

**TRADE LIBERALISATION IN SOUTH ASIA:
IMPACT ON TRADE AND INCOME DISTRIBUTION
IN A MULTI-COUNTRY CGE MODEL
FOCUSING ON THE SRI LANKAN ECONOMY**

**A thesis submitted for the degree of Doctor of Philosophy of the
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By

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Dedication

This thesis is dedicated to my parents who have presented me the opportunity of an education from the best institutions and help throughout my life.

ABSTRACT

In 1995, the seven South Asian countries: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, instigated a framework for region-wide integration under the South Asian Preferential Trading Agreement (SAPTA). Subsequently, the member countries agreed that SAPTA would take steps towards transformation into a South Asian Free Trade Area (SAFTA) by the beginning of 2006, with full implementation completed by 31 December 2015. The momentum towards regional preferential trading arrangements and greater regional economic integration raises many important issues for the individual countries and for the South Asian region as a whole; the region has second largest incidence of poverty in the world next to Sub-Saharan Africa. Even though the South Asian Association for Regional Co-operation (SAARC) members initiated regional economic initiatives in 1995, intra-regional trade still stands at an extremely low level, below five per cent even after a decade or so. Hence, it is important to evaluate the economic impacts of SAFTA relative to alternative trade policies to determine which policies boost intra-regional trade and best deliver increased welfare to citizens, thereby helping to alleviate income disparities and poverty in the region. This study does so with a particular emphasis on the income inequality and poverty effects of trade liberalisation in South Asia on households in Sri Lanka.

A static multi-country computable general equilibrium model for South Asia (SAMGEM) is formulated by incorporating a multiple household framework into the Global Trade Analysis Project (GTAP) model. The database consists of household survey data of the respective South Asian economies and version 7 of the GTAP database which reflects the 2004 world economy. Three trade policies are

investigated: SAFTA, South Asian customs union and unilateral trade liberalisation in South Asia. The model was set up to capture the short-run and long-run implications of different trade policy options for South Asia. The model is also formulated by endogenising the monetary poverty line, based on cost of basic needs approach, to capture the poverty impacts of trade reforms in South Asia. A non-parametric extended representative household agent approach is used to estimate the income inequality and poverty effects of trade liberalisation in South Asia on households in Sri Lanka by using micro household survey data. For this part of the analysis, the study has used the Distributive Analysis/Analyse Distributive (DAD) programme.

The findings revealed that, amongst the different trade policy options considered, unilateral trade liberalisation ensures the highest welfare to all South Asian members followed by the customs union (with the exception of Sri Lanka) and the SAFTA. Furthermore, the results indicate that overall household income will increase in all South Asian countries in response to trade liberalisation (again except in Sri Lanka under the customs union). Poor households gain from increased unskilled labour income while richer households gain more from capital and skilled labour. However, it is likely that trade liberalisation would lead to reductions in government revenue in all South Asian countries (apart from India and Pakistan under the SAFTA and Sri Lanka under the customs union), which in turn may affect the overall welfare of the citizens in respective economies. It also reveals that there is a reduction in the flow of government transfers to all household groups, and this reduction is greater in rural households as they rely more on government transfers. The poverty and income equality analysis for the Sri Lankan economy suggests that poverty is predominant in the rural and the estate sectors and Sri Lanka can achieve a significant progress towards poverty reduction as a result of implementing trade reforms.

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AGE	Applied General Equilibrium
APA	Asia Pacific Trade Agreement
BBS	Bangladesh Bureau of Statistics
BIMSTEC	Bangladesh, India, Myanmar, Sri Lanka, and Thailand Economic Cooperation
BOI	Board of Investment
CCPI	Colombo Consumer Price Index
CDE	Constant Difference Elasticity
CES	Constant Elasticity of Substitution
CFS	Consumer Finance and Socio-Economic Survey
CGE	Computable General Equilibrium
CPI	Consumer Price Index
DAD	Distributive Analysis/Analyse Distributive
DCS	Department of Census and Statistics
EEC	European Economic Community
ERH	Extended Representative Household
EV	Equivalent Variation
FBSP	Federal Bureau of Statistics of Pakistan
FDI	Foreign Direct Investment
FEMA	Foreign Exchange Management Act
FERA	Foreign Exchange Regulation Act
FTA	Free Trade Agreement
GAMS	General Algebraic Modelling System
GATT	General Agreement on Tariff and Trade
GEMPACK	General Equilibrium Modelling Package
GTAP	Global Trade Analysis Project
HDI	Human Development Index
HIES	Household Income and Expenditure Survey
ICP	International Comparison Project
ICT	Information and Communication Technology
IGA	Inter-Governmental Group

LDCs	Less Developed Countries
LES	Linear Expenditure System
MDGs	Millennium Development Goals
MFN	Most Favoured Nation
MS	Micro Simulation
MPCE	Monthly Per capita Consumer Expenditure
NAMA	Non-Agricultural Market Access
NLSS	Nepalese Living Standards Survey
NSSO	National Sample Survey Organisation
NTBs	Non Tariff Barriers
OECD	Organisation for Economic Cooperation and Development
OPL	Official Poverty Line
PSU	Primary Spending Units
QRs	Quantitative Restrictions
RBI	Reserve Bank of India
RHA	Representative Household Agent
PTA	Preferential Trading Agreement
SAARC	South Asian Association for Regional Cooperation
SAFTA	South Asian Free Trade Agreement
SAM	Social Accounting Matrix
SAPTA	South Asian Preferential Trading Agreement
SSA	Systematic Sensitivity Analysis
SSU	Secondary Sampling Units
TOT	Terms of Trade
TTRI	Trade Tariff Restrictiveness Index
UNCTAD	United Nation Conference on Trade and Development
WTO	World Trade Organisation

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