-RESEARCH ARTICLE-

ELIMINATING HUMAN POVERTY: MACROECONOMIC AND SOCIAL POLICIES FOR EQUITABLE GROWTH IN VIETNAM

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─**Abstract**─

The concept of equitable growth is gaining traction in developing nations. It is recognised that simply increasing economic growth does not always lead to equitable improvements for society as a whole. Therefore, effective government policies are necessary to ensure equitable outcomes. This study examines the impact of various social and macroeconomic policies on equitable growth in Vietnam from 1998 to 2022.

Preliminary unit root testing reveals a varied degree of integration among the data series. The ARDL Bound Testing approach is used for analysis. The study's short-term results indicate that government expenditures, interest rates, and health expenditures all have a significant and positive influence on equitable growth. Similar results are also evident over an extended period of time. The short and long run estimations reveal that trade openness has a positive impact on equitable growth, while labour force participation and inflation have a negative impact. These findings are contingent upon controlling for other variables. The study recommends the promotion of targeted and inclusive social and macroeconomic policies based on the results.

Keywords: Equitable Growth; Macroeconomic and Social Policies; Vietnam; ARDL Bound Testing Approach.

INTRODUCTION

Poverty stands as one of the most pressing global challenges today. Despite extensive efforts by nations, communities, and international organisations, approximately 10% of the global population continues to live below the internationally recognised poverty threshold of $1.90 per day (Leal Filho et al., 2021). Poverty remains widespread, particularly in developing countries, despite some recent advancements. Despite a notable decrease in the poverty rate by approximately half over the past decade, primarily attributed to rapid economic growth, the World Bank estimates that around 1.2 billion people still live on less than $1.25 per day. In addition to poverty, there has been a persistent increase in inequality over the past two decades, which further exacerbates the issue of poverty (Doumbia, 2019).

Economic growth is linked to an increase in income inequality, resulting in a widening disparity between the wealthy and the impoverished. Inequality can contribute to criminal behaviour among individuals who perceive their access to a decent quality of life as being unjustly restricted. Equitable socioeconomic growth requires ensuring equal access to economic opportunities for all societal groups. In order to ensure equal participation in the process of growth, it is necessary to establish an enabling environment (Munir & Ullah, 2018). Contrary to popular belief, a high level of economic growth does not automatically lead to the achievement of development goals. It is crucial to ensure that all individuals, particularly those living in poverty, benefit from this growth in a fair and equal manner. This concept is known as equitable economic growth (Hidayat, Mulatsih, & Rindayati, 2020).

In 2012, the OECD launched an initiative on "Inclusive Growth" in response to increasing poverty, income inequality, and other factors affecting human well-being. The initiative aimed to assist governments in promoting inclusive economic growth. There are notable enhancements in living standards across various socioeconomic

groups and aspects of well-being (James, Devaux, & Sassi, 2017). Equitable or inclusive growth aims to foster economic growth by promoting equal opportunities and ensuring that all individuals can participate fairly and benefit from the growth process (Feshari & Valibeigi, 2017). The concept of inclusive growth emerged as a response to increasing public awareness of poverty. Poverty is conceptualised through three dimensions in the context of poverty eradication efforts: capability poverty, income poverty, and rights poverty.

Inclusive growth pertains to achieving economic growth that addresses poverty by ensuring equal distribution of economic and social opportunities among all segments of society, thereby providing opportunities for all individuals (Kamran, Rafique, Nadeem, & Anwar, 2023). The importance of inclusive growth is particularly emphasised and acknowledged in the strategies and work plans of the Millennium Development Goals when it comes to developing countries. This is due to the limitations of macroeconomic strategies in effectively addressing the issues of income inequality and poverty that prevail in these countries, as well as in providing opportunities for fair and equitable employment. The equitable provision of services, particularly in the areas of health, employment, and education, has emerged as an essential requirement.

Neglecting to address this requirement could exacerbate the issue (Munir & Ullah, 2018). The fulfilment of inclusive growth goals necessitates the implementation of effective social and macroeconomic policies. The implementation of social and macroeconomic policies and reforms can exert a substantial influence on social activities and poverty levels (Harris & Kende-Robb, 2008). Social policies that aim to provide services can generate income and improve access to public services. Public investment in financial transfers reduces income inequality and poverty in the short term. Over time, social policies aimed at improving the welfare of impoverished individuals have a positive impact on economic growth and poverty reduction by effectively influencing the human capital of disadvantaged populations. Macroeconomic policies, such as fiscal policies targeting health and education services, have a positive impact on economic growth by improving human capital.

These policies also contribute to enhancing the quality of life by providing equal opportunities to the intended beneficiaries, resulting in greater social equality. Social policies provide risk-mitigation services by safeguarding vulnerable populations from local or global financial, macroeconomic, environmental, and social shocks. Public infrastructure investments play a crucial role in improving living standards, reducing poverty, and promoting employment, productivity, and long-term economic growth. Investing in certain types of infrastructure, such as sewerage and water systems, has the potential to enhance living standards in various ways within developing nations (Zouhar, Jellema, Lustig, & Trabelsi, 2021).

Many developing countries have achieved significant growth due to effective social and

macroeconomic policies. However, these recent development patterns have neglected certain segments of society, leading to increased poverty, unemployment, and economic inequalities (Nwosa, 2016). The researchers were motivated to investigate the practical role of macroeconomic and social policies in promoting equitable growth due to the existing ambiguity surrounding this issue. The aim of this study is to assess the impact of social and macroeconomic policies on equitable growth in Vietnam from 1998 to 2022. There are multiple justifications for choosing Vietnam as the subject of study. The "Trickle Down Hypothesis" has been observed in Vietnam for several years.

The Vietnamese government implemented numerous reforms in the 1980s, leading to significant economic growth averaging around 6% annually from 1990 to 2000. The poverty rate decreased from 58% to 37% between 1993 and 1998. Poverty rates experienced a consistent decline from 2004 to 2008, with a notable decrease of 5% during this period (Figure 1). Significant variations in growth were observed between the 1990s and 2000s. Income inequality increased during the 1990s and then experienced a slight decrease in the 2000s. The preferred era of economic expansion for the underclass remains uncertain. In the 1980s, the Vietnamese government implemented various macroeconomic policies aimed at increasing health and infrastructure expenditures, as well as implementing agricultural reforms and subsidising industrial states.

However, these policies yielded unsatisfactory results (Dollar & Litvack, 1998). In the 2000s, Vietnam implemented several poverty reduction initiatives, demonstrating its dedication to achieving fair and inclusive economic development. Around $2.8 billion was allocated towards poverty reduction efforts between 2006 and 2010. During this period, there has been a significant decrease in the poverty rate. This indicates that the macroeconomic policies implemented during this time were focused on promoting equitable growth and benefiting the poor (as shown in Figure 2) (Nguyen & Pham, 2018).
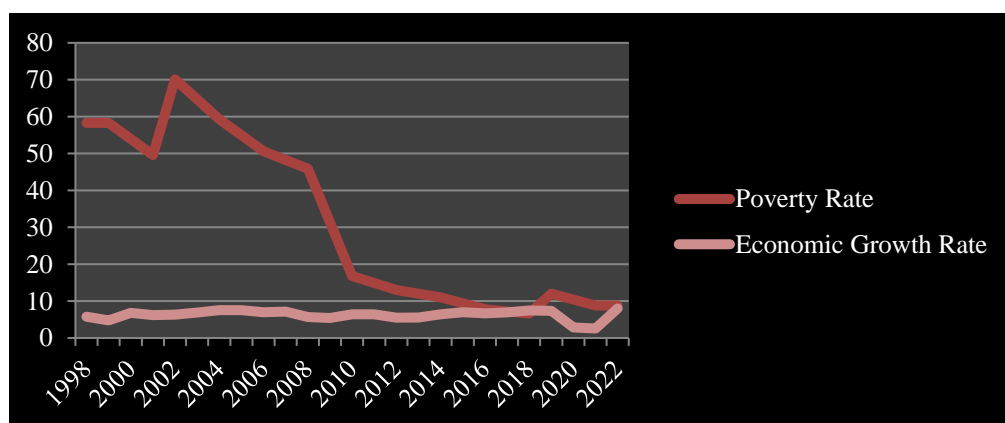
Figure 1: Rate of Economic Growth and Poverty in Vietnam (1998 to 2022)
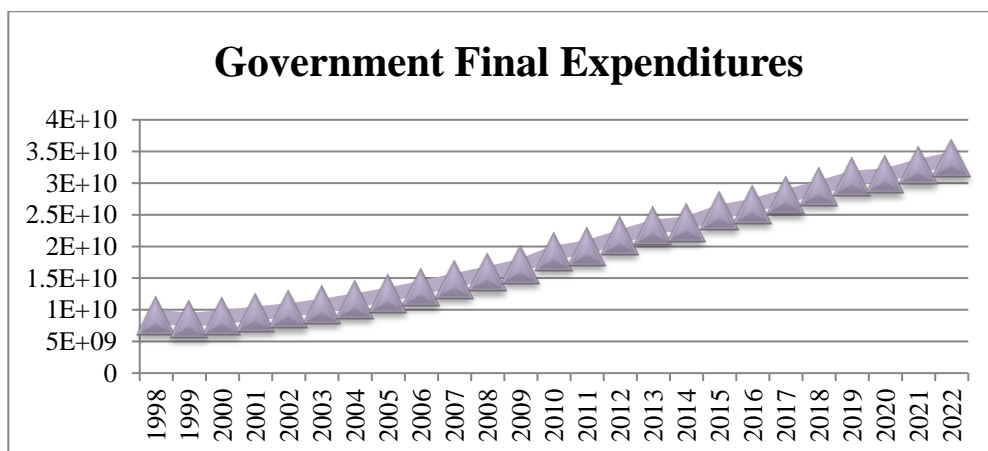
Figure 2: Government Fiscal Expenditures in Vietnam over 1998 to 2022 period
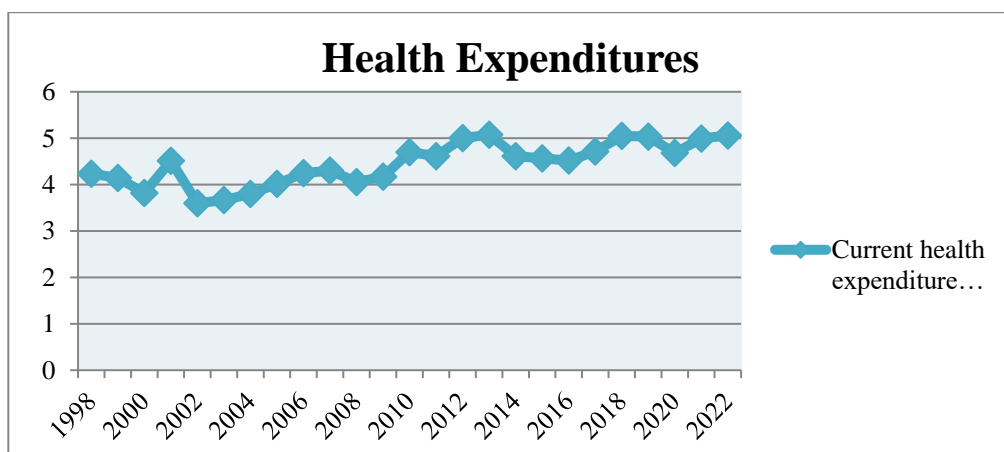
Figure 2: Government Health Expenditures in Vietnam over 1998 to 2022 period

This study makes a significant contribution to the existing literature in the following ways: This study highlights the absence of research on the role of macroeconomic and social policies in promoting equitable growth, in contrast to numerous studies that have examined various factors contributing to equitable growth (Alekhina & Ganelli, 2021; Anand, Nizamani, & Nizamani, 2019; Feshari & Valibeigi, 2017). To the best of the author's knowledge, none of the existing studies have examined the impact of social and macroeconomic policies on equitable growth in Vietnam.

Furthermore, this study employs the concept of "inclusive growth" as a metric for assessing equitable economic development, which is a more suitable indicator for gauging the inclusiveness of economic growth within a given economy. This study utilises the ARDL Bound Testing approach to provide valuable insights for government officials and policymakers in Vietnam and other developing nations. These findings can aid in the formulation of effective policies.

The subsequent sections of the study are arranged in the following order: Section 2 provides a comprehensive review of the current literature. Section 3 provides an overview of the data utilised in the study as well as the methods employed for analysis. Section 4 presents the findings and subsequent analysis. Section 5 provides the conclusion and policy recommendations.

LITERATURE REVIEW

According to economic theory, there is a fundamental trade-off between efficiency and equity in the context of economic growth. In countries that have reached or are close to the technological frontier, the only way to alter income distribution and reduce poverty is by sacrificing economic growth (Jalles & de Mello, 2019). Literature extensively examines the factors that contribute to or impede equitable growth in various countries or groups of countries. Empirical studies have predominantly employed income inequality or poverty as indicators to assess equitable growth and its association with various social and macroeconomic factors. The available evidence on the impact of social and macroeconomic policies on promoting equitable growth is limited. Sajid and Ali (2018) examined the impact of macroeconomic conditions on income inequality in four South Asian countries using panel data from 1991 to 2014.

The results obtained through the application of the Panel ARDL estimation approach revealed that education level and income were positively associated with income inequality, while labour force participation and population growth were negatively associated with income inequality in the countries under consideration. Deyshappriya (2017) conducted a study using panel data from 33 Asian countries to analyse the impact of political, demographic, and macroeconomic factors on income inequality between 1990 and 2013. The study utilised the GMM estimation approach to examine the impact of various factors on income inequality. The findings indicate that labour force participation, education, and official financial assistance have a mitigating effect on income inequality.

Conversely, political risk, inflation, unemployment, and terms of trade are associated with an increase in income inequality. Ayad (2019) conducted a study in Algeria to examine the relationship between government expenditures and poverty from 1970 to 2017. Using co-integration approaches, the study found no significant impact of government expenditures on poverty. Omar and Inaba (2020) examined the relationship between government expenditures, poverty, and income inequality using panel data from 116 emerging or developing countries spanning the period from 2004 to 2016. Their analysis revealed that government expenditures did not have a statistically significant effect on either income inequality or poverty. Liu et al. (2021) examined the impact of education on poverty alleviation in Pakistan from 1980 to 2018. Cointegration estimation revealed a negative relationship between education and poverty in Pakistan.

The concept of "Inclusive Growth" has gained popularity as a suitable measure for achieving equitable growth. Researchers have utilised this measure to assess various factors that either facilitate or impede equitable growth. However, there is a lack of research on the impact of macroeconomic or social policies on inclusive growth in the existing literature. Alekhina and Ganelli (2023) conducted a study on the ASEAN countries, examining various macro structural factors that influenced equitable growth from 1992 to 2017. Panel Regression analysis findings indicate that several factors, namely labour force participation, fiscal redistribution, FDI inflows, productivity growth, savings, and digitalization, have contributed to the promotion of equitable growth in ASEAN countries. Feshari and Valibeigi (2017) examined data from 30 provinces in Iran from 2000 to 2014 to assess the impact of inequality and unemployment rate on inclusive economic growth (measured by GDP growth).

The study employed the Seemingly Unrelated Regression (SUR) approach to examine the impact of unemployment and income inequality on GDP growth in Iranian provinces. The findings indicated that both unemployment and income inequality were negatively associated with GDP growth. Jalles and de Mello (2019) conducted a cross-country analysis using data from 78 countries to examine the impact of key factors on inclusive growth from 1980 to 2013. The study utilised Probit and Logit regression models to examine the relationship between various factors and the likelihood of inclusive growth.

The findings indicated that human capital, tax redistribution, labour force participation, multifactor productivity, institutional factors, and trade openness were positively associated with the probability of inclusive growth. Doumbia (2019) conducted a study using a panel of 112 countries to examine the relationship between governance, inclusive growth, and poverty from 1975 to 2012. The study employed the System GMM estimation method. The results indicated that factors such as rule of law, government effectiveness, financial development, education, and infrastructure development were associated with a decrease in poverty rates and the promotion of inclusive growth.

Research Gap

The literature review indicates that previous researchers have examined numerous factors related to achieving equitable or inclusive growth. Previous studies did not examine the impact of social and macroeconomic policies on equitable growth in Vietnam. The main objective of this research is to investigate the impact of various macroeconomic and social policies on equitable growth in Vietnam using the ARDL Bound Testing Approach.

DATA AND METHOD OF ANALYSIS

This study assesses the impact of macroeconomic and social policies on equitable growth by employing the concept of "Inclusive Growth" as a measure of equitable growth, as

defined by Feshari and Valibeigi (2017), Doumbia (2019), Alekhina and Ganelli (2023), and Hidayat, Mulatsih, and Rindayati (2020). We use fiscal policy and monetary policy indicators, specifically government final expenditures and the real interest rate, to represent macroeconomic policies. Additionally, we employ current health expenditures as a measure of social policy. To mitigate the issue of omitted variable bias, previous studies have suggested incorporating additional variables such as the labour force, inflation, and trade openness into the model. The study's model is specified based on economic theory and the existing literature reviewed in the previous section.

$$EG_t = \beta_0 + \beta_1 GE_t + \beta_2 IR_t + \beta_3 HE_t + \beta_4 LF_t + \beta_5 INF_t + \beta_6 TO_t + \varepsilon_t \qquad (1)$$

In this context, EG represents equitable growth, GE represents government expenditure, IR denotes interest rate, HE shows health expenditures, LF and INF are labour force participation and inflation, and TO indicates trade openness. Table 1 provides a comprehensive description of the study variables.

Table 1: Variables of the Study and Data Sources

Variables	Measurement	Data Source
Equitable Growth	Inclusive economic growth GDP per person employed	WDI
Macroeconomic policy	Fiscal Policy (Government Final Expenditures) Monetary Policy (Real Interest Rate	WDI
Social Policy	Current Health Expenditures	WDI
Inflation	Consumer Price Index	WDI
Labour Force	Labour Force Participation (15+ (% of total population)	WDI
Trade Openness	Trade (% of GDP)	WDI

Note: WDI represents World Development Indicators

ARDL Bound Testing Approach

Before estimating parameters, it is crucial to determine the order of integration of the data series. Stationarity is characterised by the constancy of average, variance, and auto-covariance over time. On the other hand, non-stationarity or unit root refers to the opposite scenario, where average, variance, and auto-covariance are not constant over time (Brooks, 2019). The notation I (0) is used to represent a stationary series. To achieve stationarity in a non-stationary or unit root series, it is common practice to apply differencing at the first or second level, which is denoted as I(1) and I(2), respectively. The present study utilises ADF and PP tests to determine the order of integration of the data series. Equation (2) represents the functional form of the Augmented Dickey-Fuller (ADF) test.

$$Y_t = \beta_1 + \beta_2 + \partial Y_{t-i} + \sum_{i=1}^{n} \alpha_i \Delta Y_{t-i} + \epsilon_t \qquad (2)$$

In this study, Yt represents the data series being analysed for its integration order. Yt-1 refers to the lagged value of Yt, which can be either one or two lagged values. The

variable "t" represents time, while "εt" represents the error term. The null hypothesis, which suggests that a series has a unit root, is rejected when the calculated test statistic exceeds its critical value. In this case, the series is determined to be stationary at the chosen level of significance.

ARDL Model (Lag Length Selection)

We utilise the ARDL approach proposed by Peseran and Peseran (1997) due to its ability to estimate study parameters regardless of the order of integration among data series. Pesaran, Shin, and Smith (2001) subsequently introduced bound testing as a modification to the aforementioned approach. This approach offers several advantages, such as not requiring the integration of data series of the same order for its application. Peseran and Peseran (1997) found that this method can generate precise and reliable estimates, even when working with small sample sizes. Additionally, this technique can address endogeneity concerns (Pesaran, Shin, & Smith, 2001). The ARDL model incorporates lagged values of both the dependent and independent variables. Choosing an appropriate lag length is essential for accurately assessing the short-term and long-term parameters of the model. The equation (3) represents the ARDL model.

$$\Delta EG_t = \alpha_0 + \alpha_1 EG_{t-1} + \sum_{i=1}^{l} \alpha_2 \Delta EG_{t-i} + \sum_{i=1}^{m} \alpha_3 \Delta GE_{t-i} + \sum_{i=1}^{o} \alpha_4 \Delta IR_{t-i} +$$
$$\sum_{i=1}^{q} \alpha_5 \Delta HE_{t-i} + \sum_{i=1}^{p} \alpha_6 \Delta LF_{t-i} + \sum_{i=1}^{r} \alpha_7 \Delta INF_{t-i} + \sum_{i=1}^{s} \alpha_8 \Delta TO_{t-i} + \beta_1 GE_{t-1} +$$
$$\beta_2 IR_{t-1} + \beta_3 HE_{t-1} + \beta_4 LF_{t-1} + \beta_5 INF_{t-1} + \beta_6 TO_{t-1} + \varepsilon_t \qquad (3)$$

where, optimal lags chosen by AIC (Akaike Information Criterion) are denoted by l to s.

The ARDL Bound Test.

Following the choice of the best ARDL model using a standard lag length criterion, the next step is to check how well endogenous and exogenous variables are integrated. The ARDL cointegration method is considered more consistent and appropriate compared to other tests like Engle and Granger (1987) and Johansen and Juselius (1990) cointegration tests because it does not impose any specific order of integration. This method is used to evaluate the cointegration of both endogenous and exogenous variables. The F statistic, or Wald test, is employed in this study to detect cointegration. It involves comparing the null hypothesis of no cointegration with the alternative hypothesis of cointegration among the variables under investigation.

We compare the upper and lower critical boundaries of the test with the F statistic. Cointegration is considered to exist between variables when the calculated value surpasses the upper bound value. However, if the calculated value is lower than the calculated F-statistics, it indicates evidence supporting the absence of cointegration. When the calculated value falls within the range of the upper and lower bounds, it is not possible to draw a definitive conclusion regarding cointegration (Azam, Nawaz, & Riaz, 2019).

Long-Run and Short-Run Coefficients Estimation

After selecting appropriate optimal ARDL model, the long run and short run parameters are estimated. The functional form of long run ARDL model is shown in Equation 4.

$$\Delta EG_t = \alpha_0 + \sum_{i=1}^{l} \alpha_2 \Delta EG_{t-i} + \sum_{i=1}^{m} \alpha_3 \Delta GE_{t-i} + \sum_{i=1}^{o} \alpha_4 \Delta IR_{t-i} + \sum_{i=1}^{q} \alpha_5 \Delta HE_{t-i}$$
$$+\sum_{i=1}^{p} \alpha_6 \Delta LF_{t-i} + \sum_{i=1}^{r} \alpha_7 \Delta INF_{t-i} + \sum_{i=1}^{s} \alpha_8 \Delta TO_{t-i} + \varepsilon_t \qquad (4)$$

After computing long run model, the short run model is computed by using the following equation (5).

$$\Delta EG_t = \varphi_0 + \sum_{i=1}^{l} \varphi_1 \Delta EG_{t-1} + \sum_{i=1}^{m} \varphi_2 \Delta GE_{t-i} + \sum_{i=1}^{o} \varphi_3 \Delta IR_{t-i} +$$
$$\sum_{i=1}^{q} \varphi_4 \Delta HE_{t-i} + \sum_{i=1}^{p} \varphi_5 \Delta LF_{t-i} + \sum_{i=1}^{r} \varphi_5 \Delta INF_{t-i} + \sum_{i=1}^{s} \varphi_5 \Delta TO_{t-i} + \varphi_5 ECT + \varepsilon_t$$

Where α_1 represents the short-run value and φ_1 represents the long-run value. The error term, represented by ECM, indicates the rate at which the model returns to equilibrium. The coefficient of the variable must meet the following criteria: it must be negative, significant, and less than 1 (Azam, Nawaz, & Riaz, 2019).

EMPIRICAL FINDINGS AND DISCUSSION

Summary or Descriptive Statistics

The findings of descriptive statistics are presented in Table 2. Descriptive statistics encompasses various measures such as the mean, median, range, and standard deviation, which provide valuable insights into the characteristics of a given data series. Based on the provided statistics, it can be observed that trade exhibits the highest mean value, while government expenditures demonstrate the lowest mean value. In relation to the standard deviation, inclusive growth exhibits the highest magnitude of variability, while health expenditures demonstrate the lowest degree of dispersion. In the spectrum of various series, it is observed that inclusive growth exhibits the highest range of data, while health expenditures demonstrate the lowest range. In addition to basic descriptive statistics, the analysis incorporates the results of the Jarque-Bera Test. Based on the statistical outcomes of this test, it is evident that none of the data series exhibit a normal distribution.

Table 2: Summary Statistics Analysis

Name of Series	Mean	Minimum	Maximum	Standard Deviation.	J-B Stat
EG	12178.2	7028.1	20391.5	4039.0	2.1911
HE	4.446	3.599	5.075	0.461	1.3550
GE	1.941	8.410	3.381	8.540	2.106
IR	2.367	-20.497	8.988	6.053	66.195
LF	74.459	71.410	77.200	1.881	2.222
TO	138.07	97.001	186.46	23.847	0.841
INF	105.45	46.990	177.30	48.400	2.771

*** shows P<0.05

Correlation Matrix

The correlation among all study variables is given in Table 3. All of the variables are found to be positively correlated with inclusive growth. Also the value of correlation among variables is less than 0.8 which indicate that multicollinearity does not exist in our data.

Table 3: Correlation Matrix

	EG	HE	GE	IR	LF	INF	TO
EG	1.00						
HE	0.763	1.00					
GE	0.982	0.823	1.00				
IR	0.152	0.078	0.129	1.00			
LF	0.311	0.585	0.475	-0.049	1.00		
INF	0.951	0.842	0.989	0.152	0.561	1.00	
TO	0.878	0.527	0.823	0.123	0.118	0.759	1.00

Unit Root Test

The study aims to examine the impact of macroeconomic and social policies on equitable growth in Vietnam. The selection of an appropriate technique for coefficient estimation requires the use of unit root or stationarity tests. We employ two widely used time series unit root tests, namely Phillips-Perron (PP) and Augmented Dickey-Fuller (ADF), to assess the integration order of the series. Table 4 presents a summary of the results obtained from both tests. The test results indicate that certain series exhibit level stationarity, while others demonstrate differenced stationarity. The ARDL approach is the most appropriate method for conducting empirical estimation.

Table 4: Unit Root Test Findings

Variables	ADF		PP	
	Level	first difference	level	first difference
EG	6.173	1.600***	5.493	-1.421***
HE	-1.614	-6.542***	-1.443	-7.765***
GE	-0.817	-5.049***	2.155	-5.108***
IR	-3.545***	----------	-3.509***	---------
LF	-1.364	-3.358***	-1.210	-3.321***
TO	-0.886	-4.325***	-0.943	-4.306***
INF	0.638	-2.712***	0.325	-2.592

Cointegration Test

After identifying the presence of a unit root, the subsequent step entails the identification of long-run cointegration among the various data series. The co-

integration test based on F-statistics is used to determine the upper bound value for the significance level. The null hypothesis of the F-test posits the absence of cointegration. Table 5 presents the results. Based on the bound test, a cointegration relationship exists between the independent variables and the dependent variable.

Table 5: ARDL Bound Results

Test Statistics	Value	Significance level	Level	First Difference	Decision
F-statistics	23.303	10%	1.99	2.94	Cointegrated
K	6	5%	2.27	3.28	
		1%	2.88	3.99	

After identifying the cointegration relationship among the study variables through the Bound test, the next step involves estimating the long-run relationship among these variables using the ARDL estimation approach. Table 6 presents the results. With the exception of trade openness, all variables have a significant impact on equitable or inclusive growth in the long run (either positive or negative).

Table 6: ARDL Long Run Estimation

DV (EG)	Coeff	t-stat	P-value
HE	2.964**	2.355	0.0567
GE	0.838***	22.48	0.0000
IR	2.307***	3.752	0.0095
LF	-2.163**	-15.54	0.0000
TO	0.9552	0.345	0.7413
INF	-2.945***	-12.53	0.0000
Cons	25.44***	18.44	0.0000

***=p<0.05 and **=p>0.05

Long-term research findings indicate that health expenditures have a substantial positive impact on long-term inclusive or equitable growth. This finding suggests that promoting social policies, such as health policies, is effective in achieving inclusive or equitable growth. This suggests that health expenditures or policies in Vietnam are effectively and equitably allocated among the population. It also suggests an improvement in the overall quality of healthcare services in Vietnam. Enhanced healthcare infrastructure, resulting in improved health conditions, facilitates individuals engaging in meaningful pursuits. Health and illness problems have a detrimental effect on productivity, hinder employment opportunities, and have a negative impact on the development of human capital. Health is crucial for achieving equitable or inclusive growth due to its significant impact on income and employment. Health expenditures improve life expectancy and mitigate lifestyle risk factors through the provision of preventive measures against life-threatening illnesses. Our results are consistent with the findings of James, Devaux, and Sassi (2017) and Zouhar, Jellema, Lustig, and Trabelsi (2021).

Furthermore, with regards to macroeconomic policies, the research also identifies the positive impacts of government spending and interest rates on inclusive growth in Vietnam. In a manner akin to social policy, macroeconomic policies have been identified as beneficial in fostering inclusive growth. An upward adjustment in the interest rate offers heightened motivation for investors, thereby generating additional employment opportunities across various sectors of society. Furthermore, the allocation of fiscal resources towards enhancing the quality of life through the provision of improved healthcare and educational facilities contributes to the accumulation of human capital among disadvantaged individuals in society. This, in turn, promotes greater equality in economic and social opportunities, resulting in enhanced and more equitable economic growth. Public infrastructure investments play a crucial role in enhancing the quality of life and alleviating poverty through the promotion of employment, productivity, and sustainable economic growth in the long term. The findings of Saiki and Frost (2014), Zouhar, Jellema, Lustig, and Trabelsi (2021), and Anand, Nizamani, and Nizamani (2019) align with the results obtained in our study, as previously reported.

Additionally, the study's findings indicate that inflation has a detrimental effect on inclusive growth over an extended period of time. The anticipation of this discovery was foreseeable, as inflation serves as an indicator of macroeconomic volatility. The inverse relationship between inflation and equitable growth suggests that inflation is linked to an increase in poverty levels due to a decrease in the overall rate of welfare improvement and a negative impact on income distribution. Low-income households are disproportionately affected by the increase in food prices due to their higher expenditure on food relative to their income and the limited availability of alternative options. Consequently, this segment of the population encounters a greater number of challenges as a result of the escalation in inflation. The present investigation aligns with the findings of Khan et al. (2016), Munir and Ullah (2018), and Anand, Nizamani, and Nizamani (2019), as reported in prior studies. Similarly, it has been observed that labour force participation has a detrimental effect on inclusive growth over an extended period of time.

The observed outcome is surprising, as previous research (Rammohan & Tohari, 2023; Schofield et al., 2012) has consistently demonstrated a correlation between an expanding labour force and a decrease in inequality. One potential explanation for this finding could be the uneven distribution of employment opportunities across various segments of society. Furthermore, it is apparent that gender discrimination is pervasive in various sectors of the economy in developing nations. The disparity in labour force participation between genders is linked to an increase in income inequality and poverty (Alekhina & Ganelli, 2021). The long-term findings of this study indicate that the impact of trade openness on inclusive or equitable growth is positive but not statistically significant. These results align with previous studies conducted by Aslam and Zulfiqar (2016) and Mir Jalili, Cheraghlou, and Safari (2018). This finding provides strong evidence that trade openness does not contribute to the development of developing

countries, primarily due to the presence of flawed microeconomic competition within their domestic markets.

Short run ARDL findings are provided in Table 7. First of all, ECT value is 0.729 indicating that model would revert to its long run equilibrium at a speed of 72%. ECT value fulfills all three conditions i.e., it is significant, less than 1 and negative. Like long run findings, short run results are also significant in statistical terms and have either positive or negative impact on green growth.

Table 7: Short Run ARDL Estimates

Data Series	Coeff	t-stat	P- value
Error correction term (ECM)	-0.729***	-2.183	0.009
D(HE)	5.310***	4.500	0.004
D(GE)	3.970***	25.22	0.000
D(IR)	2.395***	14.93	0.000
D(LF)	-3.025***	-19.01	0.029
D(TO)	13.038***	11.004	0.000
D(INF)	-18.435***	-7.412	0.000
Cons	0.436***	20.097	0.003

The short-term results indicate that all variables have a significant impact on equitable growth, whether positive or negative. In the short term, our findings indicate that health expenditures have a positive impact on inclusive growth. There is a positive correlation between health expenditures and a 5.3-unit increase. Similarly, government expenditures have been found to positively influence equitable or inclusive growth. In the short term, an increase in government expenditures leads to a 3.9-unit increase in inclusive growth. The short-term impact of interest rates is both significant and positive. There is a positive relationship between a one-unit increase in interest rates and a 2.3-unit increase in inclusive growth.

Consistent with previous research, it has been observed that both labour force participation and inflation have a substantial adverse effect on inclusive growth. Each additional unit in the labour force and inflation is linked to a decrease of 3.02 and 18.43 units, respectively, in inclusive growth. In contrast to the long run, the coefficient of trade openness is found to be positive and statistically significant. This suggests that a one-unit increase in trade openness is associated with a 13.03-unit increase in inclusive growth. After conducting short-run and long-run analyses, additional tests, such as post-estimation residual and stability diagnostic tests, are conducted to validate the findings. Table 8 presents the results, indicating that the model is unaffected by heteroscedasticity and serial correlation and exhibits normality of data. Additionally, the CUSUM and CUSUMQ plots of stability diagnostics exhibit conformity with the 5% significance level boundaries, suggesting the stability of residuals (Figure 4 and 5).

Table 8: Diagnostics Test Results

	Test-value	**Prob-value**
Serial Correlation	15.289	0.134
Heteroskedasticity Test	0.488	0.882
Normality Test	0.783	0.675
Ramsey RESET Test	0.883	0.417
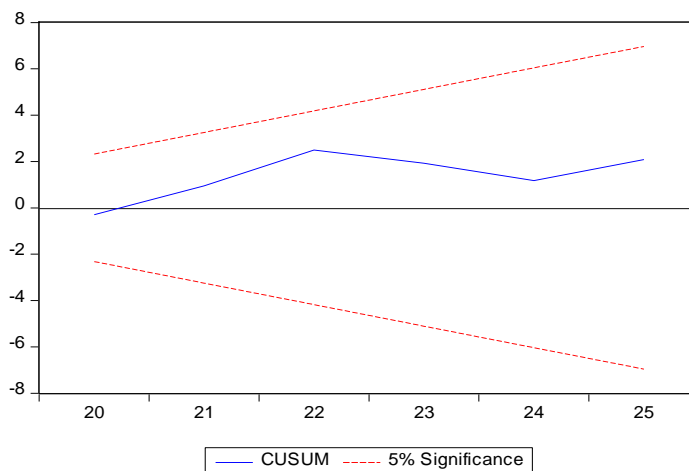
Figure 4: CUSUM plot for Residual Stability
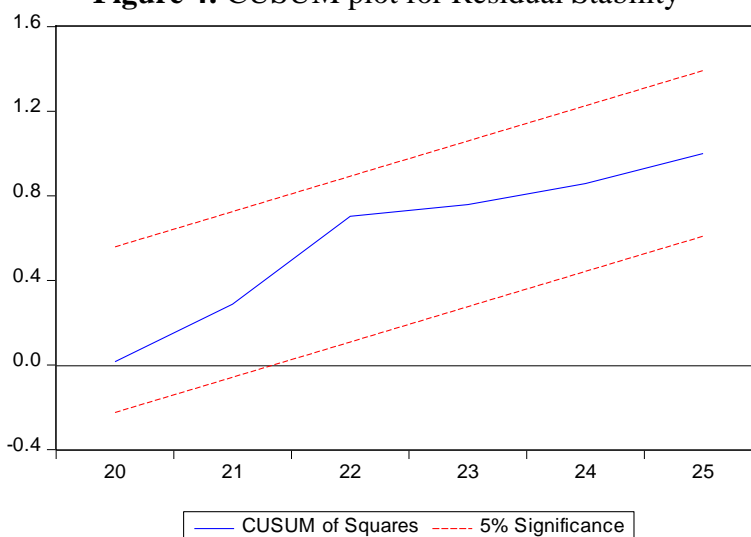
Figure 5: CUSUM Square plot for Residual Stability

CONCLUSION AND POLICY RECOMMENDATIONS

Equitable growth refers to the phenomenon of achieving higher economic growth while simultaneously reducing income inequality and poverty rates and expanding employment opportunities. Addressing poverty, unemployment, and inequality requires a range of

policies in addition to economic growth in order to achieve equitable growth. The objective of this study is to examine the impact of macroeconomic and social policies on inclusive growth, with the aim of reducing poverty in Vietnam. Time series data from 1998 to 2022 was collected for the purpose of this study from secondary sources. The initial unit root estimation revealed a combination of integration orders in the series. As a result, the researchers opted for the ARDL Bound Testing Approach as the suitable technique for both short-run and long-run estimation. The results of both short- and long-term estimations suggest that macroeconomic and social policies have a positive impact on inclusive or equitable growth in both the short and long term. The ARDL findings demonstrate the positive impact of trade openness and the negative impact of inflation and the labour force on equitable growth in both the short and long term.

The study suggests that effective utilisation of macroeconomic and social policies is recommended to reduce poverty and inequality and achieve inclusive growth. The primary focus of fiscal policy should be on the development of productive infrastructure facilities to enhance output and create employment opportunities. Re-evaluating monetary policy, particularly in terms of interest rate management, is crucial. Lowering interest rates can stimulate economic growth by providing investors with access to loans at reduced rates. Research findings indicate that government investment in social assistance programmes has effectively contributed to the promotion of inclusive growth. Hence, it is recommended that the local government formulate specific and fair policies for social assistance. Collaboration between the health ministry and other relevant ministries, such as education, housing, social protection, and income, is essential for enhancing health outcomes and reducing health and social disparities. These policies would contribute to achieving the goal of equitable growth in Vietnam.

As with any research, it is recommended that future studies address the limitations of this study. This study focuses on Vietnam as a case study to examine the impact of macroeconomic and fiscal policies on inclusive growth. Future research should explore the subject matter in various developing nations. Future studies should focus on studying the panel of developing countries. We recommend conducting future research to examine the relationship at the provincial level. In addition to examining linear relationships, future research should also investigate non-linear estimation in the subject matter.

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