Hausman test applied on our model is 0. 7922. Thus, in accordance with the results of Hausman test we conclude that Random effect model is appropriate for our model.

Therefore, the following table 4 represents the results of regression analysis using random effect model to analyze the impact of interest rate, GDP growth, Foreign direct investment and Exports on Income inequality. The diagnostic analysis is performed and found that the issues of Heteroscedasticity and Autocorrelation exist in model therefore Robust random model is applied to deal with these issues. Robust panel model is suitable to rectify the issues of Heteroscedasticity and Autocorrelation (Reed & Ye, 2011).

Table 4
Results of Random Effect Model

Variables	Coefficient	Std. Err	t- value	Probability
		Random Effect Model		
Interest	.1447	.1514	0.96	0.339
GDP growth	.4751	.2287	2.08	0.038
FDI	-.5869	.1473	-3.98	0.000
Exports	-.4109	.1655	-2.48	0.013
Constant	2.2073	.1767	12.49	0.000
Observations				416
F- value				37.88 (0.0000)

The table shows the F- value of 37.88 (0.0000). F-value is highly significant and shows the fitness of the model. In the results presented above the coefficient of interest is .1447 and P- value is 0.339. The p-value above 10% significance level concludes that the impact of interest rate on income inequality is statistically insignificant and income inequality is not affected by interest rate in Asian countries. These results are inconsistent with findings of (Adeleye, 2020; Furceri et al., 2016). Our results are also inconsistence with the results of (Mumtaz & Theophilopoulou, 2017) as they found positive and significant relationship between interest rate and income inequality.

Whereas the coefficient and p-value of GDP growth is .4751 and 0.038, illustrates that GDP growth have 48% impact on income inequality and have significantly positive relationship with income inequality. These results are consistent with the results of (Berisha et al., 2020; Ghosh, 2020; Rubin & Segal, 2015).

Moreover, FDI have the coefficient score of -.5869 and the p-value 0.000 shows that the impact of FDI on Income inequality is 59%. The results are statistically significant and shows strong bond, but the negative sign of coefficient concludes that FDI have negative relationship with Income inequality. Our results are consistent with the results of (Khan & Nawaz, 2019) and contradict with the findings of (Adams & Klobodu, 2017).

The coefficient and p-value of exports are -.4109 and 0.013 shows 41% impact of exports on income inequality at 5% significance level. Negative sign of correlation score concludes the negative relationship between Exports and Income inequality. These results are inconsistent with the study conducted by (Khan & Nawaz, 2019).

While investigating the effect of macroeconomic factors on income inequality, the study found that interest rate is statistically insignificant and does not affect income inequality. Whereas the findings of the study supported the hypothesis and found significant and positive relationship between economic growth and income inequality. Results confirms the Kuznets curve that economic growth increase income inequality at initial stage and economic growth in the developing region of Asia is contributing towards raising income inequality. On contrary findings showed that FDI and income inequality have significantly negative relation. Results of our sample data showed that increase in Foreign direct investment helps in reducing income inequality in Asia. Similarly, exports and income inequality also have significantly negative relationship which illustrates that income inequality declines when exports increase in Asian countries.

5. CONCLUSION & RECOMMENDATIONS

Uneven income distribution is the most debated topic in developed and developing both parts of the world. Asia region is also affected by rising income inequality including emerging countries like China and India. Current figures of Gini index measuring income inequality revealed that the change in income inequality in Asia is higher than other regions and crossed the level of world average inequality. The objective of the study was to investigate the macroeconomic determinants (interest rate, foreign direct investment, economic growth and exports) of income inequality of selected Asian countries. Four research questions were designed to achieve the objective of the study. The research questions were, what is the effect of interest rate on income inequality of selected Asian countries? What is the effect of GDP growth on income inequality of selected Asian countries? What is the effect of exports on income inequality of selected Asian countries? What is the effect of foreign direct investment on income inequality of selected Asian countries?

To answer the research questions 36 Asian was selected. The data of 19 years from the period 2001 to 2019 was collected to analyze the impact of interest rate, GDP growth, foreign direct investment and exports on income inequality in Asian countries. Panel data analysis is performed while using Random effect model. Data analysis was performed by applying statistical techniques including Descriptive statistics, Correlation analysis and Regression analysis.

After concluding the findings of the research, the results of the study raise some beneficial suggestions for economists and policymakers. This study focused on interest rate, GDP growth, FDI and Exports to understand their impact on income inequality. Firstly, the results reveled the inverse relationship between economic growth and income inequality therefore policy maker should consider the tradeoff between economic development and raising income inequality while implementing expansionary monetary policy by reducing interest rate to give boost to economic growth. Moreover, Exports have strong inverse impact on income inequality therefore it is suggested that government should reduce trade restrictions and provide subsidies to increase exports it will contribute to decrease income inequality. Lastly, in accordance with the results of study FDI is also beneficial for reducing uneven income distribution. the government should design policies to attract inward FDI in different sectors and give special attention to increase export- oriented FDI to take advantage of abundant labor supply of developing countries in Asia.

Current study provides few recommendations for future studies. Firstly, analyzing the impact of other macroeconomic variables like human capital and employment level will open new dimension for further research to find out the determinants of income inequality in Asian region. Cross-comparative analysis between developed and developing countries will also provide informative findings to deal with the problem of raising income inequality. Furthermore, longitudinal studies with different Asian countries is also recommended because a lot of research is done related to income inequality, but Asian countries are less explored and can also provide practical and theoretical knowledge for practitioners.

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