Kashmir Economic Review, Volume 31, Issue 1, June 2022

Kashmir Economic Review
ISSN(P): 1011-081X, ISSN(E): 2706-9516
http://www.ker.org.pk

Trade Liberalization Policy Effect on Inequality and Poverty: A Developing Economy Case in Point

ABSTRACT

This study has employed Social Accounting Matrix (SAM) 2010-11 for the economy of Pakistan designed by Dorosh et al. (2015) to analyze the effects of trade liberalization on income inequality and poverty. Two experiments have been conducted to investigate the effects using the Computable General Equilibrium (CGE) Model. By applying a restricted trade policy (50% tariff) and free trade policy (0% tariff), the results have been concluded, which depicts that overall, the trade liberalization policy has positive effects on the economy of Pakistan. Exports, Household income, Consumption, and GDP have increasing trends. The simulations have a minor effect on income inequality. Poverty reduction has also been noticed. Consumption of a few commodities has declining trends. Fluctuations in savings, decrease in investment, and increase in imports are the defects of the trade liberalization policy. In the case of developing countries like Pakistan, this policy strongly affects the achieving reduction in income inequality as well as reducing poverty along with desired capital formation and remittances from abroad for economic growth in the long run.

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Keywords
Social Accounting Matrix (SAM), Computable General Equilibrium (CGE) Model, Trade Liberalization, Tariff

JEL Classification
C68, D63, E16, E21

Please cite this article as:
Moeen ud Din, G., Naqvi, H. A., Khan, M. A., Abbas, K. (2022). Trade liberalization policy effect on inequality and poverty: A developing economy case in point. *Kashmir Economic Review*, 31(1), 1-13.

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Author's contribution to the article: 1- Conceived and designed the analysis, 2- Reviewed and compiled the literature, 3- Collected the data, 4- Contributed data or analysis tools, 5- Performed the analysis, 6- Wrote the paper, 7- Financial support for the conduct of the study, 8-Other

1. INTRODUCTION

A common concern of most countries is whether trade with other countries should be restricted or free. How is a country's economy affected if liberalized foreign trade policies are used? In 1980, World Bank (W.B.) and International Monetary Fund (IMF) introduced a structural adjustment program. Many developing countries adopted this program. Open trade policies were the target of this program. Countries facing high debt-to-GDP ratios and large deficits in their current accounts used restricted fiscal policy to handle the situation. These countries also used currency devaluation strategies and trade openness policies as key policy factors to overcome these issues. Manufacturing industries are saved from competition to enhance import substitution, protection of the infant industry, and long-term welfare.

The general Agreement on Tariff and Trade (GATT) was established in 1947 based on three basic principles; all countries will be equally treated, non-tariff barriers on trade will be abolished and the disputes among nations will be resolved within the framework of GATT. The objectives of the GATT were to enhance the living standard of people, ensure the full employment level, increase real income and effective demand, optimum utilization of resources, and enhance world trade. However, it is pertinent to mention that GATT partially achieved these objectives and failed as a whole. This is the point from where the World Trade Organization (WTO) idea came forward. The distribution of power at the international level was the primary motto while creating WTO. It was a structural change when the GATT was shifted into WTO. Thus, the objectives of WTO were free world trade, full employment, and sustainable economic growth.

Pakistan has a large population. More than 225 million people are living there. That is why poverty is a complicated issue in this developing country. Moreover, disruption of economic policies, uncertain political circumstances, natural calamities, international economic ups and downs, and often cut off in Public Sector Development Programs have enhanced poverty. Frequent increases in indirect taxes and the use of privatization policy have also positive effects on inflation, further increasing poverty. COVID-19 is a new phenomenon decreasing economic activities at the world level and hence booming poverty. According to Asian Development Bank, the reforms initiated in 1990 increased poverty in Pakistan further. While making economic planning policies, those policies are used to enhance economic growth, but growth policy has increased poverty and income inequality. Moreover, poverty in rural areas is double that in urban areas (Akmal, 1994).

A Manila-based bank study reveals that wealth in Asia is increasing while income inequalities are also increasing. Asian Development Bank (ADP) has given two suggestions to overcome the issue of disparity in incomes. Firstly, targeted social expenditure policies should be adopted by the government. Secondly, the size of subsidies should be limited along with a broader tax base policy. Poverty and inequality reduction in developing countries including Pakistan through trade liberalization is a prime debate by the policymakers, academicians, and world organizations for achieving economic development and improving growth rate issues since the 1980s. The present study contributes the solution to reduce the gap between haves and have-nots by employing computable general equilibrium modeling on the most recent available social accounting matrix of the Pakistan economy.

2. LITERATURE SURVEY

Wang and Zhai (1998) published a paper that deliberates on the effects of government tax replacement policies and trade liberalization on the distribution of income in China. For analysis, the Computed General Equilibrium (CGE) model was used. The analysis results show that income inequality can be decreased by using tools of trade liberalization. The study also depicts that the economy's efficiency also increases. To what extent trade liberalization enhances the economy's efficiency depends on the government tax policies that it uses to balance the budget. If the government reduces tariffs, the government's revenues will decrease

significantly. So, the alternate sources of revenue are to be searched by the government. Otherwise, economic efficiency is affected. The study also reveals that poor people gain more than rich people in rural and urban areas by using trade liberalization policies.

In another study, Hosoe (2001) analyzed the trade policies of Jordan and their effects on its economy. A computed General Equilibrium (CGE) model was used. The study observed the effects of the Jordan Free Trade Agreement with the European Union and the Uruguay Round on its economy. The study found that implementing the Uruguay Round, there will be positive effects on the welfare of the people of Jordan. The implementation of the Free Trade Agreement with the European Union will also bring improvement to the economy. It was observed that the non-metal sector of Jordan would shrink due to liberalization. The study explored that Jordan's chemical and agriculture sectors would get expand. Moreover, Uruguay Round would cause an expansion in exports and imports of the country. Diversification of imports would get improved due to Free Trade Agreement. The Free Trade Agreement will also bring sectoral output changes to the whole economy, leaving behind the mining and textile sectors.

Similarly, Diao et al. (2003) conducted a study examining the impacts of WTO access on regional agricultural income in China. Using the social accounting matrix (SAM), the Computed General Equilibrium Model (CGE) was used for analysis. The study revealed that welfare would improve due to liberalization. But there will be an enhancement in inequality in income. Openness will affect the agriculture sector reversely. Farmers will get benefits if all kind of trade is liberalized. Income inequality between urban and rural areas would further increase. Moreover, those farmers who belong to rural and less developed areas of China will suffer even more. The government will have to keep a close eye on its policies to escape from the reverse effects of openness. The study also depicts that liberalization enhances the income of the non-farm sectors more than the farm sector. Farmers would focus more on cash crops, and non-farm sectors would generate more employment opportunities. It is more likely that those farmers who live in backward rural areas would come to traditional subsistence farming again.

Harrison et al. (2003) investigated the relationship between income inequality, poverty, and openness in Turkey during the same period. The Computable General Equilibrium (CGE) model for the small open economy was used to analyze the relationship. The study depicts that trade liberalization has positive effects as far as welfare in aggregate is concerned, but the most low-income group of the economy would lose. Income inequality and poverty would further deepen. Two approaches were used to overcome the issues. Firstly, those who lose due to openness policies might be supported financially. The second way to handle the situation was to equalize the benefits of trade openness, foreign trade policy reforms to a limited extent might be used. In both cases, the occurrence of efficiency costs seems a must. To minimize the efficiency cost, the minimum cost combination may be used by policymakers. The study also explored that the findings mentioned above are conditional and subject to the availability of relevant data and models.

Further, Naude and Coetzee (2004) studied inequality and globalization in South Africa. To evaluate the causes and status of inequality in income, the Computed General Equilibrium (CGE) model was used. Different independent variables such as government, investors, households, exporters, importers, and industries are included in the study. To an astonishing level, this study has similar results to a survey conducted on firm and household levels in South Africa. The due place has been given to different economic shocks that can affect economic activities. The paper concluded that if tariffs are cut, and import competition is raised, economic growth increases. Lower wage rates are not accepted by labor which reveals that labor is expensive. So, to lower the cost, capital would be substituted with labor, an expensive factor. This will result in low employment opportunities. It means real wages would be high, increasing demand and consumption levels. However, the study shows a significant increase in exports, ultimately booming employment opportunities, and consumption.

Bardhan (2006) investigated a causal relationship between rural poverty and globalization. CGE model and GATP (Global Trade Analysis Project) model were used for analysis. The study explored how trade openness affects the living standard of people in less developing countries. The paper also investigated how international trade and long-term capital flows. Rural poor people face many problems due to openness. At the same time, trade openness creates many opportunities and facilities for poor people. Depending on the political and economic conditions of a country, the share of the poor people is determined by the policies of trade openness. So, sorting out the net impacts of openness is a complicated issue. The study reveals that developing countries cannot resolve their economic problems by using anti-openness trade policies. However, this opening up the economy for the rest of the world should be supported by suitable and coordinated economic policies to reap the real benefits of openness.

For the economy of China, Hertel and Zhai (2006) conducted a study showing the relationship between rural-urban inequality and trade liberalization. A household-disaggregated Computed General Equilibrium (CGE) was used to analyze the relationship. Factor market reforms and their impact on the distribution of income and urban-rural inequality were observed. Under the free trade regime, how do factor and product markets work together? Reforms in the rental market increased off-form mobility, and reforms in rural land caused a sharp decline in income inequality in urban-rural areas. Factor market reforms and trade openness increase the economy's efficiency, hence causing a reduction in income inequality. The study also depicted that labor moved out of the agriculture sector towards the manufacturing and services sectors due to trade openness. But finally, income inequality remained unchanged despite these changes.

In another analysis, Atolia (2007) conducted a study on Latin America to investigate the relationship between increasing wage inequality and trade openness. The General equilibrium CGE model (3×3×3) was used for analysis purposes. The study says that trade openness's long- and short-run effects differ regarding wage inequality. HOS theory says that wage inequality declines in the long run. Due to two reasons, wage inequality can rise in the short run. One reason for wage inequality is the ups and downs in the import sector. The second reason is a change in the capital-skill ratio in production. Fluctuations in the import and other sectors of the economy in the short run cause temporary capital formation. Real wages of skilled labor would increase. In the long run, the fundamentals of HOS theory would prevail over the short-run effects. It is pertinent to mention that the short-run effects of trade openness do not match with the HOS model.

Similarly, Acharya and Cohen (2008) conducted a study on Nepal to check the relationship between household welfare and trade openness. A computed General Equilibrium (CGE) model was used for analysis. This CGE model is different from the neo-classical CGE model. This model used exports and imports elasticity coefficients, inducted income distribution, and household groups. The study noted that a high growth rate would be yielded if exports and imports openness are integrated. However, this policy does not support the poor income class of the economy. If a flexible exchange rate system is adopted, it will result in more reverse effects on income distribution than a fixed exchange rate system. The study also concluded that the gradual implementation of openness policies has better economic results than the fast implementation of liberalization policies. The study also suggests that exchange rate openness and trade openness should not be implemented simultaneously. Only then the productive and efficient economic results can be produced.

Khan (2008) conducted a study to check the effects of trade openness policies in agriculture and non-agriculture sectors in South Asia. A macroeconomic computable general equilibrium (CGE), a compact, and dualistic model was used to check the effects of trade liberalization on poverty reduction. The model is framed on the pattern to adjust largely populated economies having large urban and rural low-income groups at the same time in South Asia. CES production function and the Harris-Todaro migration model were used as a tool for the macroeconomic model. The study explored that by having enough information about the labor market and households, the dualistic model can check a few impacts of liberalization on

reducing poverty. The study showed that trade openness reduces poverty at the macro and micro levels. But for this purpose, integrated policies should be adopted. On the other hand, the study says that trade openness reduces poverty to a minimal level.

In the same year, Rutherford and Tarr (2008) conducted a study in Russia to check the impacts of trade openness on household productivity. To investigate the effects of trade openness on income distribution and poverty Computed General Equilibrium (CGE) model was employed. The study included a survey of Russian-based 55,098 household agents. Foreign Direct Investment (FDI) was also included in the service sector. For the validity of the results, Dixit Stiglitz's endogenous productivity effects were also checked to examine the imperfect competitive goods and services markets. Along with the use of a suitable model, it is necessary to diversify the households to see the factual impacts of trade openness. In a medium period, all the households will benefit from the study's trade openness. Endogenous productivity level and Free flow of FDI affect the household gain distribution as well.

For Argentina, Cicowiez et al. (2010) investigated the effects of trade liberalization on poverty and income inequality. World Bank's LINKAGE model, Computed General Equilibrium (CGE) model, and Micro Simulation were used to check the impacts of trade openness on poverty and income inequality. Taxes were the special focus of the study. Argentina exercised export taxes on its agricultural exports in different periods, predominantly with an agricultural export base. The study explored that poverty and income inequality would decline in Argentina if coordinated openness policies were adopted in foreign trade. The study also depicted that the same kinds of results would occur in all sectors of the economy, including the industrial sector. The study also concluded that if openness policies are adopted only in the agriculture sector, there will be no effect on poverty and income inequality. Such a policy may worsen the present status even.

On the same lines, Raihan (2010) conducted a study in Bangladesh to check the effects of trade openness on welfare and poverty. For analysis purposes Computed General Equilibrium (CGE) model coupled with the household consumption survey data was used. In particular, the study was interested in investigating the impacts of openness on poverty and macroeconomic welfare. Two different poverty lines were used for urban and rural households. These poverty lines were based on rural and urban Consumer Price Indices. The study explored that the long-run impacts of removing tariffs differed from those in the short run. In the short run, openness would increase poverty, thus declining welfare. However, long-run results are quite different. In the long run, poverty would decline hence enhancing welfare gains. Resources would be allocated efficiently, and different sectors of the economy would expand. Long-run impacts of openness would prevail over the short-term impacts, thus increasing welfare and reducing income inequality.

Again, Acharya et al. (2012) investigated the impacts of trade openness on income inequalities in Nepal. To analyze the facts Computable General Equilibrium (CGE) model was used. The behavior of exports and imports was checked under different exchange rate systems separately applying liberalization policies. It was found that trade openness became a cause of reallocating commercial services to agriculture and industry sources. The study also concluded that inequality between low-skilled labor and high-skilled labor wages increased. Moreover, the increase in the wages of skilled labor in the industrial sector was greater than in the other sectors. After the reallocation of resources to the industrial sector using openness policies, classical trade theory seems to fail the study concluded. The study also explored that rich households enjoy more benefits from trade openness than poor ones. However, if a fixed exchange rate is adopted, then the lowest income group of society gets more benefits. The study suggests that trade openness may be used to overcome poverty dynamically.

Ojha et al. (2013) studied income inequality, innovation, and growth. For analysis purposes Computed General Equilibrium (CGE) model was used. The study investigated the three components of economic growth. Physical capital, human capital, and technological progress are included among these three

determinants. The study concluded that when physical capital is formatted, as a result, economic activities grow, and income inequality decreases. But in the long run, the economic growth rate decreases, and income inequalities increase. The study also concluded that technological growth is fundamental for sustainable growth with an increase in physical and human capital. The study reveals that the long-run and medium-term expansionary physical capital investment policies are the opposite. If a human and physical capital formation is not accompanied by technological investment, economic growth may occur, but income inequalities worsen.

Recently, Utilizing the CGE method, Moeen-ud-Din et al. (2020) investigated the impact of income tax on the macroeconomic variables of Pakistan. It concluded the favorable impact of an increase in income tax on Consumption, GDP, investment, the welfare of all households, imports, and exports. In another study, the same authors examined the effect of free trade on the same indicators using the CGE model in a small open economy and concluded positive effects. Moeen-ud-Din et al. (2021a) investigated the effect of reducing the sales tax on Pakistan's economy, poverty, inequality, and welfare and found positive results in the study. Similarly, Moeen-ud-Din et al. (2021b) analyzed the impact of exports on Pakistan's economy by employing the same modeling technique and concluded positive comments on all the macro indicators, including an improvement in welfare and a reduction in poverty as well as inequality.

3. DATA AND METHODOLOGY

To evaluate the impacts of trade openness on different sectors of the economy, we used Computable General Equilibrium (CGE) approach. There are two reasons to select this modeling. Firstly, the whole of the economy is affected by trade openness. Capturing all the relevant effects of trade liberalization on different sectors of the economy, the use of the CGE model is effectively helpful. Secondly, using the CGE model in Pakistan for the study will be a comprehensive contribution to recommending a policy for reducing income inequalities and poverty.

For analyzing different policies in Pakistan, the CGE model has been used in a few studies. Naqvi (1998) constructed a CGE model using SAM for 1983-84. Siddiqui and Iqbal (1999) developed the first CGE model in Pakistan. The household sector was aggregated in this model. Afterward, Siddique and Iqbal extended the model by the disaggregating household sector. By aggregating the household sector CGE model was developed by Naqvi et al. (2010). So far, work on the CGE model has not got its due concentration in Pakistan. However, gradually in Pakistan, the work on CGE Models increased. Siddiqui and Iqbal (2001) formulated a CGE model to investigate the effects of a decline in tariffs on the distribution of income. This model was based on SAM for the years 1989-90. To investigate the effects of depreciation on the exchange rate, Dutch Disease Vos applied the CGE model in Pakistan.

3.1. Data Sources

Data has been borrowed from SAM 2010-11 for Pakistan prepared by Dorosh et al. (2015) for this study. Before the commencement of the study, it is the most updated SAM. Lofgren et al. (2002) and Naqvi et al. (2010) pattern CGE model formulated for Pakistan. As the CGE model is based on the framework of mathematical equations, the behavior of economic agents has been specified mathematically. Optimized behavior of economic agents is assumed by neoclassical. The producers maximize profit, and consumers optimize utility. These assumptions work as the base for the equational framework. The behavior of major economic agents has been specified in mathematical functional form. Among these agents, government, consumers, factors of production, producers, and the rest of the world are included.

Dorosh et al. (2015) developed SAM 2010-11 was organized by IFPRI for Pakistan. This most recent SAM consists of 64 activities, 63 commodities, 12 factors of production and 16 types of households, and 17 other

accounts. This SAM has portrayed a semi-input-output multiplier model. Data analysis and its implications vary as per the requirement of the study.

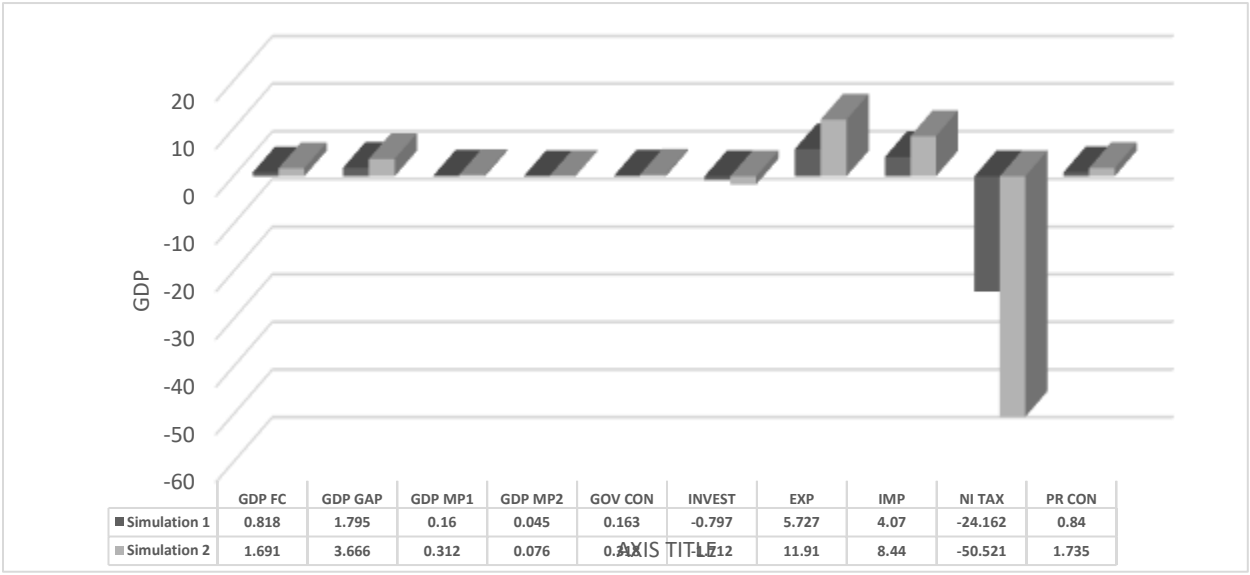
A Social Accounting Matrix (SAM) is divided into Micro- and Macro-SAM. Micro-SAM shows a detailed description of sectors and institutions, while Macro-SAM shows aggregate data. Macro-SAM shows the overall picture of the economy without going into detail about commodities, households, factors, activities, and other accounts.

4. INTERPRETATIONS OF RESULTS

4.1. Macro Level

If a 50% tariff is imposed, the GDP of Pakistan at a fixed cost shows an increase of 0.818%. However, if the trade is completely liberalized, GDP increases by 1.691%. At a 50% tariff, government consumption is 0.163%, while at zero tariffs, government consumption jumps to 0.318%. It reflects a more than double increase. At zero tariff, though there is an increase in GDP, investment has a declining trend. At a 50% tariff, investment has declined by 0.797%, while at zero, investment has declined to 1.712%. The study reveals that fully liberalized trade is beneficial for Pakistan. If tariff exports of Pakistan restrict trade are showing an increase of 5.727% while in fully free trade exports jump to 11.910% showing more than double increase. However, imports are affected reversely by trade openness. In regional trade, imports show a deficit of 184.79%, while the free trade deficit increases to 383.169%.

The study noted that government revenues decline if free trade policies are adopted. If a 50% tariff is imposed on trade, tax collection at the national level declined by 24.162%. If tariffs are decreased to zero, tax income revenue declines to 50.521% showing a drastic decrease. There is a need to increase tax revenues through alternate sources in this situation. The study also reveals that by adopting free trade policies, the budget deficit will increase (see Figure 1).



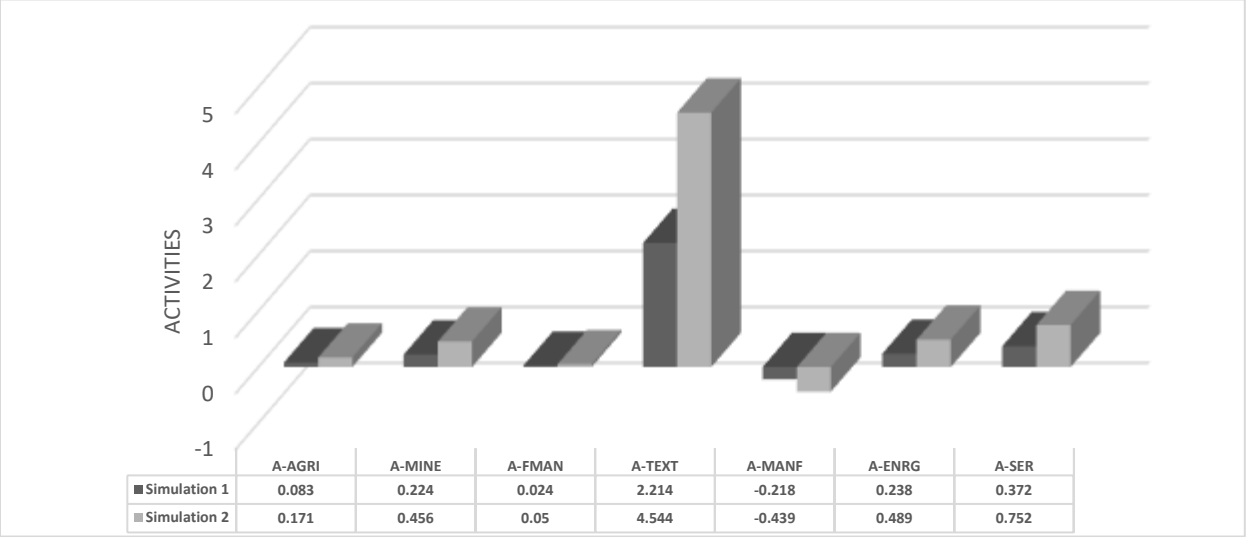
	GDP FC	GDP GAP	GDP MP1	GDP MP2	GOV CON	INVEST	EXP	IMP	NI TAX	PR CON
Simulation 1	0.818	1.795	0.16	0.045	0.163	-0.797	5.727	4.07	-24.162	0.84
Simulation 2	1.691	3.666	0.312	0.076	0.318	-1.712	11.91	8.44	-50.521	1.735

Figure 1: Nominal GDP Data (National Income Accounts) [*Source: SAM for Pakistan by Dorosh et al. 2015*]

4.2. Domestic Output

In free trade, domestic output increases, the study shows. Initially, C-AGRI (agricultural commodities) shows a growth of 0.083%, which increases to 0.171% if the trade is liberalized with the rest of the world. However, it is a minor growth in C-AGRI. If a 50% tariff is imposed, the C-Mine (mining commodities)

sector growth rate is 0.224%, increasing to 0.456% at zero tariffs. Openness policies enhance C-FMAN (food manufacturing) sector by approximately double. The C-Text (textile commodities) sector also reflects more than double growth during the free trade regime. By removing tariffs from trade, C-MANF (manufactured commodities) sector becomes worsened. At 50% tariffs, the C-MANF sector declines by 0.218%, while this decline increases to double if the trade is fully liberalized. However, C- ENRG (engineering commodities) sector shows visible growth from 0.238% to 0.489%. C-SER (services) growth rate increases from 0.372% to 0.752% if tariffs are fully removed (see Figure 2).



	A-AGRI	A-MINE	A-FMAN	A-TEXT	A-MANF	A-ENRG	A-SER
Simulation 1	0.083	0.224	0.024	2.214	-0.218	0.238	0.372
Simulation 2	0.171	0.456	0.05	4.544	-0.439	0.489	0.752

Figure 2: Level of Activities [*Source: SAM for Pakistan by Dorosh et al. 2015*]

The study reveals that except C-MANF sector, all other sectors grow in open trade. During free trade, the sale of different products in the C-AGRI sector and C-FMAN sector has a trend of decline, whiles sale in the C-MANF sector has relatively improved. The study depicts those prices of different commodities have a trend of increase in open trade, reflecting an increase in the general price level. The study also noted that prices of the C-MANF sector have a trend of decline. It means that a decline in the growth rate of the C-MANF sector is attached to a decline in prices.

4.3. Income of Household

Open trade increases the income of all the households belonging to different sectors of the economy. Except for H-MF, H-NFQ1, and H-UQ2, the prices of all other household products have increased. Notably, free trade increases the income of all households whether the prices of their products have increased or decreased.

4.4. Consumption and Savings

The study shows that the consumption of households has increased along with an increase in MPS. A visible boost (4 times) in the savings of HMF was observed. In regional trade, savings of H-SF had a negative growth which changed into growth in free trade, showing a growth of 3.79%. However, at a 50% reduction of import tariff, savings of H-NFQ1 were growing at 1.183%, which changed into negative growth of 2.012% in free trade. There was a declining trend in savings of H-NFOTH and H-UQ1 households during the free trade regime. The study reveals that these are the most suffered households in the open trade regime.

MPS of H-UQ2 households, which was 8.426% during restricted trade, declined to a negative growth rate of 2.16%. Savings of H-UOTH have negative growth trends both in restricted and free trade. The study noted visible ups and downs in the savings of different households in open trade. Except for C-ENRG.H-MF, C-ENRG.H-SF, C-ENRG.H-OF, C-ENRG.H-AGW, and C-ENRG.H-UOTH, consumption of all other commodities increased during open trade.

4.5. Welfare of the Households

The study noted that all kinds of households enjoy welfare in free trade. At zero tariff, the utility of all households increases. Relatively more welfare was derived by H-MF, H-NFOTH, H-NFQ1, and H-UOTH. Due to negative CPI (Consumer Price Index), H-MF, H- NFQ1, and H-UOTH derived more utility. Compensation Variation (CV) also confirms the results that the welfare of the whole economy becomes better in free trade (see Figure 3 and Figure 4).

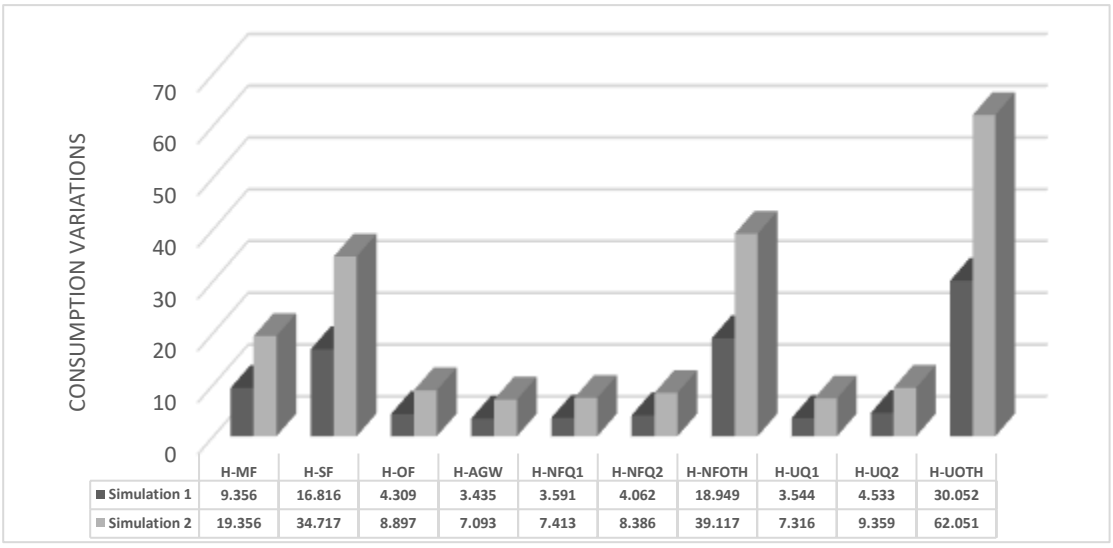


Figure 3: Consumption Variation of Households [*Source: SAM for Pakistan by Dorosh et al. 2015*]

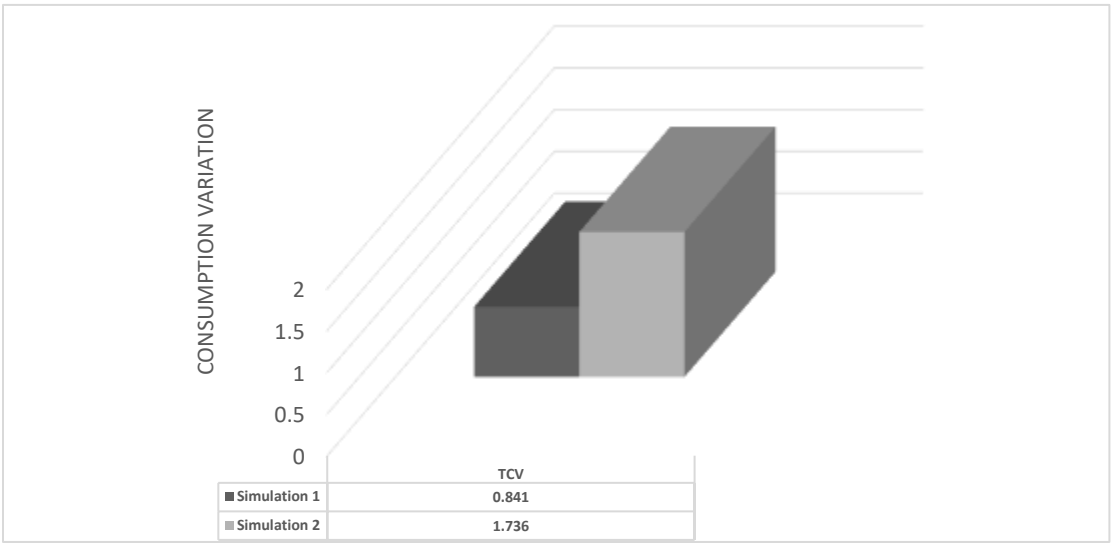


Figure 4: Economy-Wide Consumption Variation [*Source: SAM for Pakistan by Dorosh et al. 2015*]

Moreover, Theil-L and Hoover's index also show improvement in the welfare of people. However, the Theil-T index indicates that trade liberalization does not affect welfare. The study has observed poverty by relative measures. It means that poverty has been measured by consumption, income, and welfare indices. Improvement in consumption, income, and welfare indicates that poverty decreases in free trade.

4.6. Balance of Trade

Exports of all commodities indicate a visible increase in the free trade regime. Imports of all commodities have also increased trend. The study reveals that imports of the C-MINE sector showed a remarkable increase in free trade, negatively in regional trade. An increase in exports and imports shows growth in consumption and the economy. However, the C-ENRG sector shows undetermined results. A constant rate increase in the prices of exports has been observed while the prices of imports have variations. The prices of C- AGRI, C-MANF, C-FMAN, and C-SER sectors have a visible declining trend. Prices of C-MINE and C-TEXT sectors have an increasing trend. Comparatively, the prices of exports have increased at a constant rate while the prices of some of the imports have decreased while the prices of some of the imports have an increasing trend. So, it is concluded that trade liberalization improves BOT (see Figure 5, Figure 6).

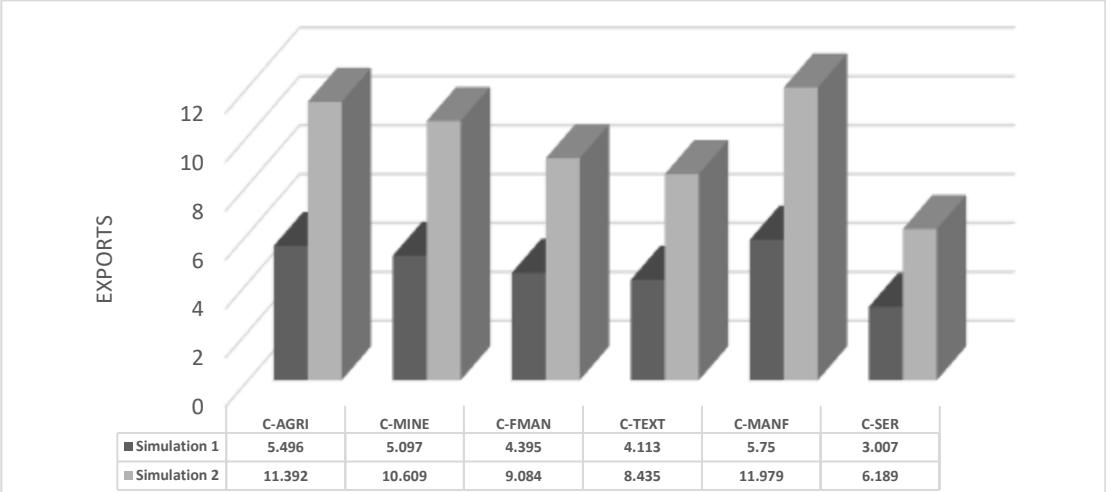


Figure 5: Quantity of Exports of Commodities [*Source: SAM for Pakistan by Dorosh et al. 2015*]

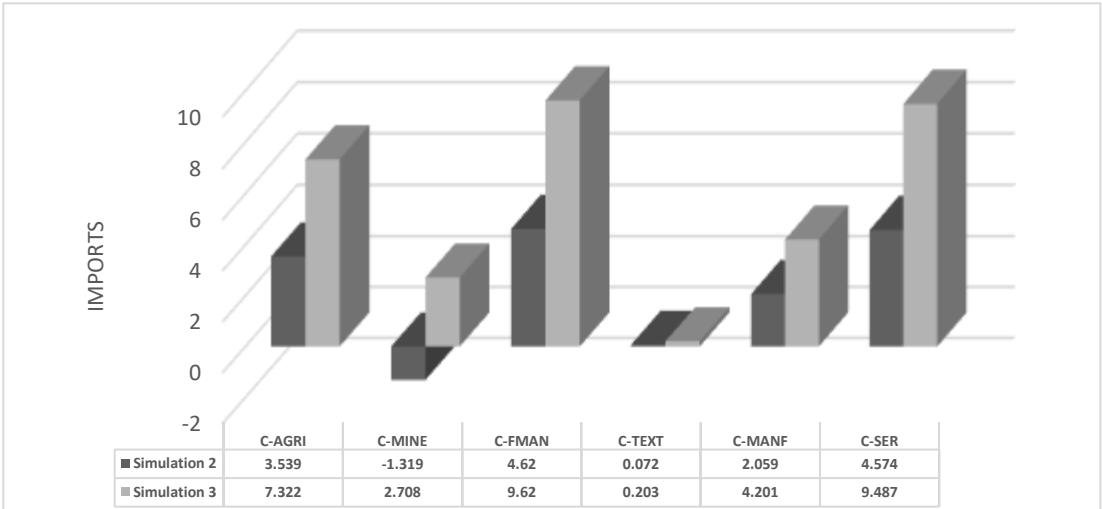


Figure 6: Quantity of Imports of Commodities [*Source: SAM for Pakistan by Dorosh et al. 2015*]

4.7. Income Inequality

If a 50% tariff is imposed, all the indexes, including Hoover, Theil- L, Theil-S, and Theil-T indexes, indicate income inequality remains unchanged. At zero-tariff, Theil-T, Theil-S, and Theil-L indexes show a slight decrease in income inequality. On the other hand, the Hoover index indicates that a fully liberalized economy, even, does not affect income inequality (see Figure 7).

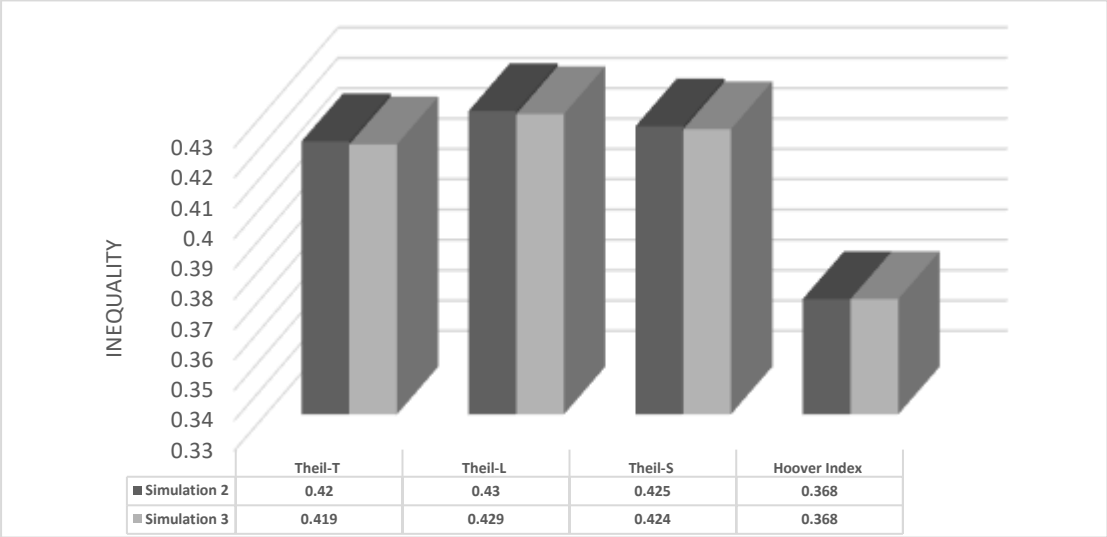


Figure 7: Indices of Inequality [*Source: SAM for Pakistan by Dorosh et al. 2015*]

5. CONCLUSION

SAM 2010-11 has been used in this study. SAM 2010-11 consists of seven goods, seven activities, ten kinds of households, three factors of production, and four kinds of institutions (ROW, government, saving and investment, and stock of capital). The study depicts that liberalized economy would enhance government consumption, exports, and the GDP of Pakistan. Except for the C-ENRG sector, the domestic output of all sectors would increase. Trade liberalization also enhances the income of all households, except for C-ENRG, H-MF, C-ENRG.H-SF, C-ENRG.H-OF, C-ENRG.H-AGW, C-ENRG, and H-UOTH, consumption of all commodities increases. Trade liberalization also enhances the welfare and utility of the people. Improvement in BOT has also been noted. According to some indexes used in the study, trade liberalization also decreases income inequality. The study concludes that the economy of Pakistan would get improved by trade liberalization. The study also noted some negative impacts of trade openness. The study also noted a reduction in investment and fluctuations in savings during trade openness. Effects on BOP are also reversing due to an increase in imports. The budget deficit will also increase due to a reduction in government revenues.

The deficit of the balance of payments (BOP) can be overcome by increasing exports, as the study reveals. In the case of Pakistan income of the households will increase, indicating that employment opportunities will increase if free trade policies are adopted. Trade liberalization will increase welfare and decrease income inequality in Pakistan. As our study investigates these two issues, these are very important results. Poverty would decline as welfare increases through trade liberalization. Poverty is a major issue in the economy of Pakistan. Poverty reduction will certainly decrease other social evils existing in the society of Pakistan. The gap between the rich and poor classes will reduce by decreasing income inequality in Pakistan.

The study concludes that trade openness has advantages and disadvantages for Pakistan's economy. Investment decreases due to the liberalization of trade. The budget deficit increases due to a fall in government revenues. The BOP deficit will also increase due to an increase in imports. Savings will remain prey to fluctuations. Due to all these issues economy will remain unstable, the study concludes. The literature coated indicates the significance of trade liberalization in affecting inequality and poverty. Using the most available recent social accounting matrix and applying computable general equilibrium techniques for the economy of Pakistan the results indicate positive influences on various macroeconomic indicators including the case in point, which leads the economy to grow by lowering the income inequality among different types of the households as well as the general poverty.

6. POLICY RECOMMENDATIONS

Based on the analysis, the study suggests that the gradual implementation of trade openness policies should be adopted rather than one jump adoption. This will be helpful to deal with the problems arising from openness policies. Trade openness enhances imports. To overcome the increasing deficit in the balance of payment (BOP), alternate tools to cut imports should be adopted. Applicable interest rate policies and a better atmosphere for external and eternal investors should be implemented to overcome the shortfall in investment due to trade openness. For the economy's stability, ups and downs in savings should be covered through appropriate measures. As trade openness reduces government revenues, alternate tools to increase taxation should be adopted to cover the budget deficit. Pre-planning for the implementation of openness policies is necessary to avoid the disadvantages of trade openness. The trade liberalization policy in developing economies like Pakistan would create the buying ability of the agriculture as well as industrial inputs which results in increased economic activities, employment opportunities, incomes, savings, investment, and all other macroeconomic variables leading to further multi-time increases towards sustainable economic development and growth.

Acknowledgment

We would like to express our sincere gratitude to the editorial board of Kashmir Economic Review and the reviewers of our article for their insightful comments and valuable feedback. Their careful attention and critical evaluation of our work have greatly improved the quality and clarity of our research. We are especially grateful for the time and effort they have devoted to providing constructive feedback, which has helped us to refine our arguments and ideas. Their expertise and dedication to Trade Liberalization Policy are truly admirable, and we feel privileged to have benefited from their guidance. We also appreciate the professionalism and efficiency of the editorial team, who have made the publication process smooth and enjoyable. Thank you once again for your invaluable support and assistance.

Funding Source:

This work was not supported by any specific funding, and the author(s) declare no conflicts of interest related to this research.

Conflict of Interests:

We believe that transparency and honesty are fundamental principles in scientific research, and we are committed to upholding these principles in our work. Therefore, we declare that no competing interests exist that could affect the impartiality and validity of our research findings.

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