CHAPTER 1: INTRODUCTION

1. Introduction

1.1. Background of the Research

The international trade is relevant for a multitude of questions in the economic research, since international dependency influence most economic variables of a country. In this regard, international trade has become an important factor in determining national income. To get higher income and growth, economies accepted globalization and liberalized country's rules and regulations. Since then, the role of General Agreement on Tariffs and Trade (GATT) in 1947 and World Trade Organization (WTO) in 1995 are made to serve as a multilateral institution who promotes free and fair trade and give all the member countries a platform of dispute settlements related to trade and other issues of trade.

In the recent years, regionalism has grown as an alternative to multilateralism system. Regionalism has played a vital role in country's national income and growth in recent times especially after WTO formation in 1995. There has been a significant growth in both the overall numbers of regional institutions and in the range of their activities over the last half century. Various examples of regionalism became popular in Europe, US and Asia and these agreements fundamentally altered the world trade landscape in the name of European Union (EU), North American Free Trade Agreement (NAFTA) and Association of South East Asian Nations (ASEAN).

Under the article XXIV of the GATT 1994 and Article V of the General Agreement on Trade in services (GATS) allow WTO member to depart from the Most Favored Nation (MFN) rule to grant more favorable treatment to their trading partners within customs unions or a free trade area without extending such favorable treatment to all WTO members, subject to certain requirements. There has been corresponding interest in the study of regionalism, and many studies indicate that the regionalism has become an important and established feature of world trade and politics. The growth of regionalism against multilateralism is the failure of multilateral trading system inability to provide quick and acceptable solutions to the problems encountered by WTO member countries over a long period of time.

Concept of Regionalism

There have been many attempts by different scholars to define regions and regionalism. The summary from various studies available in the review of literature (Chapter 2) who defines geographical proximate and interdependent states and regionalism as an attempt to formal cooperation between such states. There are many concepts available in the literature related to regional integration, but for better and deeper understanding requires basic definitions of widely accepted terminologies by researchers and policymakers. There are four types of regional integration - The first form is Preferential Trading Agreements (PTAs) where preferences are extended to few countries and non-members of the agreement are discriminated against from this favour. Second form is Free Trade Agreements (FTAs) in which trade barriers among members are removed and free movement of goods and services in the identified areas of cooperation. The Customs Union (CU) is a third form of regional integration. This is an improvement over RTA in which member countries apply a common external tariff (CET) on a good imported from outside countries. The CET can differ across goods but not across union partners. Fourth form is Common Market (CM) which is an addition to CET; there is a free movement of factors of production such as labour, capital, enterprise and technology among the member states. The CM is more beneficial because there are chances of best allocation of resources in a common market which leads to maximization of benefits for member states. Lastly, EU is the highest form of regional integration in which the member states try to harmonize monetary, fiscal and other economic policies within the union.

Progress of Regional Trade Agreements (RTAs)

The progress of regionalism is seen with respect to multilateral trading system over the years. RTAs have become increasingly prevalent since the early 1990s. RTAs have continued to proliferate, compare to the last six months of 2016, a larger number of RTAs entered into force and were notified to the WTO in the first half of 2017, bringing the total number of RTAs in force and notified to WTO to 279 by the end of June 2017. The WTO Members with the largest number of RTAs in force continue to be the EU, European Free Trade Association (EFTA), Chile, Singapore and Turkey, which have over 20 RTAs in force. However, several other developing countries including the Republic of Korea, Peru, India, Mexico and Panama have also become active users of RTAs with over 15 RTAs each in force.
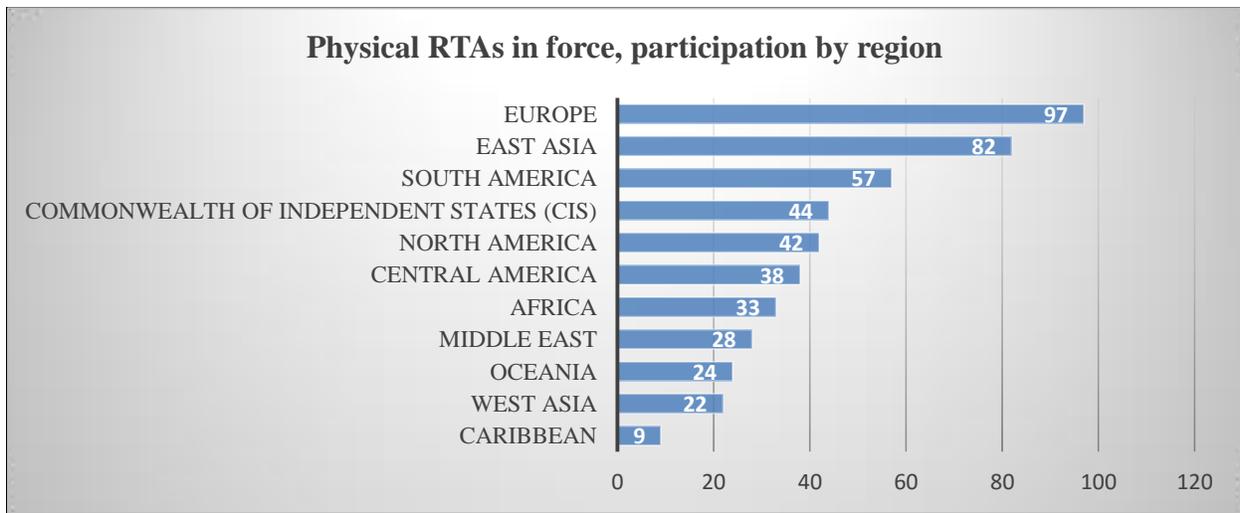
The figure 1 below represents the evolution of RTAs in the world from 1948 – 2017. It clearly represents the growth in the number of RTAs especially after the formation of WTO in 1995. There is a sudden surge in the numbers of RTAs in the world.
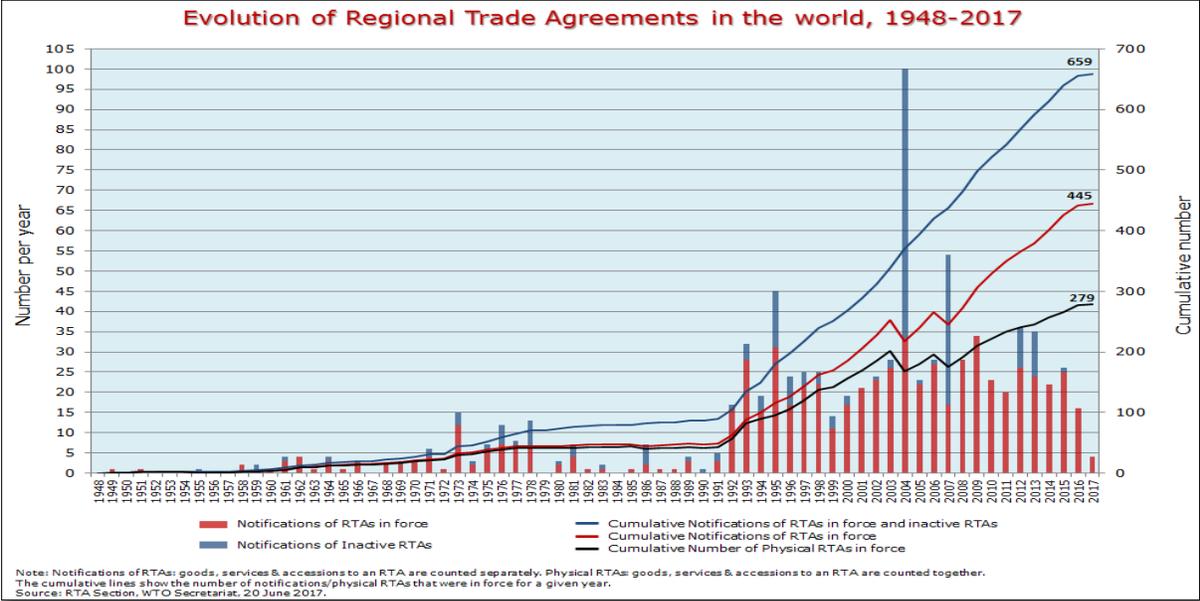
Figure 1: Evolution of RTAs in the world, 1948-2017

Figure 2 below represents the physical RTAs in force, participation by region. This represents the region on the vertical axis and notifications of RTAs in numbers on horizontal axis. The table exhibits the involvement of specific regions involved in the activities of regional initiatives. Europe stands first followed by East Asia, South America, Commonwealth independent states (CIS), North America, Central America, Africa, Middle East, Oceania, West Asia and Caribbean. The numbers are indicating the growth of RTAs in the world especially growing in Asia.

Physical RTAs in force, participation by region

Region	Value
EUROPE	97
EAST ASIA	82
SOUTH AMERICA	57
COMMONWEALTH OF INDEPENDENT STATES (CIS)	44
NORTH AMERICA	42
CENTRAL AMERICA	38
AFRICA	33
MIDDLE EAST	28
OCEANIA	24
WEST ASIA	22
CARIBBEAN	9

Source: RTA-IS 2018

Figure 2: The physical RTAs in force, participation by region

Motives for countries entering in RTAs

The main motive of RTAs is to increase and improve the trade and its potentials with partner countries. In a comprehensive paper by Whalley (1998) explains the range of considerations when a country negotiates RTAs. There are some motives presented as follows:

- Trade agreements provide foundations of strategic alliances and hence implicitly form part of security arrangements like Europe.
- For smaller countries, it is obtaining more security for their access to larger markets like Canada-US free trade agreement (CUSTA)

There are various other economic and non-economic motives. The regional cooperation in the third world countries is gaining greater importance. The major power blocs have been reducing political confrontations and moving towards trade groups. The growing importance of regional cooperation through regional organizations is an important feature of the post-Cold War era. The changed geo-political and economic realities of the post-Cold War period required new power alignments. The countries of different regions realized that their unity for economic development and for achievement of modernization is a must. In this context, cooperation alone offers the best opportunities for fulfilling these aspirations of, particularly, the third world countries.

The concept of regional integration is nothing new to Asia. Asia has been the forerunner of economic integration initiatives as far as back in with establishment of the ASEAN in the year

1967. The oldest customs unions in the world, since then the number of regional economic units have surged especially in Asia during post 1970s. The success of ASEAN is phenomenal as a regional bloc after 1990s.

The changing international scenario with more agreements in regionalism impacted India's foreign policy in a big way. India could not remain protected to this new wave of regionalism post 1995 period. India undertook many initiatives in its trade policies as a response to the evolving circumstances and economic issues in the world. India has started its first regional treaty with Asia Pacific Trade Agreement (APTA) in 1975 followed by India-Sri Lanka FTA in 1998 and many more (detailed list mentioned in chapter 4).

With India's 'Look East policy' announced in 1991, India's relations with ASEAN and South-East Asian countries have expanded and diversified. The relations with Asia have improved in 2014, when policy makers announced 'Look East policy' as a 'Look Act Policy' for giving more importance to Asia and improving international relations with Asia through economics, security, and political aspects.

To deepen its relation with Asia, India and ASEAN has signed an agreement in Trade in goods as ASEAN-India free trade agreement (AIFTA) in 2010. It seeks to strengthen and enhance economic cooperation through the progressive elimination of tariffs and non-tariff barriers in substantially all trade in goods. The commitment of trade in goods is still in progress due to phase wise reduction and removal in tariffs and facilitation of trade through improved market access by 2021 for all ASEAN countries. The progressive liberalization of trade in services with substantial sectoral coverage and the establishment of a liberal and competitive investment regime that facilitates and promotes investment within the AIFTA have been signed in 2014 to have full coverage of ASEAN-India trade negotiations.

Any agreement signed between countries is due to gain from the given agreement in terms of trade volume, share, composition, diversified pattern of trade, to get better commodities from the world especially when the demand by consumers are changing everyday with better preferences and gaining mutual interest on common issues like international security and economic cooperation. Therefore, the role of intra-industry trade (IIT) or two way trade in same commodities arise which supports and promote overall trade with better quality products and promote domestic industries to be a part of this changing supply chain and to be a part of international fragmentation.

In this matter, the impact of AIFTA in promoting IIT is very important because it will enhance two way trade between ASEAN member countries and India and allow to give more choices to the consumers and producers in terms of variety, reduction in price and making industries competitive in the international market and easy rules of origin will allow easy access of market between ASEAN and India. This will diversify the pattern of trade further between ASEAN and India.

IIT represents major portion of world trade and it is very important for stimulating innovations and exploits economies of scale. IIT lowers adjustments costs of same industry due to be a part of same industrial structure rather than shifting entire industrial base. In IIT smaller exporter can also participate by supplying fewer varieties of the same products. In RTAs, the major share of trade is taking place in the form of intra-region wise which allows reaping benefits from economies of scale, specialization and comparative advantage at product level.

1.2   Research Gap

IIT has become a very important factor now for formulating trade policy. It produces extra gains from international trade by creating larger market (Krugman and Obstfeld, 1988). The major benefit of a country by getting involved in IIT is that it can simultaneously reduce the number of products produced and increase the variety of products so that the adjustments costs would be less and therefore the income distribution effect would also be small. Although many studies have been done on IIT but most of them were for developed countries or respective regions like EU, NAFTA and others. But very few of them were for developing countries especially ASEAN and India AIFTA agreement.

The major work in the field of IIT with respect to ASEAN and India was done by Veeramani, Francis Smitha, Sikadar and Nag, and Ramakrishna and Varma. The major contribution in the context of AIFTA has been done by Veeramani studies on India's IIT on manufactured commodities under economic liberalization as between 1987-88, 1994-95, and 1998-99 to understand the impact of trade liberalization on IIT. In his study various country and industry specific factors on the intensity and probability of IIT in the manufacturing sector analyzed, and his another paper assessed impact of AIFTA on agriculture trade. The study by Francis (2011) studied ASEAN India FTA in semi-processed and processed agricultural products. Mondal et al. (2012) analyzed the impact of AIFTA on Indian diary trade by using partial equilibrium model (SMART) had been used to stimulate the trade impacts as per the proposed tariff reduction

schedule. Sikdar and Nag (2011) analyzed the impact of FTA on India and the ASEAN members, study used cross country analysis by using applied general equilibrium model. Shrivastava A. and Medury (2011) try to analyze the nature and pattern of India's IIT at 6-digit level with its trading partners. Ramakrishna and Varma (2014) examined the role of FTAs in the promotion of IIT between India and its selected trading partners. Though the study considers ASEAN but limited to Malaysia, Singapore and Thailand not included other countries of ASEAN and limited to data till 2011. The IIT is checked at 2 digit level with Horizontal IIT (HIIT) and Vertical IIT (VIIT). Another paper by Varma (2015) mentions the determinants of IIT as HIIT and VIIT in the food processing industry. This study is also limited to a sector but not 4 digit HS level sub headings and entire ASEAN as a bloc with its trading partner India.

But the present study made an attempt to study ASEAN 6 members – Singapore, Malaysia, Thailand, Indonesia, Philippines and Vietnam bilateral trade especially in the form of IIT with India for 12 years from 2005 to 2016. Though members like Cambodia, Lao PDR, Brunei Darussalam and Myanmar as ASEAN4 not considered due to unavailability of data of these countries. ASEAN6 represent maximum share of intra trade within ASEAN and hence considering ASEAN6 as a bloc.

There are very limited studies on India especially on an impact assessment of AIFTA in promoting IIT index at 4 digit Harmonized system level of classification with finding out possible IIT determinants in the promotion of IIT especially after signing an AIFTA agreement, which all chapters (2 digit) and sub-headings sectors (4 digit) are showing higher IIT with its determinants.

Model used for Computing IIT Index

The models which are widely used for measuring IIT index is Herbert Grubel and Peter Lloyd (1975) who provided the definitive empirical study on the importance of IIT and how to measure it. Research on two-way trade in similar products in the 1960s and the 1970s was mainly focused on the empirical estimation of the phenomenon of intra-industry trade. Thus Grubel empirically confirmed that intra-industry trade is a real phenomenon and that the levels of intra-industry trade grow faster within the trade between developed countries which are members of custom unions or other regional trading arrangements, than in the trade of the developed countries with other countries.

There are IIT models initiated by the Balassa Index (1966) followed by the G-L index (1975), Aquino index, the Greenway and Milner approach (1981), Balassa and Bauwens approach (1987), the Hanink approach (1988), the Bergstrand approach (1990), the Hummels and Levinsohn approach (1993), the Greenway, Hine and Milner approach (1994), and some other approaches in recent years like Gullstrand 2002, Fontagne, Freudenberg and Gaulier (2005), and Carbel, Falvey and Milner (2008). In all the listed models, widely used and accepted model is G-L index and the present study also considered the use of G-L index to measure the impact of Trade in goods agreement between ASEAN-India in promoting IIT. Therefore the proposed study uses G-L index to study the impact of AIFTA in promoting IIT.

The study considers 12 years trade flows data divided into two time period as Pre-AIFTA as 2005-2010 and Post-AIFTA as 2011-2016. The study used free trade agreement as one of the determinant computed as dummy variable in which 2005-2010 before agreement as '0' and from 2011-2016 after agreement as '1', and then understands the determinants of IIT with other country specific and industry specific factors at Harmonized System classification at 4 digit level and averaged at 2 digit for reporting purpose in identified sectors.

Realizing the suitability and availability of data, the present study proposed a model to examine the impact of Trade in goods agreement between ASEAN and India in promoting IIT. The study will evaluate whether the agreement signed between two parties has increased or decreased two-way trade. Is there any change in the two way trade pattern, what are the possible determinants of two way trade between ASEAN and India? To assess the impact at deeper level, present study considered the impact at 4 digit HS classification and considered top traded sector at 4 digit and averaged out at 2 digit for reporting purpose.

The impact of AIFTA in promoting IIT further will diversify the pattern of trade between ASEAN-India. And will give an opportunity to the member nations of ASEAN and India to identify that sectors/industry/product in which the mutual benefits could be increased for both of them in terms of IIT.

1.3   Objectives of the Study

The objectives of the study are:

- To study the ongoing debate on regionalism and multilateralism in promoting trade.
- To study the growth of ASEAN as a regional bloc.
- To study the growing trade relations between ASEAN and India since 2000.

- To analyze the impact of AIFTA in promoting IIT index.
- To analyze the possible determinants of IIT between ASEAN and India.
- To examine the shift and diversification in the pattern of trade after signing AIFTA between ASEAN and India.

1.4 Research Questions

- Does RTAs significantly promote IIT?
- What are the determinants which explain the growth of IIT after signing an agreement?
- Is there any shift and diversification in the pattern of trade in goods flows after AIFTA?

1.5 Research Methodology:

The present chapter used the secondary trade data at 2 and 4 digit of HS classification extracted from the World Integrated Trade Solution (WITS), UNCOMTRADE database published by United Nations Statistics Division from 2000 to 2016. The study calculated IIT index by using trade-weighted average than a simple IIT index in sub-headings at 4 digit HS classification. Multiply each sectoral IIT index with its corresponding trade weights and summing and then we will get trade weighted average of a particular sector. Likewise calculate 4 digit HS classification all sub headings between bilateral partners of ASEAN with India and average it on 2 digit HS classification for 12 years. GL index shows share measure or share of IIT in total trade but it does not tell in the volume terms. But this study has considered only those sectors at 2 and 4 digit HS classification in which IIT index is high and it is accompanied by high trade volume.

The data on Gross Domestic Product (GDP), Per Capita GDP, Foreign Direct Investment and Trade openness obtained from World Bank database as these are IIT index determinants. The explanatory variables are country specific and market specific factors combined with Gravity model variables as distance and GDP, its database obtained from CEPII.

The study uses panel data technique. The advantage of using panel data is that it gives holistic view about the nature, pattern, and determinants of the data under consideration. The present study considers panel data analysis for 12 years.

The present study used regression ordinary least square (OLS) method analysis for examining the impact of AIFTA in promoting IIT index for 12 years. To validate the results, the study also used Tobit regression model but results from regression and Tobit regression are approximately same.

In the estimation results as the IIT index is limited to values between 0 and 1, estimation of the regression via Ordinary least Square (OLS) would result in inconsistent estimates. Therefore, we employed another model called a Tobit Regression model which captures the lower a nd upper censoring of the dependent variable and produces consistent maximum likelihood estimates. Therefore, the study represented the result from both OLS and Tobit regression, so to make the model estimates consistent.

1.6 Scope of the Study

- The present study is not only important for policy makers in formulation of trade policies but also important for exporters and importers to reap benefits of reduced and removed tariff barriers after singing FTAs between countries.
- IIT promotes small exporters and importers to be a part of integrated supply chain.
- The AIFTA agreement has importance for investors who would like to establish their foreign affiliates in the host country and allow higher IIT in similar products or demand based products.

1.7 Limitations of the study

- The present study is based on the overall IIT rather than disentangling IIT between VIIT and HIIT.
- Though the AIFTA agreement has been signed in 2009 and came in force in 1st January 2010 and entire agreement will be completed by 2021, it's little early to understand the AIFTA impact. But still this study will contribute trade policy makers to check changing volume, share and composition of trade.
- The study only considers selected identified sector on the basis of top traded value of export and imports accompanied by calculating IIT at 4digit HS level. There were many sub-headings available at 4digit but not a part of top exports and imports. The study could not study those sectors that are not in the top ten sectors with high average IIT at 4digit.
- Due to data unavailability of countries of ASEAN like data for Cambodia, Myanmar, Lao PDR and Brunei Darussalam for all the years were not available. Therefore the study could not capture these countries observation in IIT index.

1.8 Significance of the Study

These days many developing countries are scared that regional movements in other parts of the world will badly impact their trade because regionalism overtakes multilateralism. But the reaction has been that most of them are trying to get into one regional bloc or the other via RTAs. ASEAN and India growing trade relations in the form of Comprehensive Economic Cooperation Agreement (CECA) in 2005, AIFTA in goods in 2010, recently signed ASEAN-India Free Trade Agreement in services and investments[1] in 2015 are also an example of these regional arrangements. This regional arrangement further will strengthen and deepen the political and economic ties between ASEAN and India. This has been proved with growing engagements with ASEAN at various levels.

The member countries are benefiting from the formation of regionalism due to its impact in the form of growing trade volumes, increase in intra-industry trade, trade creation effects, and producer and consumer surplus through tariff liberalization and shifting the pattern of industrial structure within countries. All these above effects are direct effects of regionalism. But indirect effects of regionalism are also in support of growing competitiveness, restructuring of industrial base which suits the shifting trade patterns within countries, setting up of multinational companies in the form of foreign direct investments in that sector whose trade volumes and share in total trade has increased after an agreement, easy access and availability of qualitative parts and components which supports domestic industries in turn and finally the creation of employment and income back in the growing and emerging sectors of respective member countries.

The impact assessment of AIFTA in promoting IIT will give an opportunity to exporters and importers to explore the benefits of growing and leading sectors and to allow the other declining sectors to make strategies to overcome from easy market access and increased competition due to an agreement. The diversification in pattern of trade will also promote domestic industries in turn and make many leading and potential sectors to become world class.

1.9 Organization of Thesis

This thesis is organized as follows:

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[1] http://articles.economictimes.indiatimes.com/2015-01-15/news/58108785_1_malaysian-minister-services-and-investments-rcep

Chapter 1- Introduction

It provides background of the study; research gap; objectives of the study; research questions; research methodology; scope and limitations of the study, significance of the study with organization of thesis.

Chapter 2 – Review of Literature

This chapter provides in detail review of literature on regionalism definitions, regionalism vs. multilateralism debate, impact of regionalism, role of intra-industry trade in promoting regionalism in the world, different measures to examine IIT index, role of ASEAN as a regional bloc, aspects of ASEAN-India trade relations, impact of AIFTA in promoting IIT index, determinants of IIT and diversification in the pattern of trade between ASEAN-India.

Chapter 3 – Research Methodology

This chapter deals with research design and research methodology used for the entire study. The study includes sampling techniques, measuring Grubel-Lloyd index, Panel data analysis, software used for simple regression and Tobit analysis with major sources of data.

Chapter 4 – ASEAN-India Trade Relations

This chapter provides brief profile of ASEAN as a regional bloc, ASEAN macro indicators and trade profile, trade profile of ASEAN with World and India, India's emerging activities in regionalism, signed ASEAN-India Free Trade agreements in 2010 and pattern of trade between ASEAN and India.

Chapter 5– Data Analysis and Interpretations

The chapter presents research questions whose answers been examined through an impact assessment of AIFTA in promoting IIT index, determinants of IIT with results and how pattern of trade has changed in post AIFTA at 2 digit and 4 digit HS classification level.

Chapter 6 – Findings and Conclusions

The chapter provides major findings on whether regionalism increased IIT, IIT determinants within ASEAN and India, direction and composition of two-way trade in post AIFTA and impact of tariff liberalization on AIFTA.

Chapter 7 – Recommendations and Future Research

The chapter provides inputs to policymakers, businesses and researchers through the study on regionalism and its impact assessment on IIT. What type of policies will increase more IIT between ASEAN and India in coming years?