

ANGLIA RUSKIN UNIVERSITY

FACULTY OF BUSINESS AND LAW

ELIMINATING DOUBLE TAXATION AND DEVELOPING DOUBLE TAXATION
TREATIES BETWEEN THAILAND AND BILATERAL COUNTRIES

NATCHA SARAMAS

A thesis in partial fulfilment of the requirements of Anglia Ruskin University for the degree
of Doctor of Philosophy

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ABSTRACT

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With the liberalisation of trade over the last few decades there are increasing number of companies investing in other economies. The developing countries have received significant foreign direct investment (FDI) due to lower cost of labour, intensive production was relocated. Developing countries suffering from under-investment, lower savings ratios and high unemployment consider FDI as a critical means to stimulate economic growth, employment and increase tax revenue. Multinational enterprises operating in many countries have to comply with different taxation policies, this means there is the possibility that where the company is

registered and the country where it is operating may tax their revenue twice, resulting in double taxation. This affects company's financial position and discourages FDI. Thailand has high level of inward FDI and needs to ensure that the incidence of double taxation does not discourage FDI. Therefore, Thailand has actively sort to enter double taxation treaties with countries within the region and internationally.

This research examines the literature on FDI, double taxation treaties and to consider its implications for Thailand. Therefore, this empirical research is of high importance to understand the impact of Double Taxation Treaties (DTTs) on countries that use this particular policy to overcome challenges trading between countries. The thesis empirically test FDI flows from, (a) South to South, (b) North to South and (c) ASEAN countries to Thailand to understand the effects of DTTs. The aim of DTT is to minimise the incidence of double taxation. To achieve this goal, firstly, this doctoral thesis investigates how an approved DTT between countries helps to increase FDI. Secondly, the study examines how DTT regulates dividend taxation between Thailand (considered as a host country) and bilateral countries (considered as home countries for international firms). Thirdly, the thesis evaluates how DTT impacts on firms decision participate in FDI in Thailand. This empirical study also undertakes a comparison of under tax credit and tax exemption methods as part of FDI data evaluation. This research also evaluates the different patterns of FDI flows.

The study sampled 9 bilateral countries and evaluates applying different method on eliminating double taxation. The research uses one method or a combination of credit or exemption method. The results suggest that for Thailand, from 1970 to 2017, FDI has increased, suggesting that DTTs have successfully increased the level of inwards FDI, resulting in increased economic activities. Thus, showing a strong relationship between DTTs and inward FDI for Thailand. The empirical findings reported in the thesis show a positive

relationship for DTTs policy to attract FDI. Furthermore, the qualitative findings derived from the use of in-depth interview are supportive of the quantitative findings. The study concludes that DTTs are efficient and effective tools for countries to encourage intra-country trade as it lowers the cost of transaction.

The research highlights the importance of negotiating DTTs for all economies but more so to promote FDI into the region and internationally. The study provides policy direction for the Government of Thailand and academic community to conduct further research into issues DTTs and make trading seamless across regions and internally.

Keywords: Credit Method, Dividends, Double Taxation Relief Article, Double Taxation Treaties, Exemption Method, Foreign Direct Investment, Multinational Enterprise

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LIST OF ABBREVIATIONS

| | |
|-------|---|
| AEC | ASEAN Economic Community |
| ASEM | Asia-Europe Meeting |
| ASEAN | Association of Southeast Asian Nations' countries |
| BIT | Bilateral Investment Treaty |
| BOI | Board of Investment |
| BOT | Bank of Thailand |
| CEN | Capital Export Neutrality |
| CFA | Committee of Fiscal Affairs |
| CIN | Capital Import Neutrality |
| CLMV | Cambodia, Laos, Myanmar and Vietnam |
| DTT | Double Taxation Treaty |
| EBD | Economic Development Board |
| ER | Exchange Rate |
| FBA | Foreign Business Act |
| FDI | Foreign Direct Investment |
| FEM | Fixed Effect Model |
| FTA | Free Trade Agreements |
| GDP | Gross Domestic Product |
| GMM | Generalised Method of Moments |
| ICRG | International Country Risk Guide |
| IIA | International Investment Treaty |
| IMF | International Monetary Fund |
| ISDS | Investor to State Dispute Settlement |
| IST | Institution |

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| JTEPA | Japan-Thailand Economic Partnership Agreement |
| MAP | Mutual Agreement Procedure (MAP) |
| MNCs | Multinational Countries |
| MNE | Multinational Enterprise |
| MTC | Model Tax Convention |
| NN | National Neutrality |
| N-N | North-to-North/ Investment between Developed Country and Developed Country |
| N-S | North-to-South/ Investment between Developed Country and Developing Country |
| NR | Natural Resource |
| OECD | Organisation for Economic Co-operation and Development |
| PE | Permanent Establishment |
| PRS | Political Risk Services |
| RD | Revenue Department |
| R&D | Research and Development |
| REM | Random Effect Model |
| S-S | South-to-South/Investment between Developing Country and Developing Country |
| TDRI | Thailand Development Research Institute |
| TIRS | Tax Information Releases |
| TOP | Trade Openness |
| UER | Unemployment Rate |
| UN | United Nations |
| UNCTAD | United Nations Conference on Trade and Development |
| VAT | Value Added Taxes |

DEFINITION OF TERMS

The following terms explain the terminology used within this research:

Host Country or Source Country - a country that hosts another country's company.

Home Country or Country of Residence - the domicile country of the person, where the person has stayed for last 12 months.

Contracting Country or Bilateral Country - a country which has agreed to be obliged by the agreement, whether or not the agreement has entered into force.

Article of Double Taxation Relief - under Double Taxation Treaties (DTTs), a convention between two countries for the purposes of avoidance of taxation. This allows a resident or citizen of countries to employ a credit or exemption against taxation on income which has been paid in Thailand.

Article of Dividend - under Double Taxation Treaties (DTTs), statement of dividends shows that dividend paid by an enterprise in country other than its country of domicile.

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I declare that whole part of my thesis has not been submitted or is being presently submitted for any other degrees or qualifications, and all of writing which is stated in this study is my own unique work.

Natcha Saramas

Nanthi Pichamuthu

(First Supervisor)

Xiaoxuan Jia, PhD

(Second Supervisor)

CHAPTER 1

INTRODUCTION

1.1 Chapter Overview

The aim of this research is to examine investment across borders that mainly lies in the category of Foreign Direct Investment (FDI); where a company invests money into another country. The recipient and the home state can gain from foreign currency when the company invests in another country instead of investing in its own country (Radu, et al., 2012). Through attracting FDI, a country can quickly and effectively boost its economy and this is particularly attractive for a country such as Thailand (Dumiter, et al., 2016). Currently, Thailand is experiencing an economic crisis and has insufficient funds for investment. Thailand has insufficient investment to create employment or to export (Bank of Thailand, 2020). This gives rise to a budget deficit and the country is unable to make payments and has experiencing a payment crisis. Investment in a country is measured as a way of attracting others for development in aggregate wealth (Jogarajan, et al., 2012).

Thus, Thailand raising finance or sufficient savings, is unable to invest in the economy and Thai investors are unable to increase their investments. For this reason, Foreign Direct Investment (FDI) is important and the main reason to attract FDI. However, there are other countries which will be competing for FDI too. Therefore, Thailand has to compete with rival countries (Dumiter, et al., 2016). Moreover, FDI brings with it other advantages, such as skill and knowledge, therefore, FDI enables Thailand to achieve employment, boost its exports and its economic growth. For these reasons, this research is important, therefore, it is important to understand the role of double taxation.

This research has practical implications for the topic and the Thai economy and its policy makers. Firstly, the aims and objectives are stated, in this research followed by the research questions. This is followed by the theoretical framework for this research that supports the theory. Hereafter, the concepts used in taxation are motivated and further the research examines the limitation and challenges to conduct this research.

1.2 Background of the Research

As a result of globalisation, competition has increased whilst doing business within and across countries. However, at the same time globalisation has offered immense opportunities for economic development, especially for emerging economies such as Thailand (Dumiter, et al., 2016). Therefore, in order to achieve full economic potential and benefit from globalisation, Thailand has to streamline its economic, political and technological processes to gain benefit from greater world connectivity. To benefit from FDI and economic opportunities, taxation policy and its implementation is considerable importance. Taxation enables the government to collect revenue and competitive tax rates play a significant role in attracting international businesses to invest within Thailand. However, at the same time, taxation is considered as a burden by local and international investors. Both domestic and cross-border investors not only see taxation as costly but there are also considerable tax compliance costs (Egger, et al., 2011).

This research's focus is on cross-border investment that involves foreign companies investing within Thailand. The transfer of funds to another country is referred as FDI, where the company moves its capital from the country of domicile to the host country for the purposes of setting up the business. The foreign company invests in the host country in the expectation of earning a higher return when compared to investing in its own country (Desai, et al., 2003). Not only for Thailand but the world over, FDIs are considered as a most significant means to

boost the economy of developing countries. Thailand and other developing countries tend to have low savings and underdeveloped financial markets thus FDI is to funds developments or to balance payments. For any country's business activity to grow, there is a need to invest to increase productivity and growth which leads to prosperity and a rise in the aggregate level of wealth (Das, et al., 2013). With low saving ratios, lack of employment opportunities leads to a low level of tax revenue. Thereby, neither banks or governments are able to provide finance for the investment that leaves the Thailand economy operating at less than optimum level. Therefore, FDI is considered as important for economic development in Thailand. FDI can assist Thailand to achieve its economic growth (Alfaro, 2003).

With greatly connected world economies through internationalisation, FDI has become central and there is a lot of competition for FDI. Many developed and emerging countries try to attract FDI. Different countries make efforts to attract FDI. Countries make special provisions and give incentives to Multinational Enterprises (MNEs) to invest in their country. One of the most important benefits for the host country is tax revenues that help the government to settle balances of payment and further make investments in education and infrastructure (Covrig, et al., 2012; Nunnenkamp, 2002). Therefore, governments, to encourage inward investment, offer attractive tax incentives to attract FDI. Many MNEs negotiate with different countries to get the most favourable tax incentives. At the same time, the host country signs off tax treaties with the foreign governments, known as Double Taxation Treaties (DTTs). The aim of both parties is to collect greater taxation without unduly burdening the companies who are operating in two or more countries.

Thus, the tax helps to reduce obstacles in doing business. This makes it easy for all the parties concerned to regulate the taxation system within and across countries, thus it helps to reduce double taxation problems. In devising the taxation policies, the respective governments need to have treaties that benefit all, thereby they need to be more transparent. Taxation policies

that are easy to understand and implement taxation makes it more attractive for foreign investors (Nonnenberg, et al., 2004).

It has been observed that Multinational Enterprises play an essential role in promoting economic and infrastructural development for emerging economies. One of the major observations is that FDI can rapidly grow and it can easily disappear, thus the impact of FDI could be transitory and this may not help the recipient of the FDI country in the long run. According to Dunning (1977), a MNE that has FDI as well as handles the value-adding services and activities in more than one state is considered to be international. On the other hand, Dudas (2011) considers that a transnational company is an organisation which controls and coordinates the functioning of a business in more than one country. A multinational firm has headquarters in one state, but it has operations such as assembly and manufacturing plants in some other states (Larsson, et al., 2012). However, in the modern era, firms may not have operations on the ground but may be using internet portals, thus they have set up in many countries and these can be referred to as MNEs. The operations of MNEs in a vast number of countries is an indication of a shrinking business world and multinational firms, through portals and websites make them more international and open foreign markets (Covrig, et al., 2012). However, at times, such definition and categories of MNEs are inappropriate as they do not fulfil the standards and principles of FDI in a state.

Growth orientated companies operate in more than one country, thus it can be said that the national companies become multinational for several reasons. Companies internationalise to benefit from overseas factors of production and natural resources or at times they may want to avoid legislation such as taxation and other charges to sell globally. International operations and manufacturing, enables them to gain access to tax benefits in international markets. There is evidence that suggests FDI has led to improvements in the economic situation of many countries and have enabled them to acquire technical knowledge that has enabled firms to

contribute towards the economic development of the host state (Chia, et al., 2014). In addition to capital flows for the host country, the FDI also helps host countries to acquire valuable technology and know-how while fostering connections with the firms that are local. FDI assists to jumpstart an economy. Thus, it is not a surprise that the developing and industrialised countries have incentives to attract FDIs into their economies (Egger, et al., 2011).

Moreover, developing countries have been successful in raising the amount of FDI into them as the host countries have opened up their economies. This has led to an increase in the style of investment from South-to-South (S-S) which is becoming popular at this moment. S-S is investment between a developing country and a developing country (Barthel, et al., 2012). However, the largest impact is observed when large companies from developed countries invest in emerging countries. At the same time, the host countries' economic conditions also play a vital role in encouraging FDI and that is why it is considered as one of the most important reasons for why governments of host countries start depending on treaties such as International Investment Treaties (IIAs) and Double Taxation Treaties (DTTs) as core mechanisms for encouraging FDI (Banomyong, et al., 2011; Covrig, et al., 2011).

Over past decades, the demand for taxation and other treaties has risen continuously, especially for DTTs and the focus of this research is on the DTT variable specifically. Thailand entered into DTTs with Germany in 1968 and continues to until now. From 1974 – 1998, Thailand has signed several DTTs and bilateral treaties with several countries. (Barthel, et al., 2010). In 1998, Thailand signed 6 DTTs treaties and this number has since increased to 61 treaties by 2020 and there are also several treaties under negotiations with other countries such as the “Association of Southeast Asian Nations’ countries (ASEAN) as for Brunei (Petri et al., 2012; Pickering et al., 2013). However, this research is the first study of its kind that focuses on the effects of different methods under DTTs for influencing inward FDI to Thailand. Thailand has focused specifically on S-S treaties where it has signed many treaties with

ASEAN countries where Thailand has significantly benefitted from FDI inflows (Banomyong, et al., 2011). The widespread mechanism of international tax treaties is used to mitigate double taxation, as mentioned earlier this is called Double Taxation Treaty, a variable for consideration in this research. DTT examines the details of tax policy and its intentions to help in alleviating international double taxation burdens (Jogarajan, et al., 2012). The first objective of DTT is to mitigate the impact of double taxation when trading across the borders internationally.

International double taxation occurs because the companies file tax on income in different ways (Banomyong, et al., 2011). Some countries file depending where their main residence is or what is most beneficial to them, while other countries mark tax on a source basis and other countries use a mixture of the two. For example, investors from Singapore file tax on a residence basis and derive income from Thailand which is based on a source basis and subjects tax on this income in Thailand. Once an investor brings this income back to Singapore, it will be subjected to tax again in Singapore. Therefore, in the absence of DTTs, this transaction could be costly and this may prevent companies investing in Thailand (Banomyong, et al., 2011).

The second objective of DTTs is allocating taxation rights between countries. Finally, the third objective of DTTs is to prevent tax evasion. However, this research will focus specifically on the first objective of DTTs (Baker, et al., 2014). DTTs are created to improve business relationships and to lessen or eliminate the impact of double tax payments and make it easier for companies to operate across borders. According to Villanueva, other members of the Pacific Alliance countries, such as Colombia or Chile, have more agreements signed that also help them to deal with taxation and other issues. This is because many clauses in these treaties privilege the interests of investors (Jogarajan, et al., 2012).

The Organisation for Economic Cooperation and Development (OECD), in order to promote international trade, develops policies and imposes models of international tax

agreements to make international trade easy. In addition, it establishes instruments that allow the validity of transactions to be measured and that reduce the possibilities of tax avoidance. However, according to Ahmad (2013), these treaties are biased in favour of the investing countries as their interests have a higher level of protection (Ahmad, et al., 2013). Thus, these treaties are beneficial for the host countries, but they need to be fair. DTTs help in two ways to eliminate double taxation, these two ways are known as Distributive Rule and Double Taxation Relief Article. The distributive rule is limited, in that dividends are taxed in the country of domicile (Avi-Yonah, et al., 2014).

While double taxation cannot address issues arising under the distributive rule, the double taxation relief article will either eliminate or reduce the double taxation issue. The double taxation relief article contains two main methods which are a) credit and b) exemption that will be investigated in this thesis by focusing on how they work and how each method affects FDI inflows to Thailand. Under DTTs, Thailand has been considered by bilateral countries to come under their favour category when applying the credit method rather than exemption method (Avi-Yonah, et al., 2014).

Mihir Desai and James Hines (2003) point out that national ownership neutrality will be satisfied if the country applies the exemption method rather than the credit method. Because adopting the exemption method will help domestic MNEs against any payment of extra tax in the home country (Avoseh, et al., 2014). Whereas, if a company from out of the country applies the credit method, it will have to pay certain taxes imposed by its home country. Thus, Desai and Hines find that the exemption method is advantageous as it will enable the company to take advantage of the system. The study by Desai and Hines investigated Thailand and other bilateral countries and concluded that proper double taxation relief methods are not beneficial (Avoseh, et al., 2014; Dumiter, et al., 2016). The evaluation of applying credit and exemption methods is necessary to investigate how the difference of these methods influences the FDI

inflow decisions of MNEs to Thailand. Based on the above statements, the thesis investigates how these methods work and affect MNEs' FDI decisions for bilateral countries whether to invest in Thailand or not (Braun, et al., 2016). The analysis will be divided into three parts: DTTs within part 1, developed countries will be considered in part 2 and developing countries and the ASEAN countries will be evaluated in part 3. Within all three parts, the ASEAN countries are central to this thesis.

To encourage MNEs to invest in Thailand, the Revenue Department of Thailand needs to provide clear, effective and efficient double taxation relief methods under DTTs to foster investment and trade. The issue of double taxation needs inputs from all countries with multinational interests and trade, which will need deliberations and negotiations to reach acceptable agreements (Barthel, et al., 2012). The purpose of this research is to provide clarity to the situation of current double taxation practices in Thailand and to identify potential red tapes and pitfalls, which could deter the MNEs' from investing in Thailand. This research will be heavily focused on the current practice adopted by “Tax Information Releases (TIRS)” of the Revenue Department of Thailand and it will make recommendations as to what amendments within the DTT encourage inward FDI to the country (Dee, et al., 2011).

The legal system is important for a country as it can influence how the nation implements its taxation provisions or applies tax policies when negotiating bilateral tax treaties. The essential question for the connection between domestic law and tax treaties is what is the legal status? (Desai, et al., 2003). The legal system of a country can significantly impact the implementation of tax treaties in some states. For example, in the legal system, if a state considers treaties as part of local law, then domestic law has to consider how such treaties are not in conflict between the treaties implementation and law of the country (Dumiter, et al., the 2016). Due to this reason, the connection of tax treaties in connection to the domestic law needs

to be carefully considered when looking at the practical application of tax treaties (Desai, et al., 2003).

The domestic legal system and its application to tax treaties within a country and across countries varies, thus, the importance of such tax treaties also varies. There is huge variation in the practices of interpreting the tax treaties and the law of the country. However, there are several countries such as Italy, Thailand and Belgium where the tax treaties and international law are regarded as the ultimate law. On the other hand, in another country, the connection between domestic law and tax treaties may still be vague (Dee et al., 2011).

There are several studies which examine the issue of taxation treaties and the domestic law, and they concluded that tax treaties are complex and lead to conflict. However, according to Radu, et al. (2012), there is now no complete, public and centralised database that shows the total number of treaties. The data on the number of treaties is sporadic for several countries, and it would be beneficial to identify the scale of the conflict between the treaties and the host countries' legal systems (Dudas, 2011).

1.3 Motivation and Relevance

The literature review suggests that there has been limited research that has examined the issue of the double taxation under the DTTs of Thailand and bilateral countries (Dumiter, et al., 2016). Thus, this research is timely and provides an overview about the methods of eliminating double taxation under DTTs for building better understanding and increasing knowledge about the relationship between DTTs and double taxation relief methods on eliminating double taxation, as well as how each method encourages inward FDI from bilateral countries to Thailand (Covrig, et al., 2011). Double taxation treaties are international legal instruments signed between two states, which are incorporated into the domestic legal system

of each country for the purposes of eliminating or reducing the international double taxation that affects or hinders the exchange of goods and services and the movements of capital, technology and people. The treaties benefit legal persons, residents or domiciles in any of the contracting states (Banomyong, et al., 2011).

The Convention for the Avoidance of Double Taxation or as it is often called, the Double Taxation Treaty is a bilateral contract to eliminate double taxation of taxes collected on the same income that an entity may have to pay in more than one country due to the internal tax regulations of each country (Chia, 2014). One of the measures in facilitating the benefits for the ASEAN Economic Community Blueprint (AEC Blueprint) is that the tax treaties focus on ASEAN countries that make it easier to conclude double tax treaty among all countries (Braun, et al., 2016). Cambodia has signed a DTT contract with Singapore as the first country in ASEAN in year 2017. In June 2018, Thailand was the second country that signed a DTT with Cambodia. Currently, Malaysia and Vietnam are countries who have also signed DTTs with all member countries of ASEAN. They are followed by Singapore and Thailand. Singapore has not yet agreed a DTT with Laos while Thailand has not signed the same with Brunei.

The DTTs are a good method to show the world the seriousness of a country and this will help to attract FDI. For example, Singapore companies pay corporate income tax at a lower rate than Thailand, which is corporate income tax rate in Singapore equal to 17 percent, while Thailand collects corporate income tax at the rate of 20 percent (Banomyong, et al., 2011). Although Singapore has double tax treaties with other countries and is at number one in ASEAN as it has signed DTTs with more than 70 countries while Thailand has 61 DTTs. Singapore does not have double tax treaties with the United States while Thailand has a DTT with the United States. If a Singapore company earns income from the United States of America if the income is taxable in the United States, the payers in the United States must withhold

taxes according to US law, Singapore companies may be taxed in the United States at a high rate at 30 percent (Sriausadawutkul, et al., 2013). But in the case of Thai companies having any tax liability from the United States, the Thai companies may receive full payment or may be taxed in the United States at a rate lower than 30 percent under the DTT between Thailand and the United States (Suwanmala, et al., 2009).

However, Singaporean companies may be able to deduct tax in the United States. The tax can be deducted in Singapore for the same income (Weyzig, et al., 2013). This gives rise to a higher taxation burden on companies operating in multiple countries and this may negatively impact on FDI. In this case, when a Singapore company uses income received from the United States to pay taxes in Singapore, it should be able to be deducted from the Singapore tax at a rate of not more than the Singapore tax rate of 17 percent (Pickering, et al., 2013). Therefore, in the same transaction, Singapore companies may have an overall tax cost of up to 30 percent of the tax rate that is deducted by the United States while Thai companies may have the greatest tax burden that 20 percent according to the Thai Revenue Code, if not taxed in the United States or deducted at a rate lower than 20 percent under the DTT between Thailand and the United States (Vanderbruggen, et al., 2012). The example used here just demonstrates the complexities of different taxation regimes and rates in different countries. Thus, when companies operate in different countries, the level of complexity can increase several folds. In some countries, the use of protection under the DTT must provide evidence to payers (In the case of not paying the tax) or the state tax authority that he is a resident of the country under the DTT for exercise of rights under that double tax treaty (Sauvant, et al., 2009).

The general evidence is that the Certificate of Residence is issued by the organisation of the country of residence in some countries. Documents must be submitted to the tax authorities in that country before exercising any rights. In the case of Thailand, being a payee and wanting to exercise rights under the DTT, Thai companies may be asked to request a

residency certificate from the Thai Revenue Department to show to foreign payers in order to pay tax at a lower rate under the double tax convention (Radu, et al., 2012).

In the event that Thailand is a current tax payer, Thailand would have the duty to pay the tax and consider using the Convention without first requesting it. However, if the Revenue Department later finds that the Double Taxation Convention does not work or is used incorrectly, such as misinterpreting the legal clause, or it cannot be proved that the parties are residents of the countries with whom the DTT is agreed; this can lead to complications and incorrect tax payments. As all taxpayers, including companies, are responsible for taxes and surcharges (Nunnenkamp, 2002). The DTT must be used whilst considering the legal status of the transactions (Luoga, et al., 2018).

Moreover, the purpose of this research is to empirically test the results and provide a narrative as to how the treaties evolved and how their scope and usage grew. This study also includes a collection of viewpoints from Thailand's bilateral countries on the methods of eliminating the double taxation under DTTs; through exploring the viewpoints of other countries where the tax credit method is used along with the exemption methods like Thailand (Nunnenkamp, 2002). Further, this study will investigate the problems of exercising DTTs and will consider methods that may help to resolve conflicts between Thailand and bilateral countries and make suggestions as to how such conflicts may be minimised when applying DTTs regulations including the matter of applying methods on eliminating double taxation. There are certain countries which see DTT as not working in their favour, therefore they seek a review and a reconsideration of DTT agreements in order to reduce their tax burden and increase FDI (Suwanmala, et al., 2009).

1.4 Research Objectives

This research investigates the impacts of double taxation treaty and applying different double taxation relief methods under DTTs on the inflow of FDI from bilateral countries to Thailand. The focus of the study is on the methods to relieve the double taxation problem in the case of dividend payments which contain the credit and exemption method. The incorrect use or interpretation of DTT treaties can potentially discourage the inflow of FDI to Thailand. The literature on double taxation shows that countries can gain value by signing DTTs, but there are potential limitations when using these treaties (Egger, et al., 2011). Braun and Fuentes (2016) noted that DTTs could mean an increased number of FDI projects between countries, but it could also limit withholding taxation rights and reduce tax revenues in developing countries. At the same time, the effectiveness of DTTs to attract higher FDI levels is also open to debate.

Barthel, et al. (2010) suggested that DTTs lead to higher FDI inflows and are substantively important in encouraging investment. However, Baker (2014) noted that developed countries often provide the relief of double taxation unilaterally, which reduces the benefit of any DTTs on investments. Although, there is data available about the impact of DTTs on FDI, its evaluation is limited. More so there are limited studies that examine the effects of different methods under DTTs on FDI. More precisely the focus on cross-section data between developing and developing country (S-S) has not been fully considered. However, there are studies that focus on cross-section data between a developed country and developing country (North-to-South or N-S) as well as between developed country and developed country (North-to-North or N-N) (Larsson et al., 2012). However, the analysis of the DTTs in S-S in the current era has been overlooked, even though S-S are significant in numbers, the DTT impact has not fully been considered DTTs impact (Dudas, 2011). Moreover, most of the studies have ignored the impact DTTs have on economic integration for ASEAN yet it is possible that DTTs will

help to stimulate higher FDI flows into Thailand through the ASEAN countries. The above analysis makes a compelling case for the research and analysis of this important aspect. The understanding of this complex area will provide a better understanding of how there are differences in concluding DTTs among ASEAN countries, and the S-S and N-S impact on FDI?

In the literature, only DTTs studies at the bilateral level have been highlighted which have been concluded within the regions and are important in terms of building a group power for improving trade and investment for the ASEAN group (Suvarnapunya, et al., 2011). Moreover, according to the study of Dunning (1977), trade liberalisation and globalisation has influenced trends in FDI (Nunnenkamp, 2002). Hence, in order to update and make the study consistent with the current situation, the thesis considers additional determinants which have not been considered in previous studies.

Thailand has developed several double tax treaties over the past few decades, most notably with the United States in 1997. The aim of signing the treaties was to improve the flow of trade and investment to overcome the financial crisis in Thailand (East Asian Executive, 1997). However, despite the country's ongoing focuses on building trade through treaties, it has only secured such treaties with around 61 countries, including the European Union and some of its regional major trading partners. It still lacks treaties with important countries in the region and around the world, such as Brunei (ASEAN countries), despite the growing importance of Pacific trade (Suvarnapunya and Chitranukroh, 2011). To fully understand the need for treaties, this study undertakes further high-level analysis into the nature of double taxation in Thailand and how it can be improved through the use of bilateral tax treaties.

In addition, the main aim of this research is to examine different methods of eliminating international double taxation under DTTs to encourage the flow of FDI into Thailand through focusing on dividend payments. The research will also investigate the potential benefits and drawbacks with regards to using these methods for eliminating international double taxation.

This research further evaluates the differences that occur whilst using diverse methods for mitigating international double taxation under DTTs that may affect the inflows of FDI into Thailand.

The study also investigates the current DTTs practices in Thailand and identifies potential red tape and pitfalls that may deter the MNEs from bringing FDI into Thailand. The current practices which are adopted by the Revenue Department of Thailand to formalise the double taxation provision as TIRS in order to encourage inward FDI into Thailand are also considered.

The objectives of the research are:

- To study the effect of DTTs on the inflows of FDI from bilateral countries to Thailand
- To define the methods of mitigating international double taxation under DTTs in the case of dividend payment under the Credit Method and Exemption Method and study the effect of these methods in mitigating international double taxation that may affect the inflows of FDI from bilateral countries to Thailand
- To evaluate the different methods concluded using the DTTs from, (a) South to South, (b) North to South and (c) ASEAN countries to Thailand, given the different impacts on the inflows of FDI to Thailand
- To investigate existing DTTs and the clauses, which are a deterrent for MNEs who may bring FDI into Thailand and to make recommendations on TIRS to the Revenue Department of Thailand to amend the relevant provisions in DTTs, especially, in the section on dividend payments under the article of Double Taxation Relief

1.5 Research Questions

When two or more than two nations impose taxes, international double taxation treatment is applicable to taxpayer. Generally, double taxation takes place not only because of transactions and domestic assets in a certain country but due to transactions and assets located in some other states that can lead to an advantage to the resident taxpayers. Therefore, it leads to an overlap of the tax claims in the different countries (Sriausadawutkul, et al., 2013; Weyzig, et al., 2013). The purpose of DTT is to minimise the double taxation impact on the companies operating in different countries and to ensure companies do not have to pay tax in more than one country. The agreements' effectiveness mainly relies on the workable interpretation of the agreement terms and conditions. Therefore, the researchers examined the significant problems that arose at the time of interpreting the DTT (Radu, et al., 2012). The research also examines how different states apply the taxation contract. The guidelines developed by the "Organisation for Economic Cooperation and Development (OECD)" provides direction as how best to interpret the treaties (Dumiter, et al., 2016).

Double taxation treaty agreements are widely used by most of the countries which aspire to grow their economies through greater trade globally. Countries have domestic taxation systems that are used to tax domestic economic transaction and domestic assets. However, when dealing with international trade, countries are more inclined to use methods approved and agreed through international treaties as it benefits trade and governments collect high levels of tax revenue and that lowers the burden of taxation on local tax payers (Pickering, et al., 2013). For tax purposes the foreign income from another jurisdiction for an individual or resident is mostly subjected to taxation on principle of residency, a principal used worldwide for the purposes of collecting taxation (Kibuta, et al., 2011).

However, no country unilaterally likes to give up its basic rights to assets or ability to collect tax revenue from non-residents or residents. Taxation revenue is core to any nation to raise income to provide goods and services to its citizens (Vanderbruggen, et al., 2012).

However, double taxation also can take place when an individual is considered to be a resident of more than two nations for taxation purposes (Dee, et al., 2011). Countries enter into tax agreements for several reasons, for each country the reason can vary depending on its economic position and its system of taxation. In addition, this depends on the country's social and economic circumstances as to whether the country is a net capital exporter for developed countries or net capital importer for developing states and its linkage with associate countries with which it has signed treaties (Das, et al., 2013). However, tax and treaties consideration varies significantly from country to country depending on the situation which prevails within the respective country (Egger, et al., 2011).

This thesis aims to evaluate several factors which assist in the development of tax treaties within and across countries in order to develop a common framework and policy when taxing trade across countries. This will comprise of international treaties developed by OECD and UN. The common policies would connect nations through the provision of tax treaties both regionally and internationally. The development of international trade and tax treaties are designed to grow trade between nations. However, the domestic tax regulations and implementations remain within the control of the national government (Sriusadawutkul et al., 2013). The thesis also examines how taxation revenues are used by the state to raise revenue for investment. The researcher will also consider the effectiveness of the taxation system within the country to collect tax and how this is connected with international treaty obligations.

The rationale of the research is to provide methods to eliminate international double taxation in DTTs to enable FDI flow to enable Thailand to raise tax revenue to promote economic growth. The research examines the potential advantages and disadvantages involved in the elimination of international double taxation (Luoga, et al., 2018). The thesis explores the literature and empirically attempts to comprehend and analyse the methods used for DTT and explore taxation practices used within Thailand. Moreover, the researcher considers multiple

reasons why countries like Thailand negotiate treaties with regards to tax with other nations (Vanderbruggen, et al., 2012).

Developing states such as Thailand are short of revenue to promote economic growth. Therefore, they seek policies that enable them to raise taxes and encourage Foreign Direct Investment for this purpose by making it easy for international companies to invest in developing countries (Weyzig et al., 2013). There is considerable optimism amongst developing countries such as Thailand that economies can grow through FDI; several states have successfully used FDI in the early years, over the last few decades and that has led to an increase in international trade amongst nations. Therefore, it is no surprise to see that post 1990 developing countries' governments opened up their economies to attract FDI (Pickering, et al., 2013). FDI increases trade and economic activity and leads to a reduction in poverty and economic development for the countries that have attracted FDI. One such example of a developed country is the UK that used favourable terms and treaties to attract FDI in Wales in the 1980s, an area where there existed high unemployment. However, the keenness for developing countries to attract FDI has varied over time; this was due to the adverse impact of FDI on some aspects of the nation's economic activity. However, FDI did provide access to technology, knowledge and also served to alleviate poverty. Moreover, FDI did not in all cases have the desired impact as the expected benefit from economic activity and tax revenue did not materialise in all of the cases (Petri, et al., 2012).

The advancement in technologies and increased liberalisation amongst nations has led to an increase in growth in countries which were successful in attracting FDI flows, accompanied by additional technology and knowledge. The increase in FDI is correlated with an increase in the growth of GDP that also led to an increase in domestic investment that as a result gave prosperity to nations' income and living standards (Nunnenkamp, 2002). However, the level of success experienced in attracting FDI varied with nations due to their geographical

and political stability and the robustness of their legal system. However, economies with a greater level of liberalisation were more successful in attracting FDI than the economies that had a more centralised government administrative system.

Countries, both developed and developing have been competing to attract FDI and this has led several firms to invest in the countries that offered them the most preferential deals in terms of taxation and other incentives. To provide firms with benchmarks when identifying countries with the most attractive offers to attract FDI, the “Asia-Europe Meeting (ASEM)” has been developing benchmarks for this purpose. For example, this research was carried out to study the various approaches that may help Thailand to eliminate double taxation and make the country attractive for international companies considering investing through FDI initiatives in Thailand (Kibuta, et al., 2011).

The research critically considers the benefits of eliminating double taxation and adopting DTTs from the perspective of Thailand. It has been observed that Thailand wishes to be a part of double taxation treaties mainly in order to promote economic growth and resolve the issue of double taxation which would stimulate economic a greater amount of FDI (Pomfret, et al., 2013). Also, to prosper and attract investment, the government in Thailand discourage tax avoidance or evasion, The government of Thailand streamlines taxation regime to encourage DTTs. Based on the above summary, this research determined the research questions that are aligned with the research aims.

1.6 Significance of the Study

Investment plays an essential role in the development of the economy for emerging as well as for developing countries. Investment is essential to create employment and assists in

the financial and economic stabilisation of the economy. Investment in machinery and products enable the country to properly utilise human and natural resources. In recent times, globalisation has gained momentum and that has led to greater flow of investment across countries and there is an exponential increase international trade and cross-border trade across the world (Radu, et al., 2012). International trade means that goods are produced in a different place from the country of domicile. This means taxation is paid in more than one country and this makes tax matters complicated and at times companies may be paying double taxation. This discourages FDI. Multi-country trade means there is a never-ending requirement to comply with multi country tax systems. Such a scenario leads to the corporations and citizens to be burdened with extra costs and this negatively affects FDI and trade at large. Due to these reasons, there is a need to know about tax compliance or otherwise and its consequences when trading in multiple countries (Jogarajan, et al., 2012; Nunnenkamp, 2002). For every company trading in more than one country, there is the need to pay attention to double taxation related issues as cross-country trade needs double taxation on the amount earned in a single company by the people of another state.

Thailand is mostly an agrarian economy that aspires to rapidly industrialise its manufacturing sectors to compete with other regional and international economies to create employment, increase gross domestic product (GDP) and make use of modern technology to move towards the knowledge economy. This rapid industrialisation could be achieved through attracting FDI into some of its sectors like electronics and the automotive sector; these sectors are the key drivers for growth in the regions that have led these economies to become known as the Asian tiger (Kibuta, et al., 2011). The other key development Thailand has experienced is the liberalisation of the economy post the economic crisis in 1997-1998 and the country has pursued policies to increase exports to bring about greater economic development. Through

industrialisation policies, Thailand has been able to create employment and increase international trade.

However, to encourage foreign investment, the government of Thailand presents multiple non-tax and tax advantages for the investors via the “Investment Promotion Act” (Dumiter, et al., 2016). Since the Investment Promotion ACT Thailand has become one of the quickest growing economies. Despite domestic political chaos, economists believe strongly in the growth potential of the Thailand economy. The state policies have made Thailand an attractive destination for foreign companies to invest in. Thus, Thailand is ranked in 8th position for its FDI in a survey that took place in the year 2013 by the "United Nations Conference on Trade and Development (UNCTAD)" (Nunnenkamp, 2002).

This research’s importance can be gauged by its application to the case of Thailand. Thailand has implemented revised methods of double taxation that has attracted the inflow of FDI from bilateral countries. Within this research the researcher examines several methods to relieve the impact of double taxation policies, particular in the case of dividend payments (Vanderbruggen, et al., 2012). The dividend payment comprises of the exemption and the credit method. Such methods can lead to hugely increasing the inflow of FDI to Thailand, therefore, this shows the importance of researching the impact of taxation and treaties when economies want to attract FDI and increase trade with one another, therefore this research evaluates the “Double Taxation Relief” and its effectiveness (Sriausadawutkul, et al., 2013).

Moreover, the research highlights the points through which the nations can obtain benefits from entering into the DTT agreement between other countries. However, the DTTs also present some of the potential restrictions or limitations when trading with other economies, thus, the policy has both benefits and costs attached to it too. For example, Fuentes and Braun (2016) suggest that DTTs can generate a number of FDI projects among nations along with withholding the rights of taxation and minimising the tax revenues for developing countries,

In addition, there is ongoing debate as to whether DTTs lead to an increase inward FDIs for a country such as Thailand, something this research also considers. There is overwhelming evidence that DTTs agreements lead to a higher FDI that helps the country to attract investment and technological knowledge. Therefore, this research examines how DTTs lead to a higher level of inward FDIs and its impact on the wellbeing of the economy (Larsson, et al., 2012). This research also examines the problems associated with bilateral tax treaties and their standards. We also explore whether there are any countries that unilaterally provide tax relief through double taxation and whether this has led to a reduction in investment; also whether double taxation treaties adversely impact on a country's trading conditions.

There are insufficient studies that have examined the role of DTTs and their effectiveness in attracting and retaining FDI in the country. Therefore, this research evaluates the impact of various methods used under DTTs and their impact on FDI, more specifically it focuses on developing countries where the researchers consider a cross-section of data for developing countries and developing countries (S-S) (Petri, et al., 2012). The unique contribution of this research is in terms of its focus on the ASEAN states, an area that has not been researched in-depth. This gap or omission in the research suggests that there is a case for undertaking research within this topic to develop a better understanding on how the DTTs agreements between N-S, S-S and ASEAN states affect FDI (Luoga, et al., 2018).

1.7 Chapter Summary

The research suggests that the purpose and aim of the DTTs is to minimise or eliminate incidents of double taxation between trading countries. DTTs are also considered attractive and useful as they assist countries to encourage foreign companies to invest in Thailand under the category of FDI (Sriausadawutkul, et al., 2013). Agreeing and implementing the DTT is expensive, time consuming and its impact takes some time to show and bring about the desired change. The process to agree DTTs is time consuming and can often take years to finalise agreement, as the taxation issues are complicated and difficult to agree. It is often argued that in the process of attracting FDIs, through negotiating DTTs, the developing nations also sacrifices potential tax revenues (Jogarajan, et al., 2012). Thus, the research evaluates the effects of applying the DTTs agreements to attract the FDI in developing into the nations such as Thailand. This is because international double taxation treaties could lead to several unintended outcomes for both developing and developed economies (Dumiter, et al., 2016).

Therefore, this research is carried out to examine the various methods used to eliminate the incidence of international double taxation that leads to an increase in the level of FDI flow into Thailand, more specifically when foreign companies pay dividends to their parent companies. The research also examines the limitations along with the potential advantages used to eradicate double taxation. Moreover, the thesis also assesses the challenges to be overcome while using the DTTs to mitigate international double taxation. In addition, the recent legal changes brought about in taxation law and the approaches employed in Thailand are also evaluated.

The limitations of the methods used are also examined. The major challenge faced by foreign companies investing in Thailand is the red tape which can discourage the MNEs to bring FDI into Thailand, an aspect that is evaluated within this thesis. The recent policies and practices used by the TIRS within the Revenue Department of Thailand to alter the provision of double taxation provision in order to encourage inward FDI to Thailand, have also been

evaluated. Furthermore, the thesis also examines the effects of DTTs on FDI inflow from bilateral states to Thailand and analyses the methods used to eliminate international double taxation under DTTs between Thailand and its bilateral countries to see how they work and describes the approaches of mitigating double taxation in the scenario of dividend payments which contain the Exemption Method and Credit Method. Additionally, the thesis empirically investigates FDI flows from, (a) South to South, (b) North to South and (c) ASEAN countries to Thailand to understand the effects of DTTs.

CHAPTER 2

LITERATURE REVIEW

2.1 Definition of Foreign Direct Investment

The International Monetary Fund (IMF) defines Foreign Direct Investment (FDI) as a sum of money invested by one company into another cross-border. FDI is considered to have a high degree of impact on other economies as it increases the enterprise activity within the economy that leads to an increase in the level of employment and the gross domestic product (GDP). FDI is effectively an investment by the resident of another economy (Davie, 2015). FDI is directly invested into the existing industry, or a new business is set-up; this brings new management and knowledge into the country. It is an active form of investment from a director's managerial role perspective, while it can be considered as a passive form from the perception of portfolio investment. FDI has played a significant role in nurturing globalisation, where goods are traded across regions and the world. This increase in trade is due to FDI that has helped developing economies such as Thailand and others to increase industrialisation and has helped emerging economies (Daniel, et al., 2016).

FDI has served to increase trade and has facilitated the exchange and flow of information and technology between economies (Egger and Merlo, 2011). Currently, FDI is internationally recognised to be of great importance and the concept is internationally supported. FDI is compatible with free market ideology and is opposite to the concept of mass nationalisation as observed in the Middle East in the 1970s and the Soviet Bloc of the 1950s (Avi-Yonah and Pougat-Tinhaga, 2014). FDI is the actual transfer of money or technology from one country to another and it is different from portfolio investment; where funds are invested in another country and normally invested in financial markets. In the case of FDI, a company will invest in assets such as plants or acquire a company and carry out day-to-day operations

to produce goods or services. FDI effectively facilitates the flow of skills, knowledge and technology from one country to another, normally from developed economies such as the USA or Europe to developing economies such as Thailand, bringing both hard currency, skills and technology (Braun and Fuentes, 2016).

The idea of FDI has gained popularity over the last few decades and is supported by academics, practitioners and government agencies; it meaningfully and purposefully enables money to flow from rich to poor countries (Braun and Fuentes, 2016). The idea of FDI is also popular amongst academics and governments as it supports the creation of new industries or helps to improve the efficiency of the existing industries through sharing knowledge and trading with different countries and with international markets (Avi-Yonah and Pougatinhaga, 2014). The major benefit of FDI is that it boosts government tax revenues and supports job creation, something that is required within developing countries to support the growing army of young unemployed youth, as is the case in Thailand,

Consequently, FDI helps to strengthen local economies. According to the Organisation for Economic Co-operation and Development (OECD), FDI is a key driver that helps to increase international trade and facilitate international economic integration (Schreiber, 2013). Countries that have accepted FDI as an effective policy framework and have implemented the system, have recognised that FDI helps to promote economic development, provide financial stability and enhance the societies' wellbeing (Daniel, et al., 2016).

As per the OECD definition of FDI, it sets the world standards for direct investment in other countries while it is completely compatible with the concepts of investment (Jogarajan, 2011). The OECD and other agencies worldwide have statistics related to FDI. Thus, the FDI statistics have enabled decision makers and academics to see the benefits of FDI and have promoted cross-border trade and investment. It was recognised, according to OECD that traditional means of reporting were not sufficient to increase cross-border investments and a

policy framework such as FDI is needed (Arnold, 2013). Additionally, it was noted that the traditional models were lacking the necessary attraction for foreign investors to invest in developing countries. Multinational Enterprises (MNEs) were especially reluctant to trade or establish businesses offshore because of varying taxation system complications, increasing the complexity of accounting records, taxation and financing (Jogarajan, 2012). Therefore, it was noted that there was a need to develop a mechanism where double taxation problems could be overcome to increase international trade for the benefit of all nations.

FDI as a mechanism to invest in countries other than the domicile country, is supported by the World Bank and the IMF. The support for FDI is due to its ability to enable companies to set up operations where the resources are and they are able to produce competitively, thereby this facilitates the economic gains for both the recipient country and the country of the original investment. Therefore, FDI ensures long term monetary advantages for all (Miller and Oats, 2016). The attraction of FDI is due to its ability to create jobs in countries where unemployment is high. It is reported that approximately 2 million jobs per year are created by FDI in developing countries. However, FDI has not successfully brought about the desired positive results, in some cases and FDI has not been proven to give positive results (Rasmussen, 2011). The other benefit of FDI is that the investor has an interest in the management of the company that helps to improve firm productivity and helps to develop a long-term relationship between the investor and the host enterprise. To measure the effectiveness of FDI, statistics are maintained by each country and various agencies which suggest their effectiveness and the amount of fund flow across the borders (Daniel, et al., 2016).

2.2 Double Taxation

According to Rasmussen (2011), the double taxation principle is under which income taxes are paid twice from the same source of income. Under the legislations of double taxation, income is taxed at two levels, a) personal and b) at corporate level (Rasmussen, 2011). Thus, the same income is taxed twice in two different countries, once in the country of domicile of the investing firm and secondly in the host country where the investment was made and the profit earned, this how the incidence of double taxation takes place, this effectively discourages investment in other countries and negatively impacts international trade. Consequently, world trade as a large is worse off. To overcome the issue of double taxation, countries negotiate tax treaties between themselves (Dong, 2019). In some incidences, double taxation is often identified as an unintended consequence. In some countries, double taxation is seen as a negative element of the tax system that discourages trade and encourages barriers, thus leaving everyone worse off (Brooks and Krever, 2015).

The topic of double taxation is currently divided into two categories, economic and juridical. Under juridical double taxation, the taxpayer pays tax twice on the same earnings with comparable taxes in two or more countries for identical periods with respect to the same subject matter (Miller and Oats, 2016). Thus, double taxation is considered to discourage cross border trade between associated enterprises (Egger and Merlo, 2011). To overcome double taxation complications, countries enter into mutual agreements which are used for the resolving of issues arising under double taxation between different countries which may arise as a consequence of transfer pricing adjustments (Miller and Oats, 2016).

International double taxation is considered to be a barrier for larger trade as the investor does not wants to pay tax twice if an investment is made abroad, a challenge that is recognised by the OECD that restricts international trade (Baker, 2014). However, whether international double taxation is a barrier has been questioned since the era of the League of Nations (Miller and Oats, 2016). More so double taxation has also been debated in the context of the

development and preservation of tax treaties; however, the avoidance of double taxation cannot be fulfilled through these strategies (Braun and Fuentes, 2016). In the context of double taxation, tax treaties involve attribution of taxing authority regarding the income produced by the residents belonging to a country and consequential deriving of sources for another contracting state (Zarb, 2011).

The issue of double taxation has led to a significant debate and the concept has received scrutiny by academics, practitioners and world regulatory agencies. The debate is that double taxation is unfair to shareholders as the tax is unfair because tax is paid on their dividends, yet at corporate level, these funds were already taxed (Borrego, 2016). The advocates of double taxation are wealthy individuals who can enjoy the large dividends based on large amounts of common stocks while on the basis of their personal income, they would pay zero taxes (Baker, 2014). Dividend payment supporters also pointed out that since the companies in different states are not required to have their income double taxed, then dividend should not be taxed twice either (Pickering, 2013).

Thailand has negotiated an extensive number of tax treaty agreements with more than 61 countries. The major purpose of Thailand to negotiate such treaties is to allow cooperation between overseas tax authorities and Thailand in the implementation of their respective tax laws as well as to prevent double taxation and attract FDI to Thailand (Blonigen, et al., 2014). When assessing the individual schemes of double taxation and taking into account its advantages and disadvantages, the following aspects should be considered:

a. Advantages of Double Taxation

While double taxation is a questionable practice, it does, however, have a few benefits. The most substantial benefit being an increase in trade revenue as it provides additional avenues of income. The capital generated from double taxation is not shared or distributed to

other countries as double taxation splits the tax revenue from specific sources or it exempts a nation from tax rights altogether (Ahmed and Giafri, 2015).

b. Disadvantages of Double Taxation

The increased burden of double taxation leads individuals to avoid paying tax and this can lead to an increase in the incidence of tax evasion in a country. Investment ventures are also negatively impacted due to double taxation. Developed countries investing in developing economies are unable to raise capital from domestic investors, and companies in developing countries may not invest, therefore, this could cause a loss of employment for the home country and investment opportunities for foreign parties (Lesage, et al., 2013). While double taxation deters foreign investors from establishing an enterprise in developing countries, its exemption means either the host or companies domicile country loses out on tax revenue.

The elimination of double taxation may communicate a country's commitment to attracting and establishing foreign investment interest and the policy's absence implies investment ventures may not take place if the investor is satisfied the investors may move on, this could result in loss of tax revenue. It creates a situation for developing countries where the risk of not agreeing a double taxation treaty could far-outweigh the reward (Thuronyi, et al., 2016).

2.3 Double Taxation Treaties

Generally, Double Taxation Treaties are signed to prevent double taxation, which occurs when two or several countries tax the same income twice (Dumiter, et al., 2016). Apart from this, it is considered that DTTs set up also helps to exchange the data among the signatory tax authorities of the countries. Through sharing information, countries could minimise the incidence of tax evasion and tax avoidance. Whilst discouraging tax evasion, double taxation also serves other purposes which include giving legal certainty, allocating taxation rights among co-signer states, avoiding conflicts on tax evasion, attracting FDI and minimising the incidence of tax avoidance (Luoga, et al., 2018). To overcome conflicts, DTTs are entered with several countries to avoid adversity to individuals, minimise the interpretation issues and to ensure economic growth in the region or amongst countries is not adversely impacted (Petri, et al., 2012). The main aim of DTTs was to avoid the negative effect of such treaties by specifying the regulations and rules in terms of how revenue collection issues are dealt with between two countries should a conflict arise. Thus, streamlining the tax rates, the revenue types taxed and the tax exemptions (Dee, et al., 2011).

Tax treaties with foreign countries enable the taxpayers to estimate their maximum tax liabilities for planning and investment evaluation purposes. The tax treaties ensure foreign firms investing in the country understand the taxation system and do not feel the tax system is discriminatory against them. It can also be observed that signing DTTs with nations that are developed can lead to some risk because such treaties are usually in favour of developed countries due to their bargaining base on the place of dwelling principle. Developing countries are likely to be at a disadvantage when they negotiate DTTs with developed countries as they are keen to attract FDIs due to their heavy indebtedness and due to trade imbalances. In addition, their infrastructure is either old or has not been developed (Sriausadawutkul, et al., 2013). Thus, even when tax treaties are agreed they may not attract FDI.

The benefits and otherwise of double taxation treaties are well reported by the OECD and in another published research. The aim of DTT implementation is to raise tax revenues, to retain capital inside the borders of the country and to enable the government to provide goods and services for its citizens (Vanderbruggen, et al., 2012). The disadvantages of DTTs are that double taxation causes an increase in the burden of tax on the population that encourages them to avoid tax. High levels of taxation are often argued to lead to capital flight out of the country and raising balance of payment challenges for the country (Weyzig, et al., 2013). The high level of taxation directly or through double taxation discourages companies to invest in other countries. Low taxation levels help countries to develop infrastructure through attracting FDI (Weyzig, et al., 2013).

An important part of international law is represented by the current existing treaties of double taxation (DTTs) among more than 2500 bilateral countries. On the whole, two major models of DTTs are used globally which have been developed by the United Nations (UN) and the OECD (Quak and Timmis, 2018). These models have been developed and implemented to support an increase in international trade through the effective use of DTTs by the League of Nations between the years 1927-1946. The DTTs are designed on the principle of encouraging countries to develop legislation for double taxation to attract FDI and increase international trade (Dong, 2019). There are conventions and definitions developed to make DTTs operations easy and effective to apply. Moreover, DTTs allow the prevention of fiscal evasion in the context of Taxes on Income (UN, 2013).

The DTTs are designed to deal with the incidence of taxation specifically and they differ from other treaties relating to economic and law treaties. This represents the bilateral nature of DTTs (Chua and Lim, 2017). There are provisions stated within the DTTs that cannot be transferred to third countries. The growth of DTTs is attributable to their simplicity and

similarity in terms of their text and provision that enables them to be easily applied. According to an estimate, approximately 75% of DTTs are identical based on their words (Arnold, 2013).

Governments, policy makers, practitioners and academics consider the DTT network as an important element of the international tax regime (Dong, 2019). Further, DTTs are essential in the generalisation and applicability of rules governing income taxation based on cross border transactions (United Nations Department of Economic and Social Affairs, 2018). There are other problems that are linked with DTTs that this thesis has attempted to deal with and provide analysis. This thesis attempts to provide an evaluation of the issues associated with the DTTs and the aims and the objectives of the thesis outlined in chapter 1. To achieve clarity and simplicity, the researcher uses similar tax terminologies, and the legal frameworks that are used to solve disputes between countries and for companies to prevent trade disputes and minimise the abuse of tax agreements. The analysis also includes the methods on eliminating double taxation in cases where companies make dividend payments in different countries and different agreements (Radu, et al., 2012). Critical analysis of DTTs indicates that the level of similarity adopted when negotiating DTTs has enabled the treaties to become part of international customary law and conventions. The countries' legal systems accommodate the DTTs agreements and they generally implement laws for the prevention or avoidance of double taxation, especially by larger investors and shareholders in their country. It is also suggested that DTTs leads to a harmonisation of cross border trade and minimises conflicts, especially regarding borderline disputed income (Baker, 2014).

In the context of Thailand, the first DTT was introduced in 1968 and currently 61 countries are involved in DTTs with Thailand. Powerful countries such as the U.S. are involved in forty such treaties that are currently active and more specifically an historic event was marked with the signing of the treaty between the U.S. and Thailand in 2014 (Lang, 2014). The treaty led to a new era of investment and trade between Thailand and the USA. This treaty led

Thailand to also sign a DTT agreement with Great Britain too. This was specifically to address the issues related with taxation on oil related trade. This enabled the two countries to take advantage of petroleum tax, capital gains tax, income tax, and corporation and development tax (Egger and Merlo, 2011).

The DTT does not mean that there will be no disagreement between the trading states, for example there was disagreement between Thailand and the U.S. when Thailand wanted the USA to provide relief to Thailand over the treatment of taxation on trade. As per definition, “tax sparing” is a form of incentive for investment which results in a reduction in tax holidays or a reduction in tax (Becker, et al., 2015). There are large numbers of MNEs that operate in Thailand, and they have influenced its trade and investments figures. It is recognised that countries earn higher foreign currency through using technologies to track trade and capital in and out flows. Much of the capital inflow in Thailand occurs through the manufacturing of finished products once the goods have left the country (Ahmed and Giafri, 2015). Agreements between other countries have led to an increase in the level of trade between them and Thailand, therefore, DTTs have to some extent led to a reduction in the incidence of double taxation. Therefore, DTT is recognised as an effective tool in eliminating double taxation (Blonigen, et al., 2014).

2.3.1 Scopes of the Double Taxation Treaties

Therefore, the DTTs treaties have served a substantive role to promote international trade as the OECD model of Double Taxation Convention's Article 2 has been adopted worldwide when concluding bilateral treaties (Vandeveld, 2017). These measures have been adopted to prevent double taxation in the area of taxes on capital and income as well as in the areas of taxes on inheritance, estates, and gifts. Tax treaties limit a state's ability to impose excessive domestic tax by the state through domestic law. The development of DTTs has enabled developing countries to benefit from an increased flow of FDI; the inflows and their impact has been widely analysed and the analysis suggests that DTTs have served to developing economies well (Alworth and Arachi, 2012). The inflow of capital has led to the creation of employment, increased industrialisation and better administration of the tax system. With the liberalisation of trade over the last few decades, there are an increasing number of companies investing in other economies. In particular, developing countries have received significant foreign direct investment (FDI) due to the lower cost of labour, intensive production was relocated. Developing countries suffering from under-investment, lower savings ratios and high unemployment consider FDI as a critical means to stimulate economic growth, employment and increase tax revenue. Multinational enterprises (MNEs) operating in many countries have to comply with different taxation policies, this means there is the possibility that where the company is registered and the country where it is operating, may tax their revenue twice, resulting in double taxation. This affects a company's financial position and discourages FDI. Thailand has a high level of inward FDI and needs to ensure that the incidence of double taxation does not discourage FDI. Therefore, Thailand has actively sought to enter into double taxation treaties with countries within the region and internationally.

This research examines the literature on FDI, double taxation treaties and considers its implications for Thailand. Therefore, this empirical research is of high importance to

understand the impact of Double Taxation Treaties (DTTs) on countries that use this policy to overcome challenges when trading between countries. The thesis empirically tests FDI flows from, (a) South to South, (b) North to South and (c) ASEAN countries to Thailand to understand the effects of DTTs. The aim of DTT is to minimise the incidence of double taxation. To achieve this goal, firstly, this doctoral thesis investigates how an approved DTT between countries helps to increase FDI. Secondly, the study examines how DTT regulates dividend taxation between Thailand (considered as a host country) and bilateral countries (considered as home countries for international firms). Thirdly, the thesis evaluates how DTT impacts on a firm's decision to participate in FDI in Thailand. This empirical study also undertakes a comparison of tax credit and tax exemption methods as part of FDI data evaluation. This research also evaluates the different patterns of FDI flows.

The study sampled 9 bilateral countries and evaluates applying different methods on eliminating double taxation. The research uses one method or a combination of the credit or exemption method. The results suggest that for Thailand, from 1970 to 2017, FDI has increased, suggesting that DTTs have successfully increased the level of inwards FDI, resulting in increased economic activities. Thus, showing a strong relationship between DTTs and inward FDI for Thailand. The empirical findings reported in the thesis show a positive relationship for DTTs policy to attract FDI. Furthermore, the qualitative findings derived from the use of in-depth interview are supportive of the quantitative findings. The study concludes that DTTs are efficient and effective tools for countries to encourage intra-country trade as it lowers the cost of transaction.

The research highlights the importance of negotiating DTTs for all economies but more so to promote FDI into the region and internationally. The study provides policy direction for the Government of Thailand and the academic community to conduct further research into the issues of DTTs so as to make trading seamless across regions and internally.

International DTTs have served developing economies well over several decades. An important aspect of international tax rules in many countries are evidenced through the number of tax treaties agreed. According to a recent estimate, currently 3000 bilateral income tax treaties are currently in operation (Radaelli, 2013). The objective of tax treaties was to promote and facilitate cross-border investment and trade through eliminating the tax impediments amongst the Contracting States, with ever increasing numbers of DTTs the cross-border trade has increased. Thus, the importance of DTTs is ever-expanding and growing for the betterment of the taxation system and trade between countries. The DTTs have led several other operational objectives to complement the broader aim or central objective of the tax treaties between the trading countries (Jogarajan, 2018). The specific focus on the agreements of tax treaties was to resolve double taxation issues as MNE were faced with large double taxation (Karkinsky & Riedel, 2012). Historically, a unilateral relief was provided by some countries for double taxation, to reduce the impact of double taxation. Subsequently this led to the development of DTTs. Most of the DTTs were implemented in the mid-twentieth century and these treaties are now routinely accepted by the contracting countries (Pinto, 2013). A significant impact of DTTs is acknowledged in the literature as it aims to provide certainty for the taxpayers of FDIs. Firms like certainty when making cross-border investments, Cross-border investments expand the need and scope of DTTs amongst the contracting countries as well as in the countries which are not a part of taxation treaties (Davie, 2015).

According to analysts, the success of eliminating double taxation needs the state's support. The state support is necessary to overcome the issue associated with the avoidance or double non-taxation and the prevention of tax evasion. The DTTs are recognised as reliable when they ensure that income is taxed once, for which treaties have been applied (Rixen, 2011). This additional advantage of DTT is that it often provides advantages by counterbalancing the elimination of double taxation, thereby making the treaties more acceptable and easy to

implement by the state. The other advantage of DTTs is that it eliminates discrimination against foreign nationals and non-residents, that is another ancillary objective of DTTs (Vandevelde, 2017).

The scope of DTTs in Thailand has been attributed to various factors such as the desire of the government to attract FDIs, create employment and attempt to reduce the balance of payment deficit. In a typical tax treaty, taxpayers receive assurance from the treaty as well as it helping to combat tax evasion as the treaties are considered to be a good tool to reduce tax avoidance (Tisa, 2019). Based on the OECD Model and UN reforms, contracting countries are required to lend assistance to collect taxes, which facilitates and promotes the accepted abilities of treaties (Blonigen and Piger, 2014). The allocation of tax revenues is another advantage recognised by analysts of cross border activity between the States, expanding the scope of these treaties may serve as an advantage for the contracting states for the long term (Miller and Oats, 2016).

2.3.2 Types of Income under Double Taxation Treaties

Contracting states have identified certain regulations to distinguish between taxable and non-taxable incomes. Certain types or amounts of incomes are excluded from tax such as incomes gained from special situations for example payment received whilst serving in wars (Chua and Lim, 2017). There are several types of income that are recognised as taxable, and the earner is required to pay a tax in accordance with government applied tax rates. In accordance with the Internal Revenue Service (IRS), taxable incomes are defined as the amount of income an individual or the firm owes to their respective state government in a given tax year. Taxable income is generally referred to as adjusted gross income or gross income and includes bonuses, wages, tips, salaries, unearned income, and investment income (Miller and Oats, 2016).

The two types of major income taxes are corporate income tax and personal income tax that are regulated by the state legislative frameworks and regularly updated and revised. In Thailand, corporate income tax is the tax on the income of juristic entities and the Revenue Code regulates the taxation affairs for corporate income taxes in Thailand (Zucman, 2014). Taxable incomes are often discussed as the rates change and they impact on companies' and an individual's liabilities. Therefore, it is not a surprise that the rates and government policies are widely discussed in literature. The incomes on which taxes are paid include incomes from business profits and passive incomes such as interest, dividends, capitals, royalties, and gains. In Thailand, foreign and domestic companies pay corporate income tax (Davie, 2015). According to the taxation regulatory framework, a foreign company is subjected to tax only on Thai-source income while a locally incorporated company is taxed on the basis of its worldwide income. The corporate income tax is estimated to be 20% of the net profits while petroleum income tax is taxed at the rate of 50% net profit (Molenaar, 2019).

A foreign firm in Thailand is generally taxed on interests, dividends, and capital gains. Only under the Thai source of profits, is a branch of a foreign company required to pay income tax as per the country's taxation law and at the corporate income tax rate (Zucman, 2014). The Thai Revenue Authorities effectively manage the profits and credits earned by foreign companies within Thailand. Moreover, the salary of the owner is also taxed on the basis of the personal income tax rate. Different taxation rules are applied for the multiple types of income that are taxed under Thai taxation legislations (Kobetsky, 2011). A 10% levy on profits on the branch of a foreign company is provided, booked or remitted to the foreign head office. A foreign company deriving a certain type of income from Thailand such as interest, dividends, professional fees, rents, and royalties is required to be taxed on the basis of the gross amount received by the company (Pinto, 2013). The personal and corporate income tax rate depends on the state's legislative frameworks while under authoritative incentives, the standard

company tax rate may be reduced. Taxable incomes have also been defined by the Thai and other contracting states (Blonigen and Piger, 2014).

2.3.3 Eliminating International Double Taxation Under Double Taxation Treaties

There is considerable literature that has proved that DTTs provide tax relief for FDI through many forms such as exemptions, deductions, credits, tax sparing, and the allocation of expenses (Borrego, 2016). Tax sparing credit contained in tax treaties is the credit granted by the resident country which was not initially paid as foreign taxes but which is required to be paid under the normal tax rules of the state. This generally evolves due to tax incentives provided by the source country which wants to attract foreign investors and to promote businesses in the country (Kobetsky, 2011).

According to the evidence provided in the literature, a lack of double tax relief provision in domestic law can be managed through amendments in the agreement within in DTTs in order to eliminate double taxation (Radaelli, 2013). There are very limited international laws that restrict the countries from imposing taxes since the challenges of double taxation are recognised to limit the development of international economic relations (Karkinsky and Riedel, 2012). Therefore, the states affected respond through unilateral law to tackle double taxation issues unilaterally through bilateral or domestic legislative amendments. Most countries have developed, designed and implemented domestic laws to tackle counter juridical double taxation unilaterally (Arnold, 2013).

Some countries, in response to double taxation, used a tax relief mechanism whereby it used the tax credit method by adopting unilateral legislation to provide tax relief. However, double taxation is not always fully dealt with or eliminated by such measures (Blonigen and Piger, 2014). Over time, between trading nations, bilateral DTTs have been designed and

implemented to guarantee and clarify the position of international taxpayers when undertaking financial, industrial and commercial activities (Schreiber, 2013). Based on these bilateral DTTs, the countries which will tax an item or a taxpayer are determined and the credits associated in the distinct jurisdiction. The source countries, under bilateral DTTs, are provided primary rights to tax while limiting the tax on some of the aspects or items or incomes (Costa, 2016).

The potential of DTTs in eliminating double taxation has been attributed to the significant impact it has for providing relief from juridical double taxation. However, the elimination of juridical double taxation is often provided and reformed in the domestic tax legislation of the country. The critical analyses of the policy suggest that relief from double taxation through tax treaty is often more generous when compared with domestic legislation (Arnold, 2013). Article 23 of the OECD model has been reported to contain DTTs that offer choices for the credit method or the exemption method of elimination or relief from double taxation (Schellekens, 2016).

The credit method is generally chosen as a preferred method for the elimination of double taxation than the exemption method which is required if mentioned in a tax treaty. Moreover, in a corporate entity total taxable income, foreign income is not included that has been credited by the exemption method (Hong, 2018). Corporations are generally not allowed to deduct any interest payments or expenses associated with the production of foreign income. In general cases, reduced domestic taxes, by the amount of foreign tax, are identified payments when the credit of tax has been paid already (Kobetsky, 2011). Therefore, the domicile of the individual or company is an important factor. The residence-source type is therefore exempt from international double taxation through this strategy. From the literature, it is evident that double taxation elimination strategies and methods are evolving and growing in multiple countries throughout the world (Palan et al., 2013).

2.3.4 General Provisions in Double Taxation Treaties

In the context of DTTs, General Provisions are the principles required to be followed by the contracting countries in usual basis and must not be curtailed by either of the states as it may have consequences due to the legal obligation of the DTTs agreed between the contracting states (Schellekens, 2016). The fundamental principle identified by analysts, underlying the concept of tax treaties, is reciprocity. Reciprocity involves obligations on both contracting states, regardless of the cross-border flows of the dividends. Equal participation is the major general provision in the case of DTTs, providing an advantage for the developing countries (Ponjan and Thirawat, 2016). However, developing countries often suggest that due to MNEs bargaining power in relation to the size of FDI flow and the country's GDP, it is often the developed countries who are able to negotiate better DTTs in their favour.

General provisions in tax treaties are also recognised to be the part of multiple non-tax matters (Borrego, 2016). Analysis of types of provisions included in tax treaties, indicate that administrative provisions in DTTs are required to be applied reciprocally such as in cases of exchange of information and collection of taxes (Lerskullawat, 2011). In the context of bilateral countries' involvement in DTTs, rights and agreements are imposed on both contracting states. However, these rights and obligations are not required to be imposed and followed by third parties such as taxpayers. Nevertheless, taxpayers receive advantages upon the implementation of tax treaties among contracting states (Sangsubhan and Wangcharoenrung, 2011).

General provisions in tax treaties involve multiple steps before a treaty is ratified, such as signature, entry into force and conclusion (Jogarajan, 2018). The Participation of States is only complete once all these stages are complete as failure to complete any of the stages leads to consequences (Davie, 2015). The general provisions provide the guidelines as per the UN Model Convention and the guidelines provided by the OECD Model Convention. A majority of the provisions involved in the Models of the UN and OECD are identical and apply to both

contracting states (Egger and Merlo, 2011). According to the provisions presented by the Convention of UN, there are limited scope for amendments when compared with the OECD Model Convention (Büthe and Milner, 2014).

The general provisions provided by the OECD Model reflect the position of contracting states or member countries unlike the UN Model of Convention (Vandeveldt, 2017). On the basis of the OECD provisions, any aspect of the OECD Model, if there is disagreement between the member states, it can be remedied through a registration of reservation (Razin and Sadka, 2012). These reservations exempt the member states from the obligations of following the particular provision of the OECD Model in the approved and mutually agreed tax treaties (Daniel, et al., 2016). General provisions in the OECD Model also provide the member states an opportunity to disagree with the interpretation of the treaty presented in the Commentary of the OECD Model (Davie, 2015).

The purpose of the OECD Model is to provide the member state an opportunity to include the treaty in their agreement or any exemption from a particular provision. The interpretation of ‘observation’ has been recognised differently in the commentaries of both models i.e. UN and OECD (Razin and Sadka, 2012). General provisions in the tax treaties determine the applicability of member countries or contracting states in either being the taxpayer or if they may involve in taxing the income according to the taxing guidelines implemented in the states (Schreiber, 2013). In addition to some general provisions, certain special provisions also have an additional advantage by providing protection to the state from discriminatory taxation by the resident and source countries as discussed above (Ahmed and Giafri, 2015).

Table 2.1. reviews the key issues related to DTT that were explained earlier. The table captures some significant DTTs agreed between countries and displays the nature of each provision through considering multiple topics and sub-topics.

Table 2.1. Coverage of Double Taxation Treaties of Thailand

| Key Topics of Thai DTTs | Structures of OECD Model | Articles |
|-------------------------|------------------------------------|--|
| Scope of DTT | Chapter I Scope of The Conventions | Article 1 Personal Covered Article 2 Tax Covered |
| | Chapter II Definitions | Article 3 General Definitions Article 4 Resident Article 5 Permanent Establishment |
| Types of Income | Chapter III Taxation of Income | Article 6 Income from Immovable Property Article 7 Business Profits Article 8 Shipping, Inland Waterways Transport and Air Transport Article 9 Associated Enterprise Article 10 Dividends Article 11 Interest Article 12 Royalties Article 13 Capital Gain Article 14 (Delete) Article 15 Income from Employment Article 16 Directors' fees Article 17 Entertainers and Sportspersons Article 18 Pensions Article 19 Government Service |

| | | |
|--------------------------------|--|---|
| | | Article 20 Student Article 21 Other Income |
| | Chapter IV Taxation of Capital | Article 22 Capital |
| Eliminating Double Taxation | Chapter V Method for Eliminating Double Taxation | Article 23A Exemption Method Article 23B Credit Method |
| General Provisions | Chapter VI Special Provisions | Article 24 Non-discrimination Article 25 Mutual Agreement Procedure Article 26 Exchange of Information Article 27 Assistance in the Collection of Taxes Article 28 Member of Diplomatic Missions and Consular Posts Article 29 Territorial Extension |

Source: RD, 2020

2.4 The Frame of Negotiation on Double Taxation Treaties

To ensure that there is direct benefit from the agreed treaties, the tax treaty negotiation and capacity development need to be examined using a framework to design and implement the negotiation of tax treaties. The Manual for the negotiation was launched at an expert group meeting in December 2012 (Büthe and Milner, 2014). The states involved in DTTs negotiations are subject to the agreed negotiations as per the frameworks based on the Manual of Negotiation of Tax Treaties. The Manual of Negotiation of Tax treaties was updated between 2005 and 2011 by the first Subcommittee of analysts from the contracting states (Razin and Sadka, 2012). Members from both developed and developing countries participated in the designation and development of the framework for Tax Treaty Negotiation and Capacity Development, under the supervision of former and present treaty negotiators (Davie, 2015). On the basis of the discussions, the framework of negotiations for tax treaties was agreed, the negotiation meeting analysed the existing tools which can be accessed by developing countries to operationalize the DTTs (Sangsubhan, 2010). The final statements from the meeting of negotiators identified the tools for developing countries to effectively assess the resources in order to strengthen the capacity to negotiate tax treaties. The meeting was attended by 32 representatives of the developing countries that led to the publication of a paper identifying ‘Tax Treaty Administration and Negotiation’ parameters (Ho and Rashid, 2011).

A practical manual on the negotiation of bilateral tax treaties was developed by the subcommittee certain guidelines and principles were devised (Thanyakhan, 2008). According to these principles, the negotiation framework would provide practical training and tools for tax officials and professionals to operationalise the system which may reflect the realities of tax treaties in developing countries on the basis of the stages of capacity development (Phongpaichit, 2007). The negotiation framework, as per the principles of the Subcommittee reflects the current version of UN and OECD Model Tax Convention as well as the

Interpretations. Moreover, the negotiation framework was developed based on previous work done by the Committee (Company Thailand Summary Report, 2015).

The OECD and UN Models encourage the implementation of guidelines for the Manual particularly in the context of Tax Treaty Negotiations. In developing countries, negotiators are therefore suggested to apply the Manual guidelines as per the policy framework of the country (Onafowora, 2003). The main principles regarding DTT negotiation are presented in Section I of the Manual, additionally including the concepts of residence and source. In Section II of the Manual, the reasons and requirements of tax treaty negotiations are summarised (Schreiber, 2013). It also addresses the essentiality of the development of a tax treaty policy framework development and a compatible model for the country before entering the negotiations (Kawai and Wignaraja, 2011).

The developing countries need to understand and recognise the benefits of negotiating tax treaties as well as the costs of such negotiated tax treaties (Vandeveldt, 2017). In the case of developed countries, the negotiation of tax treaties is generally for the attraction of foreign investments, for the promotion of agreements, as well as for investment protection (Morris, 2019). Certain issues have been identified about the tax treaty negotiations, such as the concept of Permanent Establishment (PE) and its applicability for an effective and fair tax system that is non-discriminatory and it is not an obstacle to trade between nations. Such a treaty ensures that the issues of the determination of the rates of withholding taxes are not an obstacle in tax treaty negotiations (Borrego, 2016).

2.5 The International Double Taxation Network

In legislative framework, a tax treaty between states, is recognised and identified as the international agreement held between two states and governed by codes of international law. By the mutual consents of the contracting states, an adopted treaty can be modified in either a major or in a minor way (Ahmed and Giafri, 2015). International tax cooperation principles are identified by the Committee of Fiscal Affairs (CFA), involving the participation of senior tax officials from the contracting states. CFA follows the Model Convention rules and the international taxation cooperation rules (Baker, 2014). Almost all the bilateral tax treaties are based on OECD Model and UN Model. The international tax rules widely accept the aforementioned Models based on an agreed framework in order to reduce double taxation (Razin and Sadka, 2012).

In the context of the international cooperation of states in tax matters, tax treaties play a key role. International tax treaties encourage international trade and investment, consequently providing advantages to the contracting states such as reducing or eliminating double taxation and promoting economic growth (Büthe and Milner, 2014). International taxation also enhances the cooperation among tax administrations and the states involved in bilateral agreements; this efficiently and effectively tackles international tax evasion (Chua and Lim, 2017). Under an applicable tax treaty, the taxpayer also benefits by being entitled to the relief from international double taxation while the tax authorities of the country are able to identify the position of the taxpayer (Razin and Sadka, 2012).

Mutual Agreement Procedure (MAP) allows the contracting states to fully comply with the overall taxation legislative framework in the state on the basis of guidelines agreed through the MAP (Daniel, et al., 2016). International Committees have identified multiple ways to organise the MAP to ensure it functions according to the policies of the country for taxpayers, in order to effectively manage the administration of taxation (Kawai and Wignaraja, 2011). Audit and assessment functions are required to be separated from the MAP on the basis of the

objective of relieving international double taxation and the application of treaty (Miller and Oats, 2016). Taxation of foreign economic transactions is permitted by international law, when the strong connections between the taxing state and taxpayer exist, including habitual abode, residence, suits of assets and citizenship (Sangsubhan, 2010).

In certain cases, international taxation laws are silent and avoids the exemption rules and principles that are economically disadvantageous when the taxation become ineffective in the contracting states (Phongpaichit, 2007). The Network of international taxation treaties might be discouraged where taxation regulation or rules are not well-developed, or the tax system is ineffective in terms of implementation and the taxation treaties could lead to challenges when states trade between one another. Double taxation is not forbidden by customary international law (Miller and Oats, 2016). As long as each individual state is on a par or consistent with the international law in the context of double taxation, the resultant double taxation from the domestic laws' interaction of the states may last longer (Razin and Sadka, 2012).

International laws and legislative frameworks also possess the potential to decrease the negative effects of double taxation when the states wish to withdraw from their tax arrangements (Schreiber, 2013). In real life there is no such example, where such international laws have been identified and reported; bilateral double tax treaties play the roles by introducing such rules to facilitate easy trade between countries (Morris, 2019). All internal legal provisions conducted abroad are required to follow the national and international law as the principle of formal territoriality (Blonigen and Piger, 2014). From a general perspective, DTTs are international agreements and the rules followed by the member states in DTTs determine the consequences of the application of the DTTs between the states (Ponjan and Thirawat, 2016).

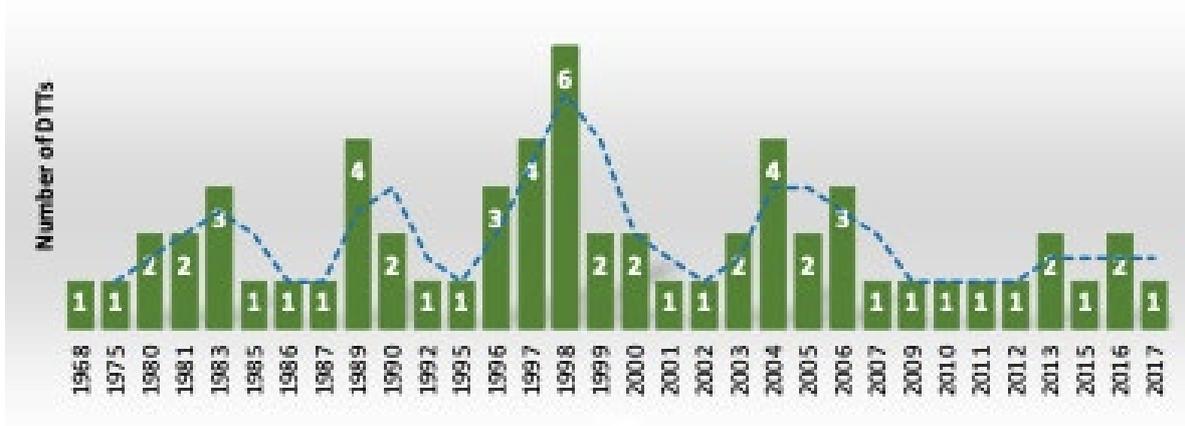
2.6 The Rationale for Double Taxation Treaties

To eliminate double taxation and provide tax relief for investors when the dividend payments are made, the DTTs are signed to promote FDI and increase the level of trade globally. The DTTs designate taxation rights to one country or provide a compromise - or a mutually beneficial agreement - where both countries are granted taxation rights (Ahmed and Giafri, 2015). The tax treaties promote trade between countries and assist in preventing tax evasion and discourages strategies for avoiding taxation in the long term, such as the strategy which is applied by the U.S investors who appear to avoid being taxed in the U.S. thus, they tend to transfer their capital gains and dividends by transferring their assets into another country. In this case an agreed DTT can help, through the effective exchange of information between the contracting states to prevent this tax avoidance issue.

DTTs decrease the tariffs on trade and taxation on specific income; they provide a baseline for tax revenue which should be appropriately split between the contracting countries. This practice protects taxpayers against tax discrimination in private and public firms, and reduces the burden of double taxation as a key objective of signing the DTT; the treaty's key objective is to eradicate double taxation (Ahmed and Giafri, 2015). Mainly, the advantage of signing the tax treaty is to substantially minimise the tax liabilities for MNEs who attempt to avoid paying tax in the host countries (Sachs, et al., 2009). The double taxation topic has been researched by Egger et al., (2010) and suggests that double taxation is one of the core issues for MNEs when they consider investing in the foreign markets. Therefore, developing countries such as Thailand can implement DTT in order to encourage the inflows of FDI through creating a competitive environment for foreign companies. This ensures that Thailand benefits from international investment (Barthel, et al., 2010).

Figure 2.1. The number of Double Taxation Treaties Thailand agreed for the period 1968-2017

The Proliferation of DTTs of Thailand



Source: RD, 2019

As evidenced in Figure 2.1, Thailand concluded 6 DTTs in the year 1998, the highest number followed by 4 in 2004. In total, Thailand has entered into 61 DTTs and continues the process of negotiation with other countries such as with ASEAN members as for Brunei.

The elimination of international double taxation can be easily accomplished through the use of two main approaches which are known as the credit and the exemption method. The exemption method can be linked with the lowest and highest rates of tax, respectively (Mintz, et al., 2010). However, developing nations with smaller economies cannot benefit from tax exemption, as they rely/depend on the tax revenue (Miller, et al., 2016). For the elimination of double taxation, developing nations generally prefer tax credit. However, numerous approaches can be used by taxpayers even if there are no treaties signed (Thuronyi, et al., 2016).

The DTT also serves as an important role through providing additional related information to both the parties involved in the trading. The information exchange records enable tax authorities to control tax evasion and prevent tax avoidance. In addition to this, for

Thailand, the increased tax base can be essential to meet the costs of the DTT, for example, the reduction in withholding tax prices or rates (Sauvant, et al., 2010). Consequently, signing a DTT can give preferable tax benefits to businesses. In addition, the inflow of MNEs into Thailand also helps to develop a positive image to the host nation.

Moreover, the increased international recognition helps to attract further investment and generate tax revenue that helps to invest in infrastructure making Thailand attractive for future inward investment. Busse, et al., (2010) and Neumayer and Spess (2005) have observed that a Bilateral Investment Agreement (BIT), when signed, could generate a positive effect on FDI inflows. In addition, BIT also assists in acquiring additional investments for local corporations. In the year 2011, Bloomquist was able to replicate the results on the linear model to estimate the influence of FDI affected by approving BIT. It has been reported that an increased amount of BITs can influence the development and growth of FDI (Bloomquist, 2011). It was also reported that DTT can have a positive effect on the inflow of FDI. For developing states such as Thailand, Neumayer (2007) found similar results (Neumayer, 2007).

2.7 International Double Taxation Treaties Models

In international tax rules, tax treaties represent an important aspect of the legislative framework for the country. Currently, above 3000 bilateral income tax treaties are in operation and the number of treaties involving multiple states are still growing (Chua and Lim, 2017). For the structuring taxation treaties at international level, the UN Model of Convention is followed in both developed and developing countries (Ponjan and Thirawat, 2016). Another internationally accepted model used for taxation treaties is based on the framework provided by the Organisation for Economic Co-operation and Development Model (OECD) Tax

Convention on Income and on Capital. Both models are regularly updated and the DTTs are structured and implemented based on these models (Davie, 2015).

A profound influence of both models has been reported on international taxation treaty practices and the models include several identical provisions. The similarity in the models and their application helps to maintain consistency, something that is reflected in their success (Razin and Sadka, 2012). However, there are also key differences in the models in terms of the measures used by the countries' policies to exemplify these differences. The economists' perspective in identifying the similarities and differences between both models has helped in an evaluation of their applicability as well as the exemptions a country may gain on the basis of these similarities and differences (Sangsubhan, 2010).

Under a particular tax treaty, the UN Model of Conventions substantially favours the retention of source country as per the policy of the taxing rights of the treaty when compared to the residence country of the investor. Under the UN model convention, this issue has been recognised as significant with respect to the taxation treaties implemented in developing countries (Ponjan and Thirawat, 2016). However, an issue is also emerging in the case of certain bilateral developed countries negotiating their bilateral treaties (Daniel et al., 2016). As compared to the OECD Model, the UN Model of Convention represents a compromise between the residence principle and the source principle, providing more weight to the source principle (Morris, 2019).

International taxation issues have gained importance as the DTTs numbers have increased and the contents of the treaties are frequently updated as new issues emerge. The OECD Model has played a significant role in presenting suggestions for the need to review the process (Borrego, 2016). On the contrary, the UN Model of Convention for taxation is the least prescriptive and suggestive. However, the model facilitates decision makers with essential information for expanding their understanding of the predictable consequences on the basis of

the country's policies on taxation (Ponjan and Thirawat, 2016). Moreover, the UN Model also represents the idea of extending the measure of relief for the residence country from double taxation through either an exemption or a foreign tax credit; as suggested by the OECD model (Borrego, 2016). Similar to the OECD Model for DTTs, the UN Model of Convention applies policies to the residents of one or both member states involved in the DTT (Sangsubhan, 2010). Both models have their own significance in the Fiscal Affairs of the member states and identify effective frameworks for the implementation of DTTs, providing long term advantages (Büthe and Milner, 2014).

Table 2.2. Allocating Taxing Right in OECD MTC and UN MTC

| Types of Taxing Right | Types of Income |
|---|--|
| Unlimited source country to tax | Immovable, Director's Income, Business Income (PE) |
| Limited source country to tax | Dividend, Interest, Royalties (UN) |
| Only resident country to tax | Royalties, Business Income (no PE), Student Income, Pension Income |
| Country of Effective Management can tax | Income from international traffic |

Source: OECD, 2018 and UN, 2018

OECD MTC and UN MTC make it necessary to apply different perspectives when approaching the principles of allocating taxing rights among the contracting countries. One of the practices to eliminate the problem of double taxation, which arises from international business transaction, is dividing the taxing rights of the country of residence and the source country. This system provides a solution for both parties and the MTCs considering the following sequence. The taxation rights are divided into 4 parts: 1) Source country gets full

taxing rights, 2) residence country gets full taxing rights, 3) source country gets limited taxing rights and 4) the country with effective management gets taxing rights. The respective government and MTCs realised that there are different structures needed to apply these types of taxing rights. Normally, the UN MTC will prioritise giving taxing rights to the source country, while in opposition, the OECD MTC will give importance to contributing taxing rights to the country of residence.

To achieve the research objectives, the information from Table 2.2 can assist in analysing the reasons for declaring dividend income as external to how the methods of eliminating double taxation under DTTs affect the FDI inflow from bilateral countries to Thailand. As we can see, some types of income in Table 2.2 do not allow the researcher to capture the methods of tax credit and tax exemption by providing full taxing rights to one of the contracting countries without sharing tax revenue (distributive rule). Thus, the focus of this study is only on dividend, interest and royalties.

Therefore, considering the limitations mentioned above, the researcher decided to focus on the dividend income to limit the scope of the study and provide an in-depth analysis. Within this study, firstly, interest income is applied only to the credit method between Thailand and bilateral countries. Secondly, royalty income has been omitted from my choice as some countries which have DTTs with Thailand, keep on OECD with MTC such as Thailand and some countries keep on UN with MTC, such as Indonesia. If the countries follow the OECD MTC, royalty income will be taxed only in country of residence; this means the researcher cannot cover the credit method and the exemption method in their analysis. Therefore, on this basis, dividend income is considered to be the most appropriate methods that help to eliminate double taxation under DTT and this can be used for testing impacts and to attract inbound FDI to the Thai.

2.8 Alternatives for Current Double Taxation Treaties

In order to improve the position of source countries, the literature suggests that there are several alternative methods other than the current DTTs (Jogarajan, 2018). One major alternative is the inclusion of the principle of 'limitation of benefit' that limits the reduced withholding rates, providing important protection and provisions for other treaties evaluated through a distinct assessment criterion (Sangsubhan, 2010). Despite the suggestions and recommendation of the OECD for the inclusion of the provision of limitation of benefit, commonly introduced and implemented treaties do not involve these provisions. The provisions of limitations of benefits are recognised to be complex and arbitrarily self-executing; thereby promoting limited access to essential information (Büthe and Milner, 2014).

The External Strategy for Fair Taxation represented by the European Commission's Communication, recommends member states to design and apply a balanced approach in order to negotiate the bilateral tax treaties with respect to low-income countries (Davie, 2015). Under an effective alternative for DTT, Commission also recommended the use of the Platform for Good Tax Governance for the fair treatment of developing countries while dealing with the bilateral tax treaties (Egger and Merlo, 2011). To ensure consistency between the tax and development policies within a state, the European Commission seriously takes the issues of double taxation and applies alternative strategies (Razin and Sadka, 2012).

Some recommendations have also been presented in the current published literature for developing countries under the title 'Tax, Development and International Relations' (Hong, 2018). On the basis of these recommendations, alternative strategies include the approval of all tax treaties by the parliaments of the respective countries as part of the ratification process. This will ensure that the inclusion of assessment processes for the taxes forgone are fully considered with regards to the tax treaties; this will update the provisions provided by the OECD and UN Models, their reservations/observations and an identification of the positions

set out in the national law of the country (Kobetsky, 2011). Domestic laws also aim to reduce the impact of double taxation and suggest identifying alternative strategies for the elimination of double taxation in the contracting states; either by modification or the inclusion of certain provisions at national level (Razin and Sadka, 2012).

Issues of qualification are the most critical challenge as identified in the literature but there are issues as to how such qualifications can be solved through the identifying method that can solve the issues through the use of the treaty itself with no probable alternative solutions. In such scenarios, the treaty defines a particular term for a particular contracting state (Schellekens, 2016). In rare cases, where a particular DTT fails to express or define the term, a varied number of alternative solutions are present. The OECD and UN Model based provisions also present certain effective alternative strategies; replacing the currently established and implemented DTTs are rare, as these provisions are generally operational on international level and cannot be modified on structural basis for each contracting state (Ponjan and Thirawat, 2016).

In order to ensure consistency with the development needs of the member countries involved, DTTs are suggested to reconsider their tax policies and respective DTTs; this recommendation is particularly applicable for developing countries (Schellekens, 2016). However, not all the DTTs in such cases are amended with possible revisions, instead minor modifications in the taxation policies are administered, which must be in line with the coherence policy for development. These solutions have been provided through the European Consensus on Development (Brooks and Krever, 2015). On such an exceptional basis, the EU aims to assist the developing countries through "Collect More-Spend? Better" strategy and promotes the building of effective tax systems (Kawai and Wignaraja, 2011).

2.9 Positive Effect of Double Taxation Treaties

The key purpose of signing a DTT is to focus on the elimination of double taxation (Dagan, 2000; Li and Chen, 2010). As such, the main benefit of signing the treaty would be to substantially reduce the tax burden of the MNE in the host country and again in the country of domicile, that seeks to extend its operations in the host country (Barthel, et al., 2010). This would directly lead to an improvement in the local business environment and the country would become more favourable compared to other countries with no corresponding DTT. Egger et al. (2006) argued that double taxation constitutes one of the major obstacles for MNE to invest into foreign markets. Consequently, developing countries such as Thailand could employ DTT to stimulate FDI inflow and this would create a competitive advantage (Barthel, et al., 2010).

The elimination of double taxation can be achieved through three methods, namely credit, deduction, and exemption (Dickescheid, 2004). The deduction and exemption methods can be associated with the highest and lowest effective tax rate, respectively (Parikh et al., 2011). Smaller developing countries might rely more on tax exemption. At the same time, large countries might prefer tax credit as the method of double tax elimination. Several methods could be offered to the taxpayers even if no treaty is signed between the respective countries. This suggests that there are alternatives to DTTs that could be used to resolve the double taxation problem (Parikh et al., 2011).

Another role of DTT is to provide relevant information so that the respective parties could make informed decisions when considering investment opportunities. Not only would the information help to improve investment decisions, but this information exchange could also then be utilised to prevent tax avoidance and tax evasion (Barthel, et al., 2010). An increased tax base could be important for Thailand to cover the costs of the DTT such as a reduction in withholding tax rates (Baker, 2014; Sharkey and Bain, 2011). Signing a DTT that offers

attractive business conditions for MNE could also create a positive image of the host country as an investment target and encourage other international investors to invest in Thailand (Christians, 2005). This international recognition may be used to combat the disadvantages of the local business environment such as the inferior infrastructure in Thailand (Dagan, 2000; Yew, et al., 2010).

Egger and Merlo (2011) found that the number of signed DTTs could have a positive effect on FDI inflow. Furthermore, it was suggested that DTT could attract more investment despite weaker local institutions. Similar results were reported by Kim (2007). Blonigen and Davies (2005) who analysed OECD data and reported that DTTs signed earlier lead to an increase in the positive effects on FDI after investigating the OECD data. Similar results were found by Neumayer (2007) for middle-income developing countries, Murthy and Bhasin (2013) for India, Ohno (2010) for Japan and Asian countries, and Marques and Pinho (2014) for European countries.

2.10 Cost of Double Taxation Treaties

At the time of signing a DTT, considerable research and negotiations are required for the benefit of both parties. DTTs can provide benefits in terms of the savings based on double taxation and the specific costs linked with the agreement that may outweigh its costs and any negative impact (Allee, et al., 2011). However, negotiation costs could be significant, and this may be one of the barriers for less developed countries when negotiating DTTs. In addition to this, the ratifying of the treaty can take a long time, at times years and may incur substantial costs for the home and the host states. The requirement to adapt and match the treaty version can be noticeable for underdeveloped nations with lower and limited administrative resources (Bellak, et al., 2009).

The most notable aspect of signing the treaty is connected to the change in the tax revenue resulting for one of the parties. In reality, a more substantial effect can be linked with the developing country as the agreement generally restricts source-based taxation. However, because of the asymmetric nature of the flows of FDI among both developing and developed nations, the incentives offered to the MNE may be too generous and costly; thus, the DTT may not benefit Thailand as the treaty may not be fully in its favour (Bellak, et al., 2009). Therefore, a good deal could help Thailand and a bad deal could have a substantial negative impact for Thailand. It is due to the elimination of tax revenue which can be too costly to be offset by the benefits of signing DTTs. However, it is consistent with the tax rate reduction as being one of the most influential factors for MNEs in selecting targets for investment (Dharmapala, et al., 2009).

In addition to this, the avoidance or tax evasion can discourage investment instead of attracting it as this may indicate a poor administration of taxation within the country that may show the country lacks robust procedures and administration. The attempt to agree a treaty at any cost, known as treaty shopping, can also be a significant concern; this may be considered as the party manipulating DTTs for the advantages (Allee, et al., 2011). Moreover, the anti-treaty shopping events might have a minor negative effect in contrast to the prevention of tax reduction and tax evasion in the rate of tax for multinational corporations (Egger, et al., 2010).

However, no substantial proof supporting the role of DTTs in attracting FDI has been discovered in contrast, the advantages of concluding DTTs can be advantageous as these tax treaties are a sign of the country's economic and trade standing, thus the countries which acquire "International Economic Recognition" may increase trade and create economic opportunities for its citizens. Effectively, the DTTs could be considered as their badge of international economic respectability with an extensive system of DTTs (Allee, et al., 2011). In contradiction to the several advantages of DTTs, there are numerous costs incurred by the

contracting parties. The ratifying and negotiations of the contract leads to major costs and a burden on the resources of administration (Kurtishi-Kastrati, 2013). The labour intensity, and the length of the process of negotiation along with the additional effort of matching various versions of DTTs and languages, means there are substantial costs associated with the process, especially for developing countries with smaller economies. Moreover, the obligations in the treaty may conflict with the domestic tax regulations, this can give rise to complications and disputes. Thus, the DTTs may lead to a loss of the national legal and economic authority of the country's government (Miller, et al., 2016).

In addition to this, the essential cost element is the potential loss of the revenue of tax since DTTs usually favour the resident and domestic over-taxation sources. Due to the flow of FDI reciprocity, the advantages offered to the investors from the contracting partner in a single state should be remunerated by providing similar benefits to the investors of the country who were party with other contracting nations. At the same time, the government serves both the residents of the nation and act as a host for the foreign investment (Pickering, 2013).

2.11 Double Taxation and Double Taxation Treaties in Bilateral Countries

In bilateral countries, the tax agreement, which is also identified as the tax treaty, is defined as the mutual agreement between two jurisdictions, based on provisions that facilitate and promote the elimination of double taxation through legal procedures (Egger and Merlo, 2011). According to economists' perspectives, tax agreements possess the potential to improve the relations between two countries, reduce tax evasion, and encourage foreign investment and trade. As per the statements of the European Commission's Communication, negotiation of bilateral tax treaties is required to apply a balanced approach in the context of low-income countries that are involved in bilateral treaties (Thanyakhan, 2008). This statement recognises

that developing countries do not have bargaining power or technical knowledge when negotiating with developed economies.

Moreover, within the Platform of Tax Good Governance, the Commission also suggested the implementation of fair treatment methods in member states in the case of developing countries, for their bilateral tax treaties (Tisa, 2019). In the large part, the majority of bilateral DTTs are based on the OECD Model Tax Convention as well as the UN Model of Double Taxation Convention. It has been suggested that these models be implemented in developing countries sharing mutual agreements for bilateral treaties in double taxation. The difference in both models has been recognised. The UN Model has been analysed and reported to possess a greater share of taxing rights when compared with OECD Model for bilateral countries (Molenaar, 2019).

For developing countries sharing bilateral DTTs, the UN Model has been recognised as advantageous including for the countries where investment takes place. The drawback of the UN Model is the failure of negotiations using and implementing this model (Davie, 2015). Moreover, developing countries involved in sharing mutual agreements on double taxation, lack the influence of the Committee of Experts of the UN, despite the large number of these countries. Contrary to the UN Model, the OECD Model has been evaluated and reported to possess greater influence over the OECD's Committee of Fiscal Affairs. The OECD also possesses greater technical capacity and resources than the UN Committee (Farrell, 2013).

International business incentives are based on legislation to extract income through the placement of tax treaties, with a zero-withholding rate. These incentives offered might be least valued by the host countries in the case of DTTs between bilateral countries (Davie, 2015). Treaty shopping, as reflected in the statements of IMF, are recognised to amplify the possibility by establishing advantageous routing which substantially links bilateral tax treaties. Treaty shopping also improves the link between bilateral countries in context of their DTTs through

the highlighting of low tax conduit countries. As IMF defines, a treaty agreed by one country can be made an effective taxation elimination treaty with the rest of the world (Alworth and Arachi, 2012).

The literature review suggests that losses are encountered by some countries due to the implementation of bilateral DTTs; such losses is the revenue losses experienced after the treaties with developing countries. According to estimates, EUR 770 million losses were encountered by Netherland in 2011 (Costa, 2016). Moreover, reports also show that the loss encountered by bilateral states on a usual basis were \$1.6 billion in the case of the US tax treaties in their non-OECD country counterparts in 2010. Among most of the bilateral states, 1000 to 2000 DTTs involved at least one developing bilateral state. Previously, bilateral treaties were mainly formed amongst developed countries and the trend for bilateral treaties between developed and emerging economies started some 20 years ago. There bilateral countries negotiating DTTs have only been identified within the past 20 years while the advanced economies involving developed states were much earlier, since 1990s, have been engaging with the DTTs (Blonigen and Piger, 2014). This suggests that treaties between developed and emerging economies have not increased in numbers rapidly.

2.12 Double Taxation Treaties and Foreign Direct Investment

Double taxation is mainly described as the implementation of comparable taxes in a minimum of two states regarding the same taxpayer, concerning the same taxable source, and for a similar period. It can take place if any one state claims the taxing authority founded on the taxpayer citizenship or residence, whereas another country suggests taxing consultancy based on where the income is sourced (Sachs, et al., 2009). Another source of potential double taxation can be noticed when both nations claim either a specific taxpayer as a resident of that country or that the revenue was raised in that country

Furthermore, diverse approaches for the determination of the internal transfer amount applied in two nations, can lead to double taxation such as a firm that contains a production facility in two states and transports goods directly from one state to another. Due to this, the nations on a large scale have resorted to the deduction of DTTs (Neumayer, 2007). By locating the economic activity in the foreign state and if the income is transferred between the economies then there will exist the incidence of double taxation. This leads to a negative impact on the flow of FDI between the countries (Mintz, et al., 2010). Taxation on income from foreign countries tends to raise issues for the investing company. Therefore, taxation incurred on such income is considered to be an obstacle to investments across borders in the foreign state. Due to this, the vital purpose of DTTs is the encouragement of FDI. This provides relief against taxation for foreign investors and leads to the exchange of information along with the purpose of DTTs (Kleist, 2012).

The impact of DTTs on the inflow of FDI can be absorbed or influenced by several determinants of foreign investment. The development and size of the market can be significant in attracting MNEs, which is mainly related to Thailand (Mintz, et al., 2010). This is because Thailand has a comparatively underdeveloped infrastructure, which causes the diversion of funds from MNEs to other states. Other factors are its geography, physical resources and the

cultural distance between nations along with literacy levels amongst the local workforce (Porter, et al., 2019).

However, the developed economies other than cheap labour or natural resources, normally do not have much competitive advantage to attract FDI. Therefore, taxation policies are used to attract foreign investors. Moreover, bilateral treaties can help to minimise the tax liabilities for MNEs along with giving a supportive atmosphere and discouraging the evasion of tax (Lesage, et al., 2013). The unilateral contract may not be adequate enough to offset the time-inconsistency problems which are arising in the activity of MNEs. Along with this, the DTTs are considered to be good a complement to other governments strategies to encourage the inflow of investment (Miller, et al., 2016).

To attract the FDI to the state, there are preferred policies for most of the policymakers. Mostly the elements affecting the influx of FDI are not completely agreeable to the system in general as they are unalterable (Lesage, et al., 2013). Moreover, there are multiple measures which can be taken to attract foreign investment and these strategies can be used to compete effectively with rival countries. In contrast to this, the limitations forced on the investors concerning the profit return, can be relieved unilaterally, and corporate taxes and red tape can be minimised. The bilateral measures can also be considered, such as DTT or BITs effective tools to attract FDIs into the countries (Kim, et al., 2007).

The effectiveness of the model can be determined by its acceptance by all the negotiating countries and the resulting increase in flow of investment. However, the significant critical differences between the UN and OECD approaches arise from how the issue of double taxation is negotiated and operationalised. Moreover, the jurisdictions of taxation are linked with source states in the model of OECD. It has been observed by Daurer and Kreyer (2014) that both the UN and OECD models prescribe tax credit and exemption for eliminating double taxation. Apart from this, the OECD model can give less authority over schemes of transfer

pricing and has been considered to be ineffective in avoiding the elimination of double taxation. In addition to this, the effect of DTT on FDI relies on how widespread the bilateral practice is. The level of FDI established may inhibit the influence of DTT on investments for the future. The DTTs have been renegotiated and have gone through' revisions suggesting the issues associated with such treaties and at times their futile significance of DTT (Sauvant, et al., 2010). The DTT effectiveness in attracting FDI also relies on the implementation of long-term treaties among the home state and host nation. Furthermore, it has been observed by numerous researchers that the effect of signing the DTT has a positive impact on FDI in the sense that the bilateral states have a long term application of DTTs (Jogarajan, 2011).

However, the governments which prefer to use FDI to achieve the growth objective through long-term development in developing states such as Thailand, have to consider the policies and strategies which will be most effective in attracting FDI. Governments often revise policies to boost the linkages among the local firms and foreign multinational companies to foster a conducive environment for firms to grow (Sachs, et al., 2009). The governments prefer FDI as it provides a quick boost for economic growth. However, the governments that make sustained efforts to improve the efficiency of economies are more successful in attracting FDI inflows. Attractive policies need to have incentives, promotions, as well as well negotiated tax treaties to promote a macroeconomic environment within a country such as Thailand. Other strategies such as infrastructure development and skills are also important. However, general macroeconomic, normally the external elements are not completely under their control (Kleist, 2012).

To summarise the literature that considers the need to attract foreign direct investment and the role of double taxation treaties, the table 2.3, pulls together the key literature from 2002 to 2019. Table 2.3 lists the published literatures, the variables employed for the respective studies and briefly summarises the findings. The table provides a snapshot of the development within the area that has been discussed within the literature chapter.

Table 2.3. Description of Literature on Double Taxation Treaties as Determinants of Foreign Direct Investment

| Author (s) | Topic | Variables | Effect sign of DTT on FDI | Findings |
|--|---|---|---------------------------|--|
| Blonigen, B.A. and Davies, R.B., 2002 | Do bilateral tax treaties promote foreign direct investment? | <u>Dependent Variable</u> Inward FDI <u>Explanatory Variables</u> DTT, GDP, TOP, Distance | - | DTT does not encourage FDI. It actually shrinks FDI as predicted by arguments suggesting DTT is intended to reduce tax evasion rather than attracting FDI. |
| Blonigen, B. A. and Davies, R. B., 2005 | Do bilateral tax treaties promote foreign direct investment? | <u>Dependent Variable</u> Outward FDI <u>Explanatory Variables</u> DTT, Corporate Tax Rate, Infrastructure, TOP, Corruption, Similarity of Countries | + | The middle-income countries adoption a DTT with Austria may aid to increase amount of FDI from Austrian companies. DTT aids to make investors to have confident in investment. |
| Egger, P., Larch, M., Pfaffermayr, M. and Winner, H., 2006 | The impact of endogenous tax treaties on foreign direct investment: theory and evidence | <u>Dependent Variable</u> Outward FDI <u>Explanatory Variables</u> DTT, GDP, Government Expenditure | - | DTT has a significant negative influence on outward FDI. Because DTT may propose to eliminate the tax avoidance rather than attracting FDI. |
| Neumayer, E., 2007 | Do double taxation treaties increase foreign direct investment to developing countries? | <u>Dependent Variable</u> Inward FDI <u>Explanatory Variables</u> DTT, BIT, GDP per Capita, Population, Economic growth, Inflation, Resource Rents, WTO Membership | + | DTTs are only effective in the group of middle-income, not low-income developing countries. DTT can offer tax privilege to contracting countries but not suitable for low-income countries which they may have to scarify their tax revenues and spend high cost to enter DTT. |
| Sachs, L. and Sauvant, K.P., 2009 | BITs, DTTs, and FDI flows: An overview | A Review of Literature | + | DTT helps to raise FDI flows which its significant approach is to tackle investment issues to guarantee investors that they will be legally protected under international law to eliminate double taxation burden. |

| Author (s) | Topic | Variables | Effect sign of DTT on FDI | Findings |
|---|---|--|---------------------------|---|
| Barthel, F., Busse, M. and Neumayer, E., 2010 | The impact of double taxation treaties on foreign direct investment: evidence from sizeable dyadic panel data | <u>Dependent Variable</u> Inward FDI <u>Explanatory Variables</u> DTT, Regional Trade Agreement, TOP, GDP, GDP per Capita, Inflation Rate | + | DTTs do prime to raise greater FDI and policy-makers should increase possibility to enter DTTs as DTT helps to reduce tax burden. |
| Barthel, F., Busse, M., Krever, R. and Neumayer, E., 2010 | The relationship between double taxation treaties and foreign direct investment | <u>Dependent Variable</u> Inward FDI <u>Explanatory Variables</u> DTT, GDP, GDP per capita, TOP, BIT, Regional Trade Agreement, Inflation Rate | + | DTT leads to increase FDI with stronger significant than the other explanatory variables. DTT mentions clearly in taxing rights to ensure that investors will be prevented from paying excessing tax. |
| Davies, R., Norbäck, P. and Tekin-Koru, A., 2010 | The effect of tax treaties on multinational firms: New evidence from microdata | <u>Dependent Variable</u> Outward FDI <u>Explanatory Variables</u> DTT, GDP, GDP per Capita, Firm Size, Tax Rate, R&D, MNE's Age of Facilitate, MNE's Scale, MNE's Experience | No effect | DTT has insignificant or no effect on FDI. Because the increasing of FDI can be expected from tax certainty or withholding tax reductions rather than entering DTT. |
| Ohno, T., 2010 | Empirical analysis of international tax treaties and foreign direct investment | <u>Dependent Variable</u> Outward FDI <u>Explanatory Variables</u> DTT, GDP, Trade Cost, Investment Cost, Population, Years of Education, Inflation Rate, Exchange Rate, Level of Investment Safety | No effect | DTT has no statistically significant effects on FDI. The indication is the government should play attention to make clearly identifying the roles of DTT to build them effective for encouraging FDI. |
| Egger, P. and Merlo, V., 2011 | Statutory corporate tax rates and double-taxation treaties as determinants of multinational firm activity | <u>Dependent Variable</u> Outward FDI <u>Explanatory Variables</u> DTT, GDP, Statutory Corporate Tax, Skill, Capital-Labour Ratio, Asset per Employee | + | DTT has a significant positive influence on outward FDI. Because DTT has effective tax policy incentive to investors. |
| Sharkey, N. C. and Bain, K., 2011 | An Australia-Hong Kong double tax agreement: Assessing the costs and benefits | A Review of Literature | + | DTT would have important effect in increasing FDI. This negotiations of this treaty do launch carefully to regulate whether a low rate each item of income to ensure investor avoided from uncertainty tax rate under internal law. |

| Author (s) | Topic | Variables | Effect sign of DTT on FDI | Findings |
|---|---|---|---------------------------|---|
| Baker, P., 2014 | An analysis of double taxation treaties and their effect on foreign direct investment | <u>Dependent Variable</u> Outward FDI <u>Explanatory Variables</u> DTT, GDP, GDP per Capita, Trade Cost, Investment Cost, Distance, Rule of Law, Corporate Tax Rate, BIT, Inflation Rate, Natural Resource, Infrastructure, Exchange Rate. | No effect | DTT has no effect on FDI from developed to less developed countries. Developed countries provide unilateral release of double taxation and avoid to use treaties for attracting multinational enterprises' FDI decisions as unilateral release is better to set up tax rate by their own. |
| Marques, M. and Pinho, C., 2014 | Tax-Treaty effects on foreign investment: evidence from European multinationals | <u>Dependent Variable</u> Outward FDI <u>Explanatory Variables</u> DTT, Effective Tax Rate, Corporate Tax Rate, Withholding Tax Rate, GDP, Inflation, Labour Cost | + | DTT provides significant positive impact in encouraging MNE's FDI as DTT has offering low tax rate than internal law offers. |
| Ahmed, S. and Giafri, R.N.M., 2015 | The role of double taxation treaties on attracting foreign direct investment | A Review of Literature | + | DTT stops incidents of double taxation. It aids less developed countries in attracting FDI, and reduce double taxation. However, less developed nations sacrifice high costs to enter DTT and FDI to cover these costs. |
| Murthy, K. V. and Bhasin, N., 2015 | The impact of bilateral tax treaties: A multi-country analysis of FDI inflows in India | <u>Dependent Variable</u> Inward FDI <u>Explanatory Variables</u> DTT, GDP, GDP per Capita, TOP, Distance | + | DTT presents significant effect as determinants of FDI flows to India. Because effective tax system can aid to create greater competitive investment. GDP and Distance are also key variables to encourage FDI inflows. |
| Castillo-Murciego, Á. and López-Laborda, J., 2019 | The effect of double taxation treaties and territorial tax systems on foreign direct investment | <u>Dependent Variables</u> Inward FDI and outward FDI <u>Explanatory Variables</u> DTT, GDP, Distance, Exchange Rate, BIT, Institution | + | DTTs increase on Spain's inward and outward FDI. Due to DTTs can reduce the tax avoidance and evasion of MNEs. |
| Dong, Y., 2019 | The Impact of Double Tax Treaties on Inward FDI in ASEAN Countries | <u>Dependent Variable</u> Inward FDI <u>Explanatory Variables</u> DTT, Market Size, Development Level, TOP, Corporate Tax Rate | - | DTTs bend to have a negative effect on the FDI inflows into ASEAN. This effect of DTTs on FDI inflows in ASEAN could be motivated by certain provisions in some older DTT may have become outdated or irrelevant, thus deterring FDI. |

Source: Author's own compilation

2.13 Effects of Double Taxation Treaties on Domestic Law

Double taxation is the circumstance where tax is applicable on two or more jurisdictions on a single avenue of profit or income obtained. In other words, it is defined as the situation where the income earned by the firms is subjected to deduction twice, in the country where the profit is earned and, in the country, where the profit is repatriated (Lesage, et al., 2013). The treaties concerning the taxes levied in the legal system of a nation can affect the methods through which the country applies its plans regarding bilateral tax agreements. However, the legal status of tax treaties is governed by conventions in general or by the tax treaties agreed along with the domestic law (Dharmapala, et al., 2009).

The developing countries trying to attract FDI, tend to give greater importance to gaining status through getting a DTT done in as many countries as possible and at times it is prioritised over their domestic laws. This indicates that when there is any disagreement between the local law and the DTTs, the rules which prioritise the DTT would be enforced to implement DTT policies instead of domestic law, even though DTTs are incorporated partially within the local legislation (Pickering, 2013). Thus, the local law and DTTs are interlinked as when two nations agree to enter in a DTT, they are required to be approved by their government as per their domestic law. Thus, it ensures that DTTs are enforceable within the domestic legal system. By entering DTTs, it assists the individual who was a resident in a contracting nation as it can give the resident an advantage in tax terms instead of the provision of tax in domestic law. It can also be said that DTTs will help the investor and will not let the investor squander the opportunity to obtain the benefits of tax exemption and subsequently provide them with additional advantages (Dharmapala, et al., 2009).

However, if the domestic law is altered and there is some modification in the rate of income tax, the DTTs assist in safeguarding the outside investor from its negative impact so that the alteration of domestic tax law will not negatively affect the investor of the contracting

nation (Miller, et al., 2016). However, there are some states which seem to have considerable flexibility and independence from domestic and international law from the perspective of the implementation of bilateral tax treaties (Kurtishi-Kastrati, 2013). This level of flexibility and freedom is present despite the enormous differences relating to the status of tax treaties about domestic law. In addition to this, the general considerations of the tax treaties' status can restrict the method through which the state applies the provisions of the treaties concerning tax. However, an essential aspect of such a problem is the link between the treaties of charge and their domestic anti-avoidance regulations (Jogarajan, 2011).

2.14 Capital Import Neutrality, Capital Export Neutrality and National Neutrality

Musgrave (1963) founded the Capital Import Neutrality (CIN) principle in the year 1963. It was at the same time, that Musgrave founded the principle of Capital Export Neutrality (CEN) (Allee, et al., 2011). This tax neutrality is based on the economic equity and efficiency principles. The tax neutrality is defined through these three criteria. The "Capital Export Neutrality" is the ideal tax system which needs to be efficient in raising additional revenue for the state government. However, at the same time it aims to minimise the negative impacts on the decisions of the taxpayer. Generally, it is considered as favourable tax and it also prevents economic resources from being assigned to anything without considering whether an appropriate rate of return can be achieved or not (Porter, et al., 2019).

The second precedent is of Political or National Neutrality (NN). This is irrespective of where the income of tax is obtained, as all taxpayers are taxed similarly by the governmental authorities and jurisdictions. National tax neutrality is regarded as a commendable objective, which is founded on the principle of equality. The third precedent of neutrality is the capital import neutrality which is uncompromising on the burden of tax on the foreign subsidiary of

the MNEs by the host nation, and it needs to be similar in all cases irrespective of the government where the MNE operate. This principle is also true in the case of the domestic firms (Pietrobelli, et al., 2011).

The fundamental concept of developing CEN and CIN are to ensure non-discrimination between the investment done by an external investor, cross border or domestic investor. To develop CIN, there is a specific initial criterion which needs to be passed. The first principle is that the host country - or the source state - needs to impose a tax on the investor who is from a foreign country and to invest an amount equal to the amount of capital from investors in the home nation (Blonigen, et al., 2014). The host states are not allowed to accumulate withholding tax from the depositors who are not citizens of the host nation. Furthermore, it was stated that the citizen of the host nation would not gather tax from the amount which is incurred in another nation (Dharmapala, et al., 2009).

Apart from this, the principles of CIN consider the neutrality of the state where the flow of capital is significant. Thus, the resident state should set the arrangement of an internal law, the central aim of which is to safeguard the resident from enduring the burden of a high tax rate. In this respect, the responsibility of cost on the investment of the state, whether it takes place from cross border investments or domestic investments, needs to have equality (Pickering, 2013). Apart from this, the resident state of the foreign investor will collect the tax from the investor, only on the income which is earned domestically. On the other hand, the income which is incurred in the host nation can only be utilised for the principle of developing CIN from the exemption method. Also, the laws of CIN and CEN were presented in the year 1979 as Hartman and Feldstein formed the opinion of National Neutrality (NN) with the help of tax on the amount of income to be of the welfare state as a major factor (Sauvant, et al., 2010).

2.15 Methods on Eliminating Double Taxation under Double taxation Treaties

Two basic rules of taxation have been developed to regulate tax between contracting nations and the host nation and these regulations are agreed and are applied in the real world where DTTs are operational. One is a residence basic rule and the other is a source basic rule. Residence basic rule is incorporated into the tax system, it suggests that the earned income is taxed in accordance to the worldwide principle. On the other hand, source basic rule is specified as a system where income refers to tax regarding the territorial principle.

The other basic rule used suggests that the incomes are taxed by countries within the territories of their dominions. In other words, incomes are subjected to the taxation rules of the source countries' borders of incomes. Generally, the source basic rule and exemption methods are aligned for the reason that the source countries earn income from their investment, and they have a desire to repatriate income to the country of origin, such income is regularly exempted from tax at residence state.

2.15.1 Exemption Method

The easiest way to evade double taxation for transnational profits across countries, is to obtain tax exemption from the home country from foreign sources of income. As discussed previously, the exemption method means that the profits of subsidiaries in source countries which have been taxed, will be subjected to exemption from levying tax in the calculation of total profits. Therefore, under the exemption method, the calculation of exempting foreign profits from the tax collection of MNEs follow description of sub-methods under exemption method.

a. Full Exemption Method

The Full Exemption Method is the procedure that the taxpayers of the residence country who had investments abroad are exempted from paying tax on income earned as that has been paid once at the source country. These incomes earned from the source country. As the taxpayers have paid tax, the source nation will not be included in the tax calculation again at the country of residence of the taxpayers. This exemption method ensures double taxation issue do not arise and ensures that the resident taxpayers as well as the non-resident taxpayers, are taxed equally. Thus, tax obligations are met on the basis of the incomes in the question and such taxes incur merely inside the residence country.

b. Exemption with Progression Method

The exemption with Progression Method is the procedure whereby the taxpayers of the residence country who had investments abroad, are able to carry their incomes from the source country, once the tax has been paid at the source country, there after incomes in question will be again computed together with the incomes incurred at residence country to discover aggregate tax base. This process aims to expand the tax base in the residence country of these taxpayers where the main objective is to build the tax base by reducing high tax rates. Regarding the tax progression system, the tax rates relate to the amount of income calculated at tax base. Within this system, taxpayers can estimate their tax rates using the set criteria for the tax rates are to be exercised to compute tax on incomes which were solely incurred in the residence country. As shown in the previous statement, above, this implies that the income earned in the source country will not be consolidated in the process of calculating taxable income.

As a general rule, the worldwide view of tax authorities is that the source basic rule alongside an exemption method of foreign earned income, creates an uneconomical allocation

of capital internationally for investment purposes. If a territorial tax system or source basic rule is set up by two nations and exemption tax on foreign incomes takes place, then the after-tax rates of these foreign source incomes that are repatriated to the investors of a parent country may differ, as the parent country of investors are independent from them. In this manner, dissimilarities in tax rate charges across nations have a bearing under the taxation rule. If a country has low tax rates, then it will attract greater capital inflows. Notwithstanding, one significant positive perspective related to a territorial tax system is that in the same nation, the tax bill for domestic and foreign investors is equalised. PWC (2013) states that through the importance of the territorial tax system approach, there have been significant changes introduced. In the year 2000, the territorial tax system had been used by only 14 nations out of 34 OECD members. Later, 28 OECD members implemented this tax system during the year 2012.

Though the residence basic tax rule is often opposed but it is still widely used worldwide. The income earned in another nation will be consolidated at a local headquarter of MNE which is subject to tax for the MNE at its parent country. In this manner, the worldwide taxation system suggests the double taxation duties from incomes which incurred at foreign countries, particularly, in the circumstance when foreign countries act as host countries and confer tax privilege on incomes of MNEs are designed to attract foreign investment. To avoid the issue of double taxation on foreign source income, a system of worldwide taxation, DTT is designed. Countries which apply residence a rule normally confer tax credit on foreign source incomes to foreign government. In the event that giving unlimited foreign tax credit is applied, the investors of the residence country may face the equality in the matter of tax treatment via credit method on their taxable incomes as worldwide taxation system is independent of territory that these investors invest.

2.15.2 Credit Method

Credit Method is used in practice in the case where both the residence and source countries have the right to collect tax on income. However, DTTs help the residence country to eliminate double taxation by permitting them to take the income into account which the tax had already been paid at source country to credit from estimating tax of the home state. Countries apply the principle of worldwide taxation where the company is set up, mostly by the credit method to avoid double taxation from foreign earned income. Underneath the credit method, the residence country of MNEs charge the tax on worldwide income. However, granting tax credit for foreign income tax, the after-tax benefits of the MNEs can be treated through 2 sub-methods of credit:

a. Full Credit Method

Full Credit Method is the procedure where the resident country allows the foreign investor to repatriate the income and the tax credit and to pay tax in the residence country. This is valid as long as the amount of tax which is already paid in the source country exceeds the tax which is computed in the resident country. When there is tax credit on this amount of income from the tax base, the amount left will be returned to the taxpayer. Some countries are reluctant to apply the full credit method because it will put the taxpayer of residence country at a disadvantage as it will take time for the taxpayer to get the tax refunds.

b. Ordinary Credit Method

The ordinary credit method is the procedure which taxes income earned by MNEs in the source country which is an attempt to reduce or eliminate the amount of tax paid within the resident country on the incomes obtained in the source country. The resident country has an obligation in eliminating double taxation by allowing its taxpayers to reclaim tax that has been

paid in the source country to meet the liability of paying tax in the resident country. Through the computing of the tax amount in the resident state, the incomes of the MNEs which were earned in the source country will be computed by assigning the tax rate of the residence country which is equal to the tax rate that the domestic investor paid in the residence country. Subsequently, the tax amount from the previous method will be credited from the aggregate tax amount of MNEs in their resident country.

The incomes from the source country under the residence basic rule are taxed by the residence country. This relates to repatriation rather than the event of accrual tax, of which income is taken into consideration as tax deferral until repatriation really happens. This process shows that MNEs benefit from low taxes and this is the motivating force for MNEs to invest in countries with low tax rates. These steps are taken by MNEs to ensure that the tax assessment on repatriation funds does not take place. Frequently, MNEs repatriate foreign profits to reinvest them abroad, regardless of a lower return on the investment, to avoid excessive tax as opposed to returning foreign earned income to the residence country.

Indeed, the businesses of the residence state attract lower tax charges on income from international investment. The tax rate affects the repatriation decision of the investor. In this case, the reduction in tax rates is an important factor for investors when companies make repatriation decisions regarding income earned abroad. However, repatriation of income by MNEs is not well received by the host countries (Harford, et al., 2015). Investments made from earned income if not used appropriately, would suggest the decision was made to avoid paying tax rather than making a pure investment decision. The act of imposing tax on foreign income and giving the tax credit on repatriation bring down the neutrality of taxation concerning locations as choices of investment which is theoretically connected with worldwide taxation procedure on tax credit method (Hanlon, et al., 2015).

2.16 Theoretical Framework

A number of situations are explained wherein the double taxation treaties and the methods under double taxation treaties may affect foreign direct investment choices. A simple theoretical framework makes it simpler to underline the common essentials of these choices. This framework can be prolonged in a number of directions to model any particular choice in more detail.

2.16.1 Theory of Foreign Direct Investment

There is burgeoning literature that has explained and dealt with the subject of FDI; it has been classified into two research areas: international trade theory and multinational enterprise theory. Early FDI studies are rooted in the concept of international trade. The other literature strand is situated within the multinational corporate theory. This strand attempts to seek a response to a question that has not been answered by international trade theories—as to why businesses are expanding overseas or moving their output to a foreign country. Before 1960, the prevailing explanation for international capital movements, was based solely on a neoclassical financial theory of portfolio flows, which does not suggest any role for the MNEs. This pioneering conceptual knowledge contributed to Stephen Hymer's thesis in 1960 to separate himself from the confines of neoclassical trade and finance theory and to move towards an analysis of industrial organisations' theory based on MNEs. The nature of MNEs has been described as a key driver for internalisation, which implies that an organisation will choose to internalise (invest in other countries) when the net benefit gained from foreign investment is either greater than domestic (Rugman, 1980; Dunning, 1992).

In order to enter a host country, a foreign company could directly collaborate with the local companies to undertake investment. The decision to invest directly in or through a country situated in the host country is based on the tax benefits to be gained or cost benefit analysis. To conduct business profitably, in another market, the host country may grant certain special tax benefits whereas the foreign firm may bring with it superior technology, management skills, the brand name and access to the larger markets of the world. Dunning (1981) and Hymer's theory introduced the ownership, location, internalization (OLI) model to examine global development determinants (Dunning, 1981). Such as the L-Location advantages are because, if the company creates a production facility within the host country, rather than having to ship it from its own state, then the costs of shipping and interaction will be less. Further benefits may be derived from lower input prices as well. Certain factors related to L benefits include host country incentives and disincentives, external market hurdles, social and linguistic and company gaps cross-border (Dunning, 1992).

From the point of view of a corporation, the decision to keep operations within the country or to locate in in a foreign country are often associated with FDI decisions. Organisations can have multiple internalisation plans and therefore may make choices for completely for different reasons to invest in a foreign country. According to the theory of internalisation, a company will decide to internalise if it perceives that the net benefits of domestic and foreign production ownership are more than those that the company receives from external trade relations (Dunning, 1992). There are important reasons for MNE to internalise, rather than rely on exports and/or market licenses, the presence of different market imperfections such as transaction costs or government-imposed trade obstacles (Rugman, 1996).

Through considering the independent and joint influences of the advantages, an MNE can choose appropriate entry modes of investment. The eclectic paradigm suggests that MNEs

are only going to make investments in a host country if it perceives they have the 'O' benefit and that the residence country. Thus, FDI decisions are purely based on return to be achieved from investing abroad. The host country could use DTTs framework to make investments attractive and to attract more FDI from MNEs in a country. O, L and I, strategies suggest that MNEs will profit from investing in foreign countries if they are able to produce at a lower cost and benefit from the tax benefits offered by the host country. Nevertheless, for a foreign investor, the decision to invest or otherwise will be dependent on the return on the investment that may be influenced by the incentives offered by the host country (UNCTAD, 1998; Cukrowski, et al., 2002).

The concept of global industry and the theory of international trade have historically been developed independently of each other. The Heckscher-Ohlin system or a general equilibrium framework governs this field in terms of the international trade concept itself, which essentially states that the foundation for exchange is focused on the comparative endowments between countries (Heckscher-Ohlin, 1991). As the model's residual constraints are only partly balanced in existing economies with several limiting expectations (e.g. ideal competitiveness, no product differentiation, continuous return to scale), the model has minimal predictive forces in the real world. The fact that the neoclassical economic theory considers company actions, is especially important for this research (Markusen, 2002).

In addition to other benefits, the major benefit of FDI is in terms of the capital flows from rich to poor countries. However, such conclusions are not compatible with the empirical evidence, that the neoclassical system had to export. Nevertheless, recent efforts by international trade analysts have helped to address some of the flaws in the neoclassical theory of exchange. Scaling markets, product differentiation and consequent imperfect competitiveness are the issues considered in the so-called "new trade paradigm" of the 1980's (Dixit and Stiglitz, 1977, Helpman and Krugman, 1985; Krugman, 1991; Krugman and

Venables, 1996). Markusen study further took global manufacturing into account and this helped to address some differences between the philosophies on international trade and multinational companies (Markusen, 1995; Markusen, 2002).

The major contribution of literature over the recent past has been in terms of providing a solution through suggesting that trading provides opportunities that uses the "knowledge-based resource method," that provides opportunities for foreign firms to benefit from higher profits yet also offers knowledge to the local economy and enables the host country to earn tax revenue. FDI investment enables spending in both vertical and horizontal dimensions, and describes how and where the horizontal MNE, vertical MNE and national companies dominate over each other because of the price of production and the various integer variables, such as knowledge and patents. The design foresees those horizontal foreign investments in countries with a relatively similar scale, per capita GDP and comparative variable endowments would be prevalent in terms of the prevalence of high transport costs. For example, Markusen (2002) has made an important contribution by using his model that can account for the presence of multinational enterprises in the business model theory portfolio.

However, the Markusen (2002) model still contains several limitations (Feenstra, 2004). Firstly, the provision of infrastructure in the host country is not very relevant for various reasons such as the existence of policies and the regulation of the FDI in both the home and host countries (Ietto-Gillies, 2000). In fact, the strategy of the industrial organisation offers an opportunity for well developed countries to invest in other countries to benefit from cheap labor, knowledge or larger markets. The issue of double taxation only becomes an issue once the income earned is taxed by the host country and again when the residual income is repatriated. Therefore, FDI decisions are complex and are made considering several factors. However, the theoretical work on FDI is comprehensive and the foundation for the empirical research continues to evolve (Caves, 1996; Buckley and Casson, 2002).

A review of the FDI empirical literature reveals that the eclectic paradigm of Dunning has been used extensively in recent publications to study the empirical aspects of FDI phenomena as it provides an equations taxonomic framework (Bevan and Estrin, 2000). The eclectic paradigm of Dunning appears to be the right model to help frame the research questions for this thesis.

2.16.2 Theory of Double Taxation

Double taxation is imposed by two or more jurisdictions on the same declared income of a firm. An income taxed twice or more than twice, serves to discourage firms to invest overseas as it affects their profit. Therefore, the FDI recipient countries do not benefit from investment, extra employment, increase in tax revenue or economic development. The double taxation can be defined into two types which are: Economic Double Taxation and Juridical Double Taxation.

Economic Double Taxation is where income is taxed in accordance with the taxation policies of countries as well as the taxation policies of the company's domicile. For example, when a company declares profits, it pays corporation tax in the country and when the profit returned to shareholders in form of dividends to parent company's country then, taxation is paid again by those shareholders. Hence, this is a case of paying taxation twice. However, to deal with such issues, the respective countries are able to make changes to their domestic taxation laws to solve this problem.

The International Double Taxation is the focus of this research. In essence, the income earned from the host country is taxed there and again in the country of residence which may be in accordance with those countries internal law or different tax rules. The incidence of

double taxation because the conflict of tax rules which are different in the host country than the country of residence. The main reason concern of double taxation is that it increases the costs to investor thereby it affects their return that discourages their decision to invest in other countries through FDI.

By source rule is the principle that country imposes tax from earned income that is incurred inside this country without caring about the nationality of taxpayer and where taxpayer's resident places on. While resident rule is the principle that a country will impose tax on a taxpayer's income when this taxpayer is classified as the resident of the country irrespective of where the income was earned; it does not give consideration as to whether the income was earned from an activity inside or outside country. The international double taxation issue is a major consideration for governments and firms trading across regions or countries. Thus, the topic lends itself to be researched for the benefit of policy makers in Thailand and for other countries to ensure they have appropriate tax guidelines to ensure FDI activity is appropriately dealt with. There are three major instances that concern the investors and policy makers when dealing with international double taxation that are discussed below:

Case 1: Income earned is taxed twice where the source-based rule is applied in terms of the residence based rule, once where the income is earned and secondly, in the country where the income is repatriated. To overcome issues where two countries tax rights give rise to conflict, the DTTs are negotiated to ensure such incidence does not give rise to conflicts and trade is not adversely affected.

Case 2: Both countries treat the taxpayer as the resident of their country, thus the income earned is subject to taxation based on both countries' taxation regulations. This gives rise to double taxation Thus, taxing the same income twice discourages companies from investing in other countries or firms. This particularly negatively impacts on the growth of developing economies as external investment fails to materialize as technical and commercial

knowledge exchange does not take place in this case, double taxation discourages cross border activity and developing countries suffer welfare loss. Taxing employees twice also leads to discouraging employees from working in other countries. For example, someone with technical knowledge may be reluctant to work in a country where he/she is taxed twice. Thus, this may negatively impact on a country's productivity and use of new technology. Therefore, residence rules could be an issue, thus, DTTs help to resolve such conflicts by negotiating the double tax treaties for the purpose of collecting taxes and residence-based rule.

Case 2 scenario has existed in the past for decades. Failure to adequately negotiate taxation on income earned or the tax liability of employees working in other countries has been considered as a barrier. Thus, DTTs that have not adequately addressed such issues have performed less well, as has been the case with many DTTs that have been negotiated. For example, the resident rules principles between the UK and the US show that employees working in one another's country are subject to heavy taxation. Therefore, where taxation burden becomes a major problem and stops individuals working in other countries, it is considered as a barrier to trade, this leads to a loss of welfare for all countries. Thus, taxation regulations are also linked with the freedom of movement of human resources which is necessary when companies undertake FDI. Thus, DTTs have encouraged companies and countries to develop appropriate regulations to ensure taxation is not a barrier. Therefore, DTTs provide clarity as to which countries should act as the country of residence and which country should act as country of source of income. Therefore, both countries will need to negotiate and follow agreed policy as to what criteria is to be used when classifying a person's residence.

Case 3: The same amount of earned income is subject to taxation twice because both countries follow the source-based rule. This scenario can occur when the taxpayer has

residence in a third country and receives incomes from two countries which both countries collect tax from under the source-based rule (Miller, et al., 2016).

2.16.3 Theory of Double Taxation Treaties

Globally, the number of DTTs has increased from 100 in the 1960s to roughly 3,500 by 2021 (Egger, et al., 2006). Thailand has negotiated 61 DTTs with different countries. DTTs have gained a lot of importance and recognition since the 1990s which has led to an increase in FDI activity as cross border taxation issues became more transparent and easier to resolve (Radaelli, 1997).

The purpose of these respective taxation treaties was to minimise worldwide double taxation assessments among contracting nations and to increase international trade. Thailand negotiated its first DTT during the 60s. The DTTs articulate the taxation of income regulations when capital moves between the source country and the resident country. The aim of DTTs is to eliminate double tax collection and to ensure that both contracting states have taxing rights to impose tax on the same tax basis; whilst the limitation of withholding tax rates applied by the source nation.

The aim of the DTTs is to MNEs to invest overseas and taxation duties should not be charged in more than one state so the double taxation is not a barrier. This is the primary theoretical justification for promoting DTT to promote the inflow of FDI into developing economies and to accommodate this the OECD Model Tax Convention has promoted DTTs as a model of taxation. However, with the weak financial environment and an inadequate industrial base, the benefit of DTTs is limited as this does not encourage MNE's to invest in other countries. However, with taxation treaties, double taxation issues are resolved, and this

prevents fiscal conditions clashes (Gravelle, 1988). Thereby, it restricts the unilateral imposing tax action of governments (Jones, 1996).

Nonetheless, DTT decreases tax avoidance and tax evasion of MNE by encouraging the sharing of trading data between the bilateral countries; these assists countries to use transparent mechanisms to settle any disputes through managing the relationship with well-defined and agreed policies (Baker, 2014). Without DTTs may restrain countries to benefit from MNEs investments that can help to raise a country's tax revenue and increase GDP. Considering all the above arguments, the effects of DTTs on FDI aren't well- researched. The reason being that not all of the policies may be fully applied, or their methods of application differs (Davies, Norbäck and Tekin-Koru, 2010). Therefore, researching the impact of DTTs is appropriate. The positive result of DTTs on a country's growth is reported to be significant. However, the cost of DTTs needs to be considered too; if the negotiating costs are excessive then they produce no benefit for both parties.

The concept of double taxation has been prevalent in the academic literature for many years now and it is recognized as an issue. In particular, fiscal theory and practice shows the existence of various types of double taxation, the most significant criteria for classifying them are: the criterion of consequences regarding the status of the taxes, the criterion of conditions under which double taxation occurs, the criterion of the fiscal equity, the criterion of the taxable object, and the criterion of the type of tax on which this phenomenon is based (Dudas, 2011). However, whilst the issue of double taxation has been recognized in the literature for a significant period of time, however, the issue of double taxation is still at an early stage of exploration, and the problem remains prevalent in many nations (Covrig, 2011). This is despite the potential for levels of double taxation to hinder investment and reduce welfare in most cases (Ahmad and Xiao, 2013). There is thus, a strong argument for additional research and analysis to deal with the issue of double taxation.

In particular, the literature on double taxation demonstrates the value countries can gain from signing double tax treaties, in addition, it shows the potential limitations of treaties and how they disadvantage firms. For example, Braun and Fuentes (2016) suggested that double taxation treaties can cause an increased number of foreign direct investment projects between countries; but it can also limit withholding taxation rights and reduce tax revenues in developing countries. At the same time, the effectiveness of double taxation treaties in driving higher foreign direct investment levels is also open to debate. According to Barthel et al (2010), double taxation treaties do lead to higher FDI stocks and are substantively important in encouraging investment. However, Baker (2014) notes that developed countries often unilaterally provide for the relief of double taxation, which reduces the benefit of any double taxation treaties on investment. Thus, this further highlights the need for more in-depth high level research into the issue of bilateral tax treaties and their value.

2.16.4 Theory of Methods on Eliminating Double Taxation Treaties

The methods to eliminate double taxation is interested in its benefit for a wider business community. The main interest is positioned on how they work in relieving tax burden for investors. However, specific research that examines the benefits and methods in eliminating double taxation in the case of Thailand, are limited. Therefore, this study aims to overcome this gap in the literature relating to Thailand. However, to justify this research, most of the literature cited is from studies carried out in other countries rather than drawing literature from studies carried out in Thailand. This study especially uses the findings on types of taxation that have impacted FDI together with DTTs.

Hartman (1981) studied the tax liabilities of MNEs who conducted direct investment in the US. The author suggested that the US relies on residence-based rules for offering advantage

to MNEs which have capital movement with the US. A main point concerning DTTs is related to the tax policy of the residence country, in terms of how MNEs are affected by the tax rate and tax credit and how these affect their operations. So, the method used to eliminate double taxation concerning the US, and US chooses to retain solely credit method. In this study, the author divided types of MNEs into categories of Mature Foreign Operations where MNEs remit income to the parent company, and Immature Foreign Operations, where MNEs do not remit income to the parent company. Over 90 percent of MNEs who invest in the US are Mature Foreign Operations. The result presented by Hartman suggest that MNEs should not be concerned about tax matters in the US, but should be concerned about tax credit systems operated within the source country, and gain tax charged at the residence country. MNEs duty bound to pay tax on the income that is earned from other countries.

Moreover, there is the study of Janeba (1995) which studied the matter of movement of capital among countries. Janeba concluded that FDI carried out by the MNEs influences the corporate tax rate and the procedure on paying tax in the host country who received FDI from the MNEs of the home country. This study considered 3 methods to eliminate double taxation: a) exemption method, b) credit method and c) deduction method. The topic of relieving companies of double taxation was carried out in the study of Janeba by exploring the investment model which is applied in the study of Ruffin (1988) where an analysis of capital movement was carried out. Janeba considered 3 states in the model. First method is applied, the credit method, to support government to attract FDI. Secondly, the state that applies the exemption method and thirdly, the state that apply deduction method. The author found out that the state which applies the deduction method is successful in attracting FDI, rather than the credit method and exemption method. Due to the MNEs concerns about the difficulty in getting back tax refunds from other methods (Janeba, 1995).

Lindhe (2001) studied eliminating double taxation in theoretical term. The results of this study on the procedures of mitigating economic double taxation and international double taxation of MNEs in the case of dividend payment of subsidiary company who remit income to parent company at residence country; the result shows that the imputation method which is used in eliminating economic double taxation can attract investment when it works together with the credit method and the exemption method. However, the success of this method is dependent on the corporate tax rate of each country. Moreover, the author studied more about how the method on eliminating double taxation affects the market value.

2.17 General Aspects of Host Countries on Foreign Direct Investment

2.17.1 Foreign Direct Investment for Developing Countries' Aspects

A major concern of the developing countries over embracing pro-FDI tax policies is the fear of 'hot money' and large inflows of capital in a small economy; such flows can destabilise the financial environment and create a disruptive economic bubble when and if the FDI investor chooses to withdraw their capital; the country could lose huge revenue (Coelho and Gallagher, 2010). Another concern for the developing host country is the pressure on the domestic currency, which makes the domestic market less competitive. The upward pressure on domestic currency also makes foreign investors less probable for new or continued investment as it becomes a more and more costly endeavour. However, the intervention of banks to curb this pressure does attract investors who want to take advantage of uncertainty and turbulence. Lower tax revenue due to tax incentives to attract FDI also deters developing countries from embracing this practice due to the potential of loss resulting from the FDI monetary stream (Sangsubhan, 2010).

2.17.2 Foreign Direct Investment for Developed Countries' Aspects

Industrialisation, tourism, stock market returns, economic and political situations and the potential of investment returns for the three aforementioned sectors are some of the probable causes of determining the positive or negative inward FDI flows to developed countries as host countries. However, what truly leads to positive FDI capital inflow is trade impartiality and inflation rates which determine continued investment from foreign businesses (Tsaurai, 2018). Since most foreign investors look for long term success, an open trade market is one of the leading deciding factors, which not only provides them with the highest common denominator of the trade market but also incentivises the host country to provide favourable and preferable tax policies and bilateral agreements; this results in a higher flow of direct inward foreign investment. Inflation rates also significantly impact the decisions of foreign investors and this is the second most significant determinant for FDI inflow. Higher inflation rates give rise to risks that capital investments may depreciate and that could lead to higher production and labour costs along with lower profits. The impact of inflation may discourage the future prospects of FDI, and even if stabilised later on, investors still have a higher risk factor in investing their capital in a previously destabilised economy (Tsaurai, 2018).

2.18 Determinants of Foreign Direct Investment

Over the course of the past few decades, Thailand has seen unprecedented success in attracting inward FDI flows and is now a country which gets most of its national income on export goods, taxes, and tariffs. Despite a string of natural disasters suffered by Thailand, its inward FDI flow has not seen any major fall; in contrast, Thailand has been experiencing generally a balance payment surplus – which is more for export than imported goods – this is a heavily influencing factor on causing a positive effect on the inward FDI flows. Bilateral assistance from foreign countries, especially from the West and Western Europe, has also stimulated positive growth for Thailand. However, political instability, communist agendas, and socialist influences have had a detrimental effect on inward FDI flows (Phongpaichit, 2007).

Increased foreign investment also typically increases domestic investment, along with internal market competition between host country markets as foreign services can at times bring superior technology. For most developed countries, the risk factor of providing tax incentives to foreign and domestic investors are relatively lower than in developing countries; therefore, the overall determinants of a foreign direct investment may vary in those states (Thanyakhan, 2008). To address the research question, the researcher provides in-depth explanations on the matters relating to the determinants of FDI in Chapter 4. This enables the researcher to assess factors which have attracted considerable attention from several studies from the literature and they are related to this research.

2.19 Bilateral Investment Treaties

“Bilateral Investment Treaties (BITs)” are the agreements among different governments to encourage the flows of investment and defend international investors and their investments. There are approximately 2000 BITs worldwide and the number of trade agreements are rising (Barthel, et al., 2010). The BITs offer investors a range of protections, for example, protection against inequitable and unfair treatment as well as expropriation. Such type of protection is enforced through a method known as “Investor to State Dispute Settlement (ISDS)”. It permits firms to prosecute the government if a strategy or its implementation impairs the profitability and productivity of their investment (Sauvant, et al., 2010). However, BITs are greatly biased in the favour of international investors, challenging the ability of the government to determine their strategy in areas such as water, health, energy and change of climate. Apart from this, the benefits in the rights provided by BITs to foreign investors far outweigh the rights offered to domestic citizens or firms (Blonigen, et al., 2014).

In addition to this, BITs for the foreign investors provide an extra layer of protection concerning government actions and policies that can influence their profitability and operations (Bellak, et al., 2009). These are limited rights, unparalleled in the law of international law. Moreover, they do not impose enforceable duties on the investors concerning their conduct in the host states either with reference to the financial contribution of the activities or in terms of environmental obligations and human rights (Jogarajan, 2011). BITs comprise of varied definitions of investors and investment which permits firms to bring about disputes in the extensive range of policy zones and helps foreign investors to charge the nations directly by succumbing to their claims for breaching the agreement of BIT instead of local courts if equitable and fair treatment is not provided (Sauvant, et al., 2010). However, in order to raise FDI in the state, there are individual policy goals for the policymakers. There are bilateral measures which need to be adopted like DTTs or BITs.

2.20 Brief Summary of Literature Review

Double Taxation Treaties are explored in the context of developing countries at large and Thailand in particular. The literature provides a review of the key potential benefits of the agreements; it concluded that the elimination of double taxation could stimulate additional investments into the host country. Signing DTTs could be regarded as a signal for potential investors that he improved state of the local business environment. At the same time, the prevention of tax evasion might deter MNEs from FDI. Additional administrative costs and a loss of tax revenue might be especially significant for developing countries where the DTTs are poorly negotiated. However, this would, at the cost to the developing country, stimulate the FDI inflow which could outweigh the costs associated with DTT.

The effect of DTT on the FDI inflow could be influenced or absorbed by numerous determinants of foreign investment. The size and development of the market can be important in attracting MNE. This may be especially relevant for Thailand, as it has a relatively underdeveloped infrastructure that might lead MNEs to divert funds to other countries. Other factors may include physical resources, geographical and cultural distance between countries, and the institutions. There are another range of factors that determine FDI and taxation alone is not the single factor that impacts policies. Therefore, the taxation policies when used to attract FDIs need to be carefully considered. Unilateral changes may be successful in reducing effective taxes for MNEs as well as providing a supportive environment and discouraging tax evasion. However, unilateral agreements might not be sufficient to offset the time-inconsistency issues arising in MNE activity. Bilateral agreements for DTTs could complement or substitute the existing policies to stimulate investment inflows.

CHAPTER 3

THAILAND AND ASEAN

Chapter 3 provides a brief outline to the background of Thailand and ASEAN to contextualise the study. The background will assist in understanding how Thailand uses taxation treaties to influence the FDI of MNEs from bilateral countries, especially ASEAN which the researcher explores within this research. The study examines the significance of MNEs and FDI for Thailand from bilateral countries and typically from an ASEAN perspective. Thereafter, the researcher explores the features of MNEs from the ASEAN countries' perspectives. Further, it explores how the primary principles of double taxation conventions can attract the FDI of ASEAN countries. Furthermore, the chapter provides further in-depth detail of how Thailand has performed. Moreover, the chapter reviews some fundamental statistic data on the amount of FDI inflow to Thailand from bilateral countries including ASEAN countries.

3.1 Background of Thailand with respect to Taxation

After Indonesia, Thailand is the second largest economy in Southeast Asia. Historically, Thailand has been known to have a strong economy with pro-investment policies, well-developed infrastructure and a free-enterprise economy (Schreiber, 2013). However, as a result of sluggish global demand and domestic political turmoil, Thailand has experienced a slow growth over the period 2013 to 2015. These demands, and turmoil have accompanied Thailand's traditionally strong export cycles in certain sectors, such as automobiles parts, electronics, agricultural commodities, and processed foods (Pickering, 2013). However, other sectors of Thailand have also experienced strong growth, such as agriculture, tourism, and MNEs have set-up key production centres in Thailand since 2016 which improved the

country's economic deepening and diversified exports (Borrego, 2016).

The political and economic distress in Thailand has been excessively and thoroughly researched and at one point, it was described as the consequence of unequal wealth distribution (Zarb, 2011). Acute political and economic disruption has been induced by the current socioeconomic structure as per the report provided by the Thailand Development Research Institute (TDRI) (Daniel et al., 2016). According to the TDRI report, disparities in wealth and income are recognised as the root causes of ongoing political fluctuations, affecting the democracy of the state. The Thai tax structure, as described by the IMF, has been recognised to possess structural weaknesses and an unfair tax system (Miller and Oats, 2016).

The standard rate of corporate income tax in Thailand is 20% and under Thai law, all companies are subjected to corporate income tax. Taxes in Thailand are imposed at both local and national levels under the legislations of central government (Brooks and Krever, 2015). The principle taxes implemented by central government include direct taxes such as Corporate Income Tax, Petroleum Income Tax, and Personal Income Tax; while Indirect taxes include Value Added Taxes, Custom Duties, Business Tax, Stamp Duties, and Excise Tax. Revenue Code is the principal tax law in Thailand guiding and governing corporate and personal income tax, specific business tax and VAT (Daniel et al., 2016).

The principle of self-assessment is employed in Thailand's tax administration and the taxpayers are obligated to pay tax to the authorities after assessing and declaring their income. In Asia, Thailand was the first country to introduce investment promotion laws, this has led to an increase in tax revenues and has encouraged investors to invest in Thailand (Braun & Fuentes, 2016). The first enactment of Investment Promotion laws in Thailand was performed in 1954 and it has been revised multiple times. A policy making body – the Board of Investment – was designed under investment promotion laws, promoting foreign and domestic

investments. These investments were recognised as essential for the social and economic development of country (Davie, 2015).

Thai tax treaties were designed to overcome the challenges of the avoidance of double taxation. On the basis of these treaties, the general principle involves the prior right of tax in the country in which the income arises while the tax will be paid twice by the country of residence, granting relief (either through tax credit or tax exemption) (Zarb, 2011). Moreover, the Thailand government also employs these strategies where these treaties promote cooperation between the governments of different states. The aim is to prevent the evasion of taxes. Legislative policies in Thailand substantially focus on taxation elimination treaties, such policies are in line with other countries (Blonigen and Piger, 2014).

3.2 Background of ASEAN

The Association of Southeast Asian Nations, abbreviated to ASEAN, was established on the 8th of August 1967. Five countries took part in signing the ASEAN Declaration – also called the Bangkok Declaration (Morris, 2019). The treaty was signed during the Cold War in Thailand's capital, to unite most of South Asia's most economically affluent regions against the rising fears of communist and socialist insurgency. Despite its Anti-Bolshevik motivations, its core values were to expedite economic and diplomatic growth by encouraging impartiality in intra-regional trade, promoting social and cultural synergy, and to raise collaboration with each country's national facilities (Ahmed et al., 2015).

During the Vietnam War, the Indo-Malay conflict that arose due to Indonesia opposing Malaysia's creation – also known as *Konfrontasi* – and communist insurgency due to the cold war, both prevented and also had a hand in leading to the formation of the ASEAN. Before its inception, there had been several (albeit unsuccessful) attempts at regional collaboration

between the countries of the Southeast Asian region. However, the ensuing conflicts and the Cold War did not allow diplomatic relations to improve over time (Bolliger, 2015). Prior to ASEAN, attempts were made to provide greater economic integration, one such initiative was the Association of Southeast Asia (ASA), which was established on 31st July 1961. Three countries founded the group, Thailand, the Philippines, and Malay – before it was merged into Malaysia. Without the efforts of *Konfrontasi*, the ASEAN organisation would not have been formed as there was conflict between the Malays and Indonesians that would have made it difficult for the two countries to sign the ASEAN Declaration (Chua and Lim, 2017).

Five foreign ministers signed the ASEAN Declaration. Abdul Razak Hussein of Malaysia, Adam Malik of Indonesia, S. Rajaratnam of Singapore, Narciso Ramos of Philippines, and Thanat Khoman of Thailand. The declaration ceremony took place in a Foreign Affairs building in Bangkok, arguably the most successful inter-governmental organisation was established. It is no secret, however, that ASEAN was largely indecisive in its first decade (Kawai et al., 2011). The effects of *Konfrontasi* were still emerging as South Asia was experiencing new developments such as the bombing at the MacDonald House in 1965 and Singapore's separation in the same year was causing severe challenges to the diplomatic relations between Indonesia, Singapore and Malaysia. The outcome of the North Borneo territorial dispute over the eastern side of the state of Sabah between Malaysia and the Philippines was perhaps the most significant factor for the future of ASEAN. A suspension of diplomatic relations in September 1968 had put the continuation of ASEAN in doubt, but a year later on December 1969, the issue was resolved. Only two years in and the fate of ASEAN was once again uncertain but the organisation survived (Chua and Lim, 2017).

The year 1984 was marked as the year when the ASEAN community expanded after it gained its first new member. Brunei Darussalam was the first new country to join ASEAN. It took another decade for Vietnam to be added to the roster in 1995, and by 1999 the ASEAN

community had all its current ten members when Laos and Myanmar joined in 1997, with Cambodia joining two years later due to internal political struggles. In June 2001, ASEAN maintained its exemplary status as a bulwark of peace by banning all nuclear weapons in the region (Phongpaichit, 2007).

3.3 ASEAN Economic Community and Thailand

In 1997, three decades after signing the ASEAN Declaration, the heads of each member state adopted a set of sacred principles that would look towards making the ASEAN states a single community, that would function as a community in terms of economic, social, cultural, scientific matters or anything else (Sangsubhan, 2010). This was referred to as the ‘ASEAN Way’, a principle of non-intervention which emphasised non-conflict by bringing political discussions into the light well away from public view and to solve all possible conflicts without open confrontation. It also reiterated the core pillars in terms of what the mission of the ASEAN was in the first place. The mission was to integrate all the nations of Southeast Asia into a singular regional framework that would make it easier for them to trade thus, providing a competitive economic advantage to the region that would enable trade to flow seamlessly. The aim was to enable the member countries to move towards a favourable geopolitical climate across each state (Pornavalai, 2012).

The cultures and lifestyles of the countries of Southeast Asia were quite similar, that made cooperation easy, this fed into the ASEAN Way principles. There were three major pillars to form a singular community. The Political-Security Community (APSC), to unite the ASEAN states as a single borderless society (Coelho et al., 2010). The Socio-Cultural Community (ASCC), which sought to realise economic benefits without compromising individual cultures or their unique country attributes. The aim of the ASEAN and AEC organisation was to create

a non-distinct commonwealth of nations to effectively create friendly competition in each country's financial sectors. These aims were inclusive of the ASEAN Vision 2020, declared by the ASEAN leaders to be adopted.

A full ratification of ASEAN principles was fully adopted in the year 2020; the signature of the agreed approach demonstrated the commitment of members towards the belief in their vision. However, ASEAN aspired to fully integrate the members' economies by 2015. The AEC, however, was adopted in 2007 and showed early signs of positive economic growth in Thailand. In 2010, the ASEAN Trade in Goods Agreement (ATIGA) was ratified by Thailand, which was a major step towards a singular economic market due to its affinity towards eliminating tariffs and fees that actively discourage commercial growth (Pornavalai, 2012).

The aim of the ASEAN is to eliminate trade restrictions on inward and outward foreign investments and in most ASEAN countries has been the driving force. It was recognised that as investment flows into the country it will assist growth, employment, tax revenue and economic activity. Despite recognising Thailand's dependency on foreign trade – as it is a country in which the majority of its goods are exported – there are certain sectors of the industry which have followed non-competitive practices which were following the ancient laws that stubbornly prevented the free-flow of funds for investment ventures (Pornavalai, 2012).

3.4 Thailand and Foreign Direct Investment

Industrialisation in Thailand, while not in its infancy, is still relatively new. Its economy relies on exports for two-thirds of the country's Gross Domestic Product (GDP). It is one of the most economically successful nations in Asia and ranks second in the region after Indonesia in terms of the GDP in Southeast Asia. The overall economic growth in Thailand has enabled the country to move above the poverty line; currently less than 10 per cent of the population live below the poverty line. Economic growth was achieved mainly through an increase in inward foreign investment. FDI has played a major role in Thailand's massive micro and macroeconomic success. The success in attracting and retaining FDI has been recognised by the World Bank as "one of the greatest development success stories" in its social and commercial sectors (Morris, 2019).

3.4.1 Thailand's Dependency in Foreign Direct Investment

Thailand is undeniably a nation with the success of its economy heavily dependent on exports, so it recognises the need to attract positive FDI inflows of capital and enterprise is necessary. The ASEAN Declaration and the ASEAN Way have played a huge role in using ever-increasing incentives to attract and keeping a high inflow of FDI capital. Therefore, a vulnerability to market instability makes both host and home countries wary of investment returns. However, FDI investors are largely focused on long term returns, therefore short-term difficulties are often overlooked. Capital inflows through financial markets in the form of private capital flows and portfolio investments are recognised to be particularly vulnerable and volatile due to macro and political factors as well as the economic prospects of the country. Thailand's exports have exceeded its imports and this has led to successive annual economic surpluses which in turn attracted further FDI inflow.

However, financial markets tend to be cyclical and have proved to have recurring financial crises as evidenced during the Asian Financial Crisis. However, their frequency of occurrence is unpredictable as to when will the crash take place again (Thanyakhan, 2008).

3.4.2 Thailand's Economic Condition due to Foreign Direct Investment Influx

Thailand has experienced large financial bubbles that have had a negative impact on its currency. However, Thailand quickly recovered from its financial crises and the economy experienced unprecedented success in its domestic conditions' economy. This is evidenced from a massive reduction in population below the poverty line, a huge economic surplus, and a non-stop flow of foreign investment that enabled Thailand to become the country with the second-highest GDP rate in Southeast Asia (Chua et al., 2017). Trade and economic growth has also enabled Thailand to improve diplomatic relations and overseas cooperation with other countries. Thailand has also benefited from natural resources which were successfully explored through preferable tax policies and tax incentives through treaties. The continued positive rate of inward FDI prevented Thailand from falling into debt during the financial crisis (Layton, 2007).

The continued and rapid industrialisation in Thailand, has been impressive amongst the ASEAN regions. The FDI proved to be beneficial in terms of the balance of payments and to create economic growth. However, the process to attract and retain FDI can be gradual and often it is done cautiously. While Thailand has seen major economic growth due to positive FDI inflows, it has also destabilised other local producers and that has resulted in a change within Thailand. Policy makers and commentators, including diplomats attribute the upsurge in the economic activity of Thailand to the inflow of capital from developed countries. This has enabled the intra-regional trade to grow within Southeast Asia and the ASEAN region as a

whole has benefitted. It is suggested that FDI is useful and that governments should use policies to attract FDI and this should be a priority especially for those countries with a relatively poor economic status from embracing FDI incentives in tax revenue (Morris, 2019).

3.4.3 Thailand's Controlling Capital

FDI in Thailand has been one of the biggest factors that has boosted its economy. Huge industrialisation efforts and incentives for FDI capital inflow have positively affected the overall economy. The positive inflow of FDI does not only have a domestic economic effect but influences macroeconomic growth globally (Chua et al., 2017).

The economy of Thailand has seen surplus growth for several years. The high interest rates along with accumulating progressively incremental capital inflow with a doctrine enforcing stable exchange rates, have been major positive influences (Sangsubhan, 2010). The trade liberalisation of Thailand has significantly increased trade volume since the 1990s. The financial crisis of 1997 saw funds being poured into the country, and FDI capital inflow remained high as a result. The Thai baht has recovered against the U.S dollar, while it depreciated against the Euro and the Yen. The Bank of Thailand (BOT) has been criticised for not properly managing the currency against other major monetary pricing (Bolliger, 2015).

3.4.4 Thailand Board of Investment Report

A Thailand government Board of Investment (BOI) was established in 1966, before even the formation signing of ASEAN and the ASEAN Declaration. The aim was to promote foreign investment in Thailand by providing them with information and incentives for further investment. The Thai BOI operates in major cities in Western Europe and the U.S, along with having offices in its neighbouring countries in Southeast Asia and Japan. The Thai BOI also

operates in Australia, New Zealand and India as per the FTAs established in those regions by 2010 (Ahmed et al., 2015). Overall, the tax incentives provided by the Thai BOI have had positive impacts that led to an increase in inward FDIs, however, the BOT's services leave a lot to be desired (Bolliger and Company Thailand, 2015).

3.4.5 Free Trade Agreement's Effects on Foreign Direct Investment

The Free Trade Agreements (FTA) that Thailand has with several countries, especially Japan, have had an overall positive effect that has led to an increase in inward FDI flows. FTAs reduce or eliminate trade distribution costs and tariffs. Double taxation avoidance treaties are negotiated specifically for avoiding double taxation, but FTAs remove the virtual economic barriers that are caused by taxes and tariffs in cross-border transactions. Several more FTAs that Thailand could have with other countries are either under negotiation or proposed. There are already negotiations in progress with China and India. However, FTA negotiations with the United States are on hold due to political situations in Thailand since 2006, while a Swiss-Thai FTA has been under negotiation since 2010, along with negotiations with Turkey and Pakistan which have been in progress since 2015 (Chua et al., 2017).

FTAs have already in effect, had positive results for a few sectors of Thailand that have also had a positive impact on the industrial infrastructure. The automobile industry has seen a significant utilisation of FTAs, Thailand as Japan being one of the world's biggest exporters and Thailand being a major manufacturer for cars and automobiles. However, there are not tangible benefits of FTAs in every industry, especially the textile and garment industry of Thailand which has not seen huge gains with the implementation of FTAs, and the FDI inflow has not seen a significant improvement (Kawai and Wignaraja, 2011).

3.4.6 Expecting Future Situations of Foreign Direct Investment Flows into Thailand

According to a survey (Bolliger and Company Thailand, 2015) regarding the confidence of foreign investors in Thailand, it was suggested that most of Thailand's economic factors do not affect investors' choices when deciding to invest in Thailand. Exchange fluctuations and depreciation, especially against the US dollar have a major impact on FDI flows into Thailand. The exchange rates fluctuations give rise to uncertainty that dissuades investors from investing in Thailand. FDI's are merely affected by DTTs, the Asian Financial Crisis demonstrated what unpegging dollar exchange rates can cause damage to a booming economy, as evidenced in the case of Thailand. After the financial crisis, currency fluctuations remained as major potential detractors against inward FDI's (Bolliger, 2015).

Fluctuation in exchange rates also causes unpredictability in costs for exports and imports. Whilst the exchange rates have seen a pattern for appreciation and depreciation, the Asian Financial Crisis has shed light on the possibility of mismanagement of trade balance by the Thai government. There is also no universal positive or negative effect with the appreciation or depreciation of exchange rates. The depreciation of the Thai baht exchange rate against the Japanese Yen has seen a positive improvement in the trade balance between Thailand and Japan, while exchange rates of the Thai baht against the U.S dollar saw negative effects towards trade balance, as since the Asian Financial Crisis. The depreciation of the Thai baht saw a much larger deterioration of the trade balance for a longer period of time (Coelho et al., 2010).

Despite all the financial data showing that Thailand is successful, the overall future of the Thai economy and the FDI inflow does face some challenges. There are external factors that have the potential to impact on the Thailand economy. Such as the factor being external environment, such as a trade war between China and the U.S. The trade war could lead to potential damage to long term foreign investment. In addition, Brexit will also have an impact on the general global economy that is likely to affect Thailand too. Brexit's 'no deal' or deal is

according to World Trade Organisation (WTO), would have a significant negative effect, as the increased tariffs may cause a reduction in outward FDI as a major factor for initial investment was the incentives offered by the Thai BOI. While the U.K has prepared to ensure tariff-free trade, it could have detrimental effects on future foreign investment prospects in Thailand (Morris, 2019).

3.5 Situation of Foreign Direct Investment Flows into Thailand by Developed Countries

Historically, Thailand has been attracting a large number of inward FDI deals from Japan and the United States, however, these inward flows have slowed down. The ASEAN formation and operation has played a huge role in motivating western and Japanese investors to relocate their capital to a growing market in the East. It was mutually beneficial, but it also upheld the principles of the ASEAN policy of free trade between countries within the region (Layton, 2007). Trade globalisation, economic links and partnerships and expansion into a trade hub were all major points in the ASEAN Declaration as well, and before the Asian Financial Crisis, investors from Europe were flocking to this huge investment hub. The widespread disaster did rock the apple cart, but the economy of Thailand recovered relatively quickly, even though it was the epicentre of the financial crisis. Preceding the event, aggregate inward capital in South-Eastern trade markets was more than 300 billion U.S dollars and it fell to about 250 billion U.S dollars after the Asian Financial Crisis (Ahmed et al., 2015).

3.5.1 Thailand's Financial Disaster

The foreign direct investment flows from Japan accompanied with the increasing value of the Yen – the Japanese national currency – helped to achieve several years of positive economic surplus in Thailand. Obligations and policies from the International Monetary Fund (IMF) were also the cause for Thailand loosening their restrictions to foreign investments in certain trade sectors such as agricultural and legal services. This subsequently led to government-regulated investment criteria following further liberalisation and acceptance of free trade. Due to the huge increase in foreign investment, Thailand became dependent on it for its national revenue, which led to doubts regarding the country's ability to stabilise its economy in case of a crisis. A large number of investors withdrew their funds due to this which led to the Thai currency exchange rate to depreciate against the U.S dollar causing the Asian Financial Crisis (Pornavalai, 2012).

3.5.2 Post- Asian Financial Crisis Foreign Direct Investment

The Asian Financial Crisis (AFC) led to a depreciation of the value of the Thai baht that affected import costs but this led to a rise in Thailand exports and a surge in foreign investment. However, many companies and corporations in Thailand who had worked with overseas companies previously sought new investors and takeover partners. The decreased exchange rate of the Thai baht facilitated investors and made Thailand companies cheaper which led to foreign companies taking them over at a much lower price. The previously promising economic growth and further industrialisation of Thailand did not go unnoticed along with tax incentives, cheaper labour and economic policies benefitting external trade. Despite the drastic fall in Gross Domestic Product (GDP), FDI remained steadfast and

continued to grow due to a significant cost decrease caused by the depreciating exchange rates of the currency (Kawai et al., 2011).

While most developed countries such as the U.S, China, ASEAN countries and European countries remained engaged through FDI with Thailand, Japan was the dominant country that invested heavily in Thailand and had positively impacted on the country's trade, hence the data suggest Japan remained committed to bring FDI and increased the level of Trade with Thailand. Due to the increasing value of the Yen, Japanese investors also saw tax incentives as the dominant consideration when making the decision to investment in Thailand (Sangsubhan, 2010).

3.6 Situation of Foreign Direct Investment Flows into Thailand by Developing Countries

Lecraw (1977) has suggested that a large amount of the FDI for developing countries has come from neighbouring countries which have similar economic development conditions. Even though, several countries are keen to invest in developed countries, still their purpose or motivation for investing in such countries varies. There is a tendency for foreign investors to focus investments in the service industry. The developing countries lack labour skills or experience in operating large productions plants and processes that require high-level technologies that requires trained foreign skilled labour which leads to an increase in the cost of productions which brings limited benefit for the host country. In addition, in general, companies in developing countries tend to invest considerably less in exploring innovative production techniques, this fails in an upskilling of their skill base, therefore they tend to produce existing products which are of low value and have limited export value. Thus, lack of technology, skills and financial returns make foreign countries reluctant to invest in countries such as Thailand.

While developed countries export their capital to invest in foreign countries for different reasons that have been considered in literature, the dominant reason remains that the host country has under exploited resources. The reasons for MNEs to invest into developing countries is to maximise shareholders' wealth through investing capital in countries that have the potential to provide high returns. The developing countries not only provide a comparative advantage but also DTTS allowing investing companies to pay low taxation. Thus, investors seek investment opportunities in developing countries such as Thailand to benefit from low taxes and lower production costs.

Companies in developed countries tend to have high skills and access to finance. Thus, they seek to invest in countries where opportunities exist. However, double taxation could deter investment in developing countries. FDI from international companies does bring benefit but at the same time it could lead to the displacement of local industry. Local firms are unable to compete against international firms who use new technology that lowers their costs, making their manufactured goods much cheaper. For example, there is a growing trend amongst the MNEs to invest in countries which have sufficient raw material resources with which products can be produced which have a high demand. Some of the reasons for MNEs to invest in developing countries is to achieve risk diversification, which may otherwise suffer from economic conditions and political situations of their own country. Conventionally, the politics of developing countries have a high level of uncertainty. Therefore, some investors from developed countries also invest in other developing countries as they have a desire to reduce risks and maintain value of their capital.

FDI decisions by companies in developed countries are based on the level of return the investment may generate. Countries with good economic conditions are attractive to foreign investors. Business owners of developed countries invest in host countries especially, because they have the high potential to earn greater profit and this may be due to their ability to

monopolise their resources. The only benefit FDI to the host country is in the form of employment, export to other countries by the MNE and introducing technology into the host country. However, there are limited local investors in the foreign company, thus the country's residents do not receive any benefits in terms of a share of dividend. Therefore, tax revenue from FDI investment is the only major attraction if FDI fail to pay tax then this defeats the benefit of attracting FDIs. Thus, developing countries have to balance the advantages and disadvantages when encouraging foreign companies to invest in their country or when negotiating DTTs (Lecraw, 1977).

3.7 Benefits and Impacts of Thailand from Asian Economic Community Blueprint

The most significant beneficiary from the ASEAN Way and Asian Economic Community (AEC) blueprint in Thailand is the increased trade across borders that lowers the cost of trading and leads to higher trading opportunities. For all trade avenues to co-exist in complete harmony, the trading system must follow the negotiated principle of the ASEAN Declaration. Thailand continuing to remain competitive and having a large and most successful economy, despite the financial crisis and turbulent world politics, is nothing short of extraordinary (Tsauroi, 2018).

3.7.1 Trade Facilitation

The AEC blueprint mainly existed to reiterate what the ASEAN Declaration stood for and to unite the trade bloc of Southeast Asia into a single economic hub that then transitions into a global market for better and competitive trading relations with other countries in the world. The limiting progressive taxation policies or total elimination of tariffs and tax quotas to encourage trade from both neighbours and overseas trade, was one of the AEC's key

objectives (Tsaurai, 2018). Despite this sort of regulation already being in effect across Thailand, AEC further motivated Thailand and other countries of ASEAN to adopt it fully to promote further trade amongst economies. However, reducing these quotas and eliminating high taxation means diminishing returns. Thus, the focus to attract FDI was considered to be in the national interest and taxation incentives were used to attract foreign investors to encourage further trade internationally (Layton, 2007).

Other growing economies of developing countries have also seen the chain reaction caused by reducing trade transaction costs and have adopted their custom methods to attract a high FDI inflow. Over the years, Singapore, Malaysia, and Indonesia have significantly reduced the documents required for trade in their countries, this has led to a greater liberalisation of trade between markets when compared to Thailand (Layton, 2007).

3.7.2 Industrialisation of Thailand

The AEC blueprint led to a greater attraction for FDI inflows into Thailand. While these practices still can improve, diminishing returns have delayed total open market policies. The high rate of FDI capital inflows has also led to the all too rapid industrialisation of Thailand into an export-heavy – and export-dependent – state. The focus on higher inward FDI has put lesser priority in other forms of investment such as portfolio investments but the overall benefits of these policies far outweigh their detrimental attributes (Thanyakhan, 2008).

Since the Asian Financial Crisis in 1997, Thailand has been able to recover from its effects within just six years, by 2004, as its annual gross surplus returned to the level of the 1980s and 90s. The AEC blueprint also affected the adoption of FDI friendly treaties that influenced positive growth and the improvement of diplomatic relations with other states, which in turn eased the pressure returns on investment (Chua et al., 2017). The lowered trade costs also led to an increase in trade volume worldwide. Thailand is a major exporter of raw

materials and natural resources that have become of more of value as the demand worldwide has increased. This significantly affected positive economic growth in developing countries as the capital inflow provides more room for exercising more reserved FDI policies due to the number of improvements that can still be made. The size of the domestic market in all countries also grew with positive FDI inflows, so the trade promotion and the ease with which trade can be undertaken by the AEC has positively increased international trade, leading to a ‘win-win’ situation for both developed and developing countries around the globe (Ho and Rashid, 2011).

Table 3.1. Foreign Direct Investment from Different types of Countries to Thailand, 2005-2018 (In case of countries which sign DTTs with Thailand), Unit: Millions of US Dollars

| Year/FDI Flows into Thailand (US\$ Million) from Different types of Countries | Developing Countries | Developed Countries | ASEAN Countries |
|---|----------------------|---------------------|-----------------|
| 2018 | 5361.31 | 8,176.94 | 1823.68 |
| 2017 | 3513.72 | 4,450.23 | 1822.68 |
| 2016 | 4330.41 | -563.71 | 1956.23 |
| 2015 | 1483.81 | 6,079.33 | 431.32 |
| 2014 | 457.68 | 4,608.88 | -946.52 |
| 2013 | 2399.49 | 11,238.49 | 526.61 |
| 2012 | 733.6319 | 9,766.47 | -746.36 |
| 2011 | 2338.664 | (61.69) | 950.97 |
| 2010 | 7066.874 | 7,355.16 | 2219.76 |
| 2009 | 4106.489 | 2,621.83 | 2692.12 |
| 2008 | 1566.363 | 5,540.40 | 258.48 |
| 2007 | 2252.434 | 5,285.40 | 1553.47 |
| 2006 | 3969.021 | 4,496.74 | 2843.6 |
| 2005 | 2052.896 | 4,683.93 | 2017.48 |

Source: Bank of Thailand, 2019

3.8 Corporate Tax

Taxation harmonisation occurs when the state, which is a member of ASEAN, accepts that it will apply a similar tax contract, eradicating incentives for taxpayers to transit to a low tax jurisdiction from one with a high tax jurisdiction. For regional integration, harmonisation is a good model but generally its downfall is that it restricts the sovereignty of the state by limiting its capability to make their own decisions relating to tax rates to collect revenue and to develop other competitive strategies to compete with other countries' strategies (Jogarajan et al., 2012).

There are several studies that have examined the application of coordination and harmonisation in AEC. However, it has been suggested that for these policies to succeed there is a need for a paradigm transition in such a manner that the states who are member of ASEAN define and decide their own national strategies and policies. In the past, a similar problem has occurred in the "European Union (EU)", but their states were not able to adopt taxation harmonisation (Petri et al., 2012).

Due to the absence of a taxation of harmonisation, tax becomes a differentiation point among member nations who challenge each other for foreign direct investment for their own country (Dee et al., 2011). In addition to this, it has been observed that the ASEAN states have respond to retaliatory measures whenever another member country has attempted to undercut another country's taxes to attract FDI to their country. In ASEAN, the differential corporate tax rates have proved to be a challenge when different states charged different rates. This has proved to be a recurring challenge of the last fifteen years for the ASEAN members (Pomfret et al., 2013).

Moreover, it was evident that with the AEC Blueprint signing, there were member states that have minimised their rates of corporate tax. Along with this, some nations also give

corporate tax incentives, for example, a reduction in or exemptions from corporate tax for a specific time (Kibuta et al., 2011).

3.9 Withholding Tax and Double Taxation Treaties

By 2010, in the AEC Blueprint among the two direct stated tax, it was used to stimulate the completion of the network of DTTs between member nations. After the blueprint was agreed by the ASEAN member hastily that included modern treaty conditions retain competitive policies. However, when the deadline of 2010 had passed, there were still some gaps in the coverage of the treaty in the region. For example, a member of ASEAN, Cambodia, has to date no agreement in force despite it having been expected that it would comply with the treaty before the target of the AEC 2015 (Radu et al., 2012). To facilitate free trade between states, there is a need to ensure that capital can freely move within the member states and legislation is in place to eradicate the withholding of taxes. In the blueprint, the withholding of tax was identified as a barrier for the enlargement of the market and the efficient operation of the ASEAN capital markets members to raise capital for investment (Petri et al., 2012).

The current system that operates within the ASEAN area, somewhat discourages trade among the states rather than enhancing the free movement of trade across countries which are offshore where bilateral contracts or agreement are in place. Moreover, the presence of the tax treaties' terms are more favourable for trading externally but this did not affect intra-ASEAN trade. In the past, the intra-ASEAN trade was almost 25 per cent of the whole trade-in the ASEAN (Petri et al., 2012). Due to necessity, the ASEAN had to focus on outward trade. However, by 2015, the ASEAN members decided to unlock additional opportunities and generate incentives from within the region to increase trading by making it easier to trade between members. In addition, to accomplishing integration and efficient use of resources, a

multilateral treaty between ASEAN countries was agreed. With the help of reducing gaps in the network of the ASEAN treaty, it has been predicted that the region will be able to sustain intra-ASEAN trade (Sauvant et al., 2009).

3.10 Corporate Dividends and Tax Income

Income generated by direct and indirect taxation in Thailand accounted for most of its revenue in the decade between 1995 – 2004, including taxation from trade tariffs. More than sixty per cent of Thailand's national revenue was from tax incomes. This can be a major factor in deciding whether a nation fully implements incentives to reduce withholding tax upon corporate dividend payments which in turn results in a positive FDI flow. But at the same time it is a relatively risky endeavour, especially for smaller and developing countries as low interest in foreign investment and an exemption on tax revenue on top, could lead to a major economic disaster where capital outflow leads to currency depreciation and uncertainty (Phongpaichit, 2007).

However, when the local population hold stock in foreign firms, the return from investment can be in the terms of dividend. The investors will have an obligation to pay tax on their income in both the home country and the host country. When the Thai investors go to invest in other ASEAN member countries or other member's countries make an investment in Thailand, the return from the investment can be profits, interest or dividend. Based on this research, the researcher will evaluate the treatment of the dividend within the ASEAN region and how the dividend tax is dealt with amongst member countries. There are five countries which are Cambodia, Indonesia, Laos, Philippines and Thailand which have been withholding tax on dividend income and another five countries that are Brunei, Malaysia, Myanmar, Singapore and Vietnam that do not withhold tax on dividend to ASEAN members. Thailand

collects withholding tax at the rate of 10%, if other ASEAN members fail to charge a similar rate then it makes Thailand uncompetitive for FDI. This thus, disadvantages Thailand as this tax burden will be considered negatively by the investors.

Table 3.2. ASEAN Countries' Dividend Tax Rates

| ASEAN Countries | Dividend Rates |
|-----------------|----------------|
| Brunei | - |
| Cambodia | 14% |
| Indonesia | 20% or 15%* |
| Laos | 10% |
| Malaysia | 0% |
| Myanmar | 0% |
| Philippines | 15% |
| Singapore | 0% |
| Thailand | 10% |
| Vietnam | 0% |

Source: ASEAN Secretariat, 2018

3.11 Double Taxation in Thailand

Double taxation is the levying of tax by multiple tax jurisdictions on net income, capital generated by the assets of foreign owners, or trade tariffs in the movement of goods across borders and overseas. Double taxation on income also affects corporate dividends and taxable profits, especially in relation to FDI flows and foreign interest in establishing enterprise in regional trade blocs (Layton, 2007).

The rise in cross-border trade between countries due to trade globalisation, caused an increase in trade tariffs and in corporate dividend taxation from foreign shareholder investments. This increase in activity and taxes highlighted the effects of double taxation on corporate dividends that affect a country's economy as income tax on dividends puts domestic corporations at a competitive disadvantage. This leads investors to avoid tax liability, thus they seek to invest in jurisdictions with low tax rates on income. In the U.S, the double taxation levies have led firms to seek foreign investment opportunities in external markets. This change in taxation has led to a significant outflow of capital, thus this change has benefited international economies. The tax changes were due to the taxation treaties agreed as a part of trade deals (Ahmed et al., 2015).

The effect of DTT on the FDI inflow could be influenced or absorbed by numerous determinants of foreign investment. The size and development of the market can be an essential factor in attracting MNE (Al-Sadig, 2013). This may be especially relevant for Thailand, as its relatively underdeveloped infrastructure might lead to the diverting of funds from MNE to other countries (Yew et al., 2010). Other factors may include physical resources, geographical and cultural distance between countries, and the education of the local workforce (Barthel et al., 2010).

The range of the factors that determine FDI suggests that policymakers might have limited tools available for attracting investment. Unilateral changes maybe succeed in reducing

sufficient taxes for MNE as well as providing a supportive environment and discouraging tax evasion (Christian, 2005; Dagan, 2000). However, unilateral agreements might not be sufficient to offset the time-inconsistency issues arising in MNE activity (Barthel et al., 2010; Vandevælde, 1998). DTT could complement or substitute existing policies to stimulate investment inflows (Elkins et al., 2006; Hallward-Driemeier, 2003).

3.12 Reasons for Thailand to negotiate Double Taxation Treaties

An important part of international law is to network more than 2000 bilateral double tax treaties. In international tax regimes, economists and policymakers have recognised the DTT network as the most important element, governing the income taxation of cross border transaction rules (Zucman, 2014). The existing literature also indicates that the development, rise, and preservation of tax treaties was never being done for the prevention of double taxation. Contrarily, the purpose was to derive revenues from outsourcers by the residents of a contracting state with respect to double taxation (Vandevælde, 2017).

For double taxation relief, Thailand possesses an extensive tax treaty network. As per the findings from reports and other evidence, the main purpose and need of Thailand to enter tax treaties was to limit the taxation by residents and companies within one country, to provide relief on all types of income from double taxation, and to protect companies residing in one state from discriminatory taxation applied in other states (Rixen, 2011). The complex method to exchange information to comply with OECD requirement are the major costs that are included in taxation treaties signed by Thailand. However, there are not specific documentation or requirements for claiming the benefits of applicable tax treaty. A tax residency certificate has been however, requested in some cases by revenue officers. The following countries, in

figure 3.1, are the list of countries which are part of the Tax Treaty Network, according to the taxation report of 2017, as Thailand tax treaty network (RD, 2019).

Figure 3.1. Countries involved in Double Tax Treaties with Thailand

| Thai Tax Treaty Network | | | |
|--------------------------------|----------------------|---------------|-------------------------|
| Armenia | Nepal | Vietnam | Ireland |
| Bahrain | Oman | Australia | Israel |
| Bangladesh | Pakistan | Austria | Italy |
| Belarus | Philippines | Belgium | Japan |
| Cambodia | Russian | Bulgaria | Luxembourg |
| Chile | Seychelles | Canada | Netherlands |
| China | Singapore | Cyprus | New Zealand |
| Hong Kong | South Africa | Czech | Norway |
| India | Sri Lanka | Denmark | Poland |
| Indonesia | Taiwan | Estonia | Romania |
| Korea | Tajikistan | Finland | Slovenia |
| Kuwait | Turkey | France | Spain |
| Laos | Ukraine | Germany | Sweden |
| Malaysia | United Arab Emirates | Great Britain | Switzerland |
| Mauritius | Uzbekistan | Hungary | United State of America |
| Myanmar | | | |

Source: RD, 2019

The literature and reports suggest Thailand's double tax agreements only apply on some specific tax figures such as corporate income tax, personal income tax, and petroleum tax while specific business taxes, and value added taxes are excluded from these agreements (Miller and Oats, 2016). In the case of the double taxation agreement between Thailand and Singapore, the credit is shared between the two countries, and it has been mutually agreed between the two countries that the credit must not exceed the applied taxes and it is to be computed before the credit is given (Karkinsky and Riedel, 2012).

The economic position of Thailand has been recognised as mediocre and it is not in a position to compete with the established developed countries of the world. The purpose of Thailand was to negotiate the DTTs with the ASEAN members and countries internationally is develop an effective strategy to exempt Thai companies from burdensome of taxes in different states while establishing businesses in these states (Pinto, 2013). The significance of the DTT between Thailand and Singapore has been recognised in recent years due to tax management benefits in both countries, therefore it acts as a key attraction when entering other tax treaties. According to analysts, investors and businesses in states with mutual DTT, may enjoy long term privileges through updating the agreements and from the effects of revised versions of DTTs (Goh, 2000).

In the international tax treaties context, tax avoidance, excessive taxation, aggressive tax planning, and tax evasion are identified as complicated taxing issues. Thailand's use and implementation, as well as inception of tax treaties provides the residents much better and effective taxing platforms whilst understanding the residents' ability to pay taxes (Rochananonda, 2006). Moreover, Thailand's requirements to enter an enhanced legal system under DTTs, have been reported to provide certainties through regulations and laws, as the treaties are correlated between different states and these can be easily applied after careful interpretations (Schreiber, 2013).

3.13 Changes of Thai Double Taxation Treaties

The DTTs entered by Thailand and other states have been regularly updated and revised for the purpose of balancing the revenues and credits between the participating states. According to a report, a revision in the DTT between Thailand and the Philippines expanded the definition of personal residing in the Philippines or Thailand (Miller and Oats, 2016). According to the revised definition of the treaty, if the place of the effective management of the person is situated in Thailand or the Philippines, he will be considered a resident of either of the states. Moreover, the sole focus on place of incorporation has been moved away in revised treaty as the tie-breaker test has been updated (Vandeveld, 2017).

According to the changes reported to be made in the DTT in Thailand's treaty with the Philippines, the residency status of the resident of both states (i.e. Thailand and the Philippines) will be determined with reference to the place of effective management or the place of incorporation (Rochananonda, 2006; Vandeveld, 2017). Mutual Agreement Procedures have also been included in the revised DTT where the place of effective management or incorporation is not determined. Another major modification in the DTT carried out by Thailand with the Philippines, is the exemption, if it exceeds 1.5% of the gross revenues on charged taxes on profits or income by an enterprise of one contracting state for another State. These taxation charges are documented for the operation of aircrafts or ships in international traffic (Radaelli, 2013).

The current tax treaty of Thailand with India, involves the subjection of income to the Thai tax when an Indian company with Permanent Establishment (PE) derives its income from Thailand (Miller and Oats, 2016). Subjection of income to Thai tax would be promoted according to the revised treaty if the goods and services by the Indian company are similar to those distributed in Thailand through the PE (Braun and Fuentes, 2016). According to the new treaty with India, the 'force of attraction' rule has been applied. The income gained by

operation through PE by an Indian company in Thailand would be considered and subjected to taxation in Thailand (Alworth and Arachi, 2012).

As per the analysts' report that assessed the new DTT between Thailand and India, the benefits are recognised to be limited to the beneficial owner in respect of royalties and interest (Farrell, 2013). According to the previous Thai tax law definition of beneficial owner, this is a person, without holding a legal title, who is entitled to the benefit of the income or might be considered the recipient of such income (Braun and Fuentes, 2016). Thailand's revised tax DTT has been recognised to possess a comprehensive exchange of information; it allocates the powers to contracting states in order to gather information from other participating states (Molenaar, 2019).

According to the revised version of the Thai tax legislative framework, the contracting state can measure concerning tax avoidance or evasion without any limitations and may also evaluate the domestic law; as per the clause mentioned in the limitation of benefits article (Brooks and Krever, 2015). The DTT revisions made by Thailand have been analysed substantially and are considered to affect the economic status of the country. A long-term effective advantage is identified in the reports, which is the impact of these revisions and modification on Thai tax laws and legislations with the contracting states (Davie, 2015).

3.14 Thailand and Eliminating International Double Taxation

Unilateral measures are applied as a tool to eliminate double taxation in some countries. The change can be affected by passing a new law or entering into a bilateral tax treaty. A bilateral tax treaty is recognised under the name Double Taxation Treaty (DTTs). Thailand employs the method of eliminating international double taxation under DTTs among countries as evidenced in the Table 3.3 and Table 3.4 sections below. At present, Thailand has concluded

61 DTTs with its bilateral countries and the favourable methods which are assigned in these DTTs are the ordinary credit method and the exemption with progression method.

Table 3.3. Methods of Eliminating Double Taxation of Developing Countries with Thailand

| DTTs between Developing Countries and Thailand | Year of Signature | Ordinary Credit Method | Exemption with Progression Method |
|--|-------------------|------------------------|-----------------------------------|
| Armenia | 2002 | | x |
| Bahrain | 1998 | x | |
| Bangladesh | 1998 | x | |
| Belarus | 2006 | x | |
| Cambodia | 2017 | x | |
| Chile | 2010 | x | |
| China | 1987 | x | |
| Hong Kong | 2005 | x | |
| India | 2016 (Reformed) | x | |
| Indonesia | 2003 | x | |
| Korea | 2007 | x | |
| Kuwait | 2006 | x | |
| Laos | 1997 | x | |
| Malaysia | 1983 | x | |
| Mauritius | 1998 | x | |
| Myanmar | 2011 | x | |
| Nepal | 1998 | x | |
| Oman | 2004 | x | |
| Pakistan | 1981 | x | |
| Philippines | 1983 | x | |
| Russian | 2009 | x | |
| Seychelles | 2006 | x | |
| Singapore | 2016 (Reformed) | x | |
| South Africa | 1996 | | x |
| Sri Lanka | 1990 | x | |
| Taipei | 2012 | | x |
| Tajikistan | 2013 | | x |
| Turkey | 2005 | | x |
| Ukraine | 2004 | | x |
| United Arab Emirates | 2000 | | x |
| Uzbekistan | 1999 | | x |
| Vietnam | 1992 | x | |

Source: RD, 2020

Table 3.4. Methods of Eliminating Double Taxation of Developed Countries with Thailand

| DTTs between Developed Countries and Thailand | Year of Signature | Ordinary Credit Method | Exemption with Progression Method |
|---|-------------------|------------------------|-----------------------------------|
| Australia | 1989 | x | |
| Austria | 1986 | | x |
| Belgium | 1980 | x | |
| Bulgaria | 2001 | x | |
| Canada | 1985 | x | |
| Cyprus | 2000 | x | |
| Czech | 1995 | | x |
| Denmark | 1999 | | x |
| Estonia | 2013 | x | |
| Finland | 1989 | | x |
| France | 1975 | x | |
| Germany | 1968 | x | |
| Great Britain | 1981 | x | |
| Hungary | 1989 | | x |
| Ireland | 2015 | x | |
| Israel | 1996 | x | |
| Italy | 1980 | x | |
| Japan | 1990 | x | |
| Luxembourg | 1998 | | x |
| Netherlands | 1976 | x | |
| New Zealand | 1998 | x | |
| Norway | 2003 (Reformed) | | x |
| Poland | 1983 | x | |
| Romania | 1997 | | x |
| Slovenia | 2004 | x | |
| Spain | 1998 | | x |
| Sweden | 1989 | | x |
| Switzerland | 1996 | | x |
| United State of America | 1997 | x | |

Source: RD, 2020

Table 3.3. and Table 3.4. show how choosing and applying a particular method eliminates double taxation under DTTs in the case of dividend payments between Thailand and bilateral countries. The sub-methods of credit method and exemption method which are ordinary credit method and exemption with progression are used between Thailand and bilateral countries.

The methods used to eliminate double taxation under DTTs among countries are distinctive. We can see that most countries decide to apply the ordinary credit method. Due to the ordinary credit method, the corporate tax rate which is allocated for granting the tax credit is the corporate tax rate of the residence country. This method protects the investors of the residence country from having to pay corporate tax rate as source country; otherwise this may cause challenges when seeking a refund for the tax credit of the residence country that frequently appear with full ordinary credit method. In the exemption method case, the concluding DTTs of Thailand and its bilateral countries, select exemption with the progression method on eliminating double taxation. For the exemption with progression, earning dividend income at the source country is used as a tax base in specifying tax rate at residence country, before this tax rate will be employed to calculate tax liabilities of residence country's investors. This method shows how to protect the benefit from taxation on income for investors within the residence country. At present, though corporate tax rate in many countries employs a fixed tax rate method instead of a progression tax rate that can be used to seek exemption with progression method and full exemption method have no impact in tax duty.

We can see that there are 42 bilateral countries of Thailand that select to apply the ordinary credit method and 19 bilateral countries apply the exemption with progression method. However, the application method to eliminate double taxation between Thailand and bilateral countries, may conflict with the study of Dickeschied (2004) which suggested that small countries prefer to select the exemption method. The main reason provided for this approach is that a higher level of welfare can be created through the exemption method for each country. Irrespective of the different taxation in both countries' tax rates, the impact to countries on their earned income from investment is weakest. Therefore, it is reasonable to find out why numerous bilateral countries of Thailand applied the ordinary credit method instead of ordinary credit method.

The ordinary credit method is applied by 24 developing and 18 developed bilateral countries of Thailand. While exemption using the progression method is applied by 8 developing and 11 developed bilateral countries of Thailand. It seems that both developing and developed countries prefer to apply the ordinary credit method with Thailand.

3.15 Tax Sparing Measure under Double Taxation Treaties

Tax Sparing is the special measure outside domestic tax laws where a country will provide tax exemption or tax deduction in its country to a foreign investor. Tax sparing will assume that the tax which is exempted or reduced in the source country, is the tax that has been paid in spite of no payment in fact. Tax sparing is not only having mention in DTT but in Thai Investment Promotion Act has stated the various ways on exemption or deduction of tax for supporting investment. These methods are beyond the exemption which is provided under the Thai Revenue Code. This will make foreign investors who invest in Thailand, take the credit to his/her country. We can see that this approach can help an investor to reduce their tax burden as the tax has not been paid in Thailand.

Moreover, tax sparing which is provided under DTT, will act to help to sustain Investment Promotion Act to work more effective. of the tax sparing method used with DTT, not only limits Thailand to collect tax revenue from foreign investors but it also prevents it providing tax to foreign investor by solely using Investment Promotion Act but also provides the home country to have the chance to collect more tax. This method will mean that the Thai government sacrifices tax revenue or may incur expense by providing subsidizes at the expense of tax revenue from the government of the home country. From the view of the Thai government, Thailand is not able to solely use the Investment Promotion Act with the developed country, because Thailand is a developing country and not in a position to subsidise

a rich country. The major aim of using the Investment Act of Thailand to the home country, is to attract foreign investment and this may mean that it is not giving a chance to the government of the home country to increase their tax revenue from Thailand providing tax sparing under the Investment Promotion Act. Obviously, we can understand that tax sparing should be covered by DTT to protect Thailand and to benefit the foreign investor not his/her home country.

Tax sparing measures are the way that Thailand operates its tax mechanism. If there is no such provision within the DTT then Thailand and the bilateral country are disadvantaged in terms of tax revenue and the tax will fall to Thailand. Not only will Thailand lose some tax revenue but the goal of promoting investment will also suffer as new investors will not bring in their investments to Thailand. The tax sparing measure will be needed only when the contracting state applies to use the credit method on relieving double taxation at resident country with Thailand. If this contracting start to apply exemption method, tax sparing will not need to apply.

The table in next section shows countries which decided to grant tax sparing with Thailand to give more privilege in concluding DTTs.

Table 3.5. Tax Sparing Measure between Thailand and Developing Countries

| DTTs between Developing Countries and Thailand | Year of Signature | Tax Sparing Measure |
|--|-------------------|---------------------|
| Armenia | 2002 | X |
| Bahrain | 1998 | X |
| Bangladesh | 1998 | X |
| Belarus | 2006 | - |
| Chile | 2010 | - |
| China | 1987 | X |
| Hong Kong | 2005 | X |
| India | 2016 (Reformed) | - |
| Indonesia | 2003 | X |
| Korea | 2007 | - |
| Kuwait | 2006 | X |
| Laos | 1997 | X |
| Malaysia | 1983 | X |
| Mauritius | 1998 | - |
| Myanmar | 2011 | - |
| Nepal | 1998 | X |
| Oman | 2004 | X |
| Pakistan | 1981 | X |
| Philippines | 1983 | X |
| Russia | 2009 | - |
| Seychelles | 2006 | X |
| Singapore | 2016 (Reformed) | - |
| South Africa | 1996 | X |
| Sri Lanka | 1990 | X |
| Taipei | 2012 | - |
| Tajikistan | 2013 | - |
| Turkey | 2005 | X |
| Ukraine | 2004 | X |
| United Arab Emirates | 2000 | X |
| Uzbekistan | 1999 | X |
| Vietnam | 1992 | X |

Source: RD, 2020

Table 3.6. Tax Sparing Measure between Thailand and Developed Countries

| DTTs between Developed Countries and Thailand | Year of Signature | Tax Sparing Measure |
|---|-------------------|---------------------|
| Australia | 1989 | - |
| Austria | 1986 | - |
| Belgium | 1980 | - |
| Bulgaria | 2001 | X |
| Canada | 1985 | - |
| Cyprus | 2000 | X |
| Czech | 1995 | X |
| Denmark | 1999 | - |
| Estonia | 2013 | - |
| Finland | 1989 | - |
| France | 1975 | - |
| Germany | 1968 | - |
| Great Britain | 1981 | - |
| Hungary | 1989 | - |
| Ireland | 2015 | - |
| Israel | 1996 | X |
| Italy | 1980 | - |
| Japan | 1990 | - |
| Luxembourg | 1998 | - |
| Netherlands | 1976 | - |
| New Zealand | 1998 | X |
| Norway | 2003 (Reformed) | - |
| Poland | 1983 | - |
| Romania | 1997 | X |
| Slovenia | 2004 | X |
| Spain | 1998 | X |
| Sweden | 1989 | - |
| Switzerland | 1996 | X |
| United State of America | 1997 | - |

Source: RD, 2020

Developed countries take various actions to support developing countries' economies. This objective is achieved through assisting firms with capital, creating new industries, and take action to help developing countries 'economies through Tax Sparing Measure. Tax Sparing Measure will offer tax burden of MNEs to be exempted or reduced in developing countries. When developing countries receive offering on Tax Sparing Measure, it will act like developing countries have been paid tax to host countries once. The privilege of Tax Sparing Measure will fall to MNEs of developing countries. Once developed countries who provide Tax Sparing Measure have not brought amount of income which are earned by these MNEs to calculated as tax base to pay tax in developed countries, this leads to worst outcome for the country's tax revenue collection. Finally, they lead to loss of some tax revenue whilst they are seeking to attract more FDI from developing countries (Kleist, 2012).

3.16 Digest of Dividend under Double Taxation Treaties

Table 3.7 shows how DTTs are used in the class of dividend income which reduces taxation on income earned in Thailand (as the source country) by the bilateral country (as country of residence). The table has provided no conditions or explanation as to its impact on dividend income. Therefore, to gain a fuller understanding of the treaties and how they operate, the reader or researcher? may need to refer to the original treaties which are accessible on the website of the Revenue Department of Thailand (RD, 2020).

If the recipient country receives the dividend which is paid by Thailand under the status that both countries enter DTTs, then the tax rate reference will be presented as following digest of dividend under DTTs for receipt to use in credit or exemption to MNEs.

Table 3.7. Digest of Dividend under Doble Taxation Treaties

| Countries | Dividends | Notes |
|-------------------|------------------|---|
| Armenia | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Australia | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% and company paying is a company engaging in industrial undertaking ▪ 20% when recipient holds directly shares at least 25% |
| Austria | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% and company paying is a company engaging in industrial undertaking ▪ 20% when recipient holds directly shares at least 25% |
| Bahrain | 10% | Applied for every case |
| Bangladesh | 10%, 15% | <ul style="list-style-type: none"> ▪ 10% when recipient holds directly shares at least 10% of capital of company paying 15% is applied to other case |
| Belarus | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Belgium | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% in case of company paying engaged in industrial undertaking and Belgium which is recipient holds at least 25% of voting shares ▪ 20% in case of company paying engaged in industrial undertaking or Belgium which is recipient holds at least 25% of voting shares |
| Bulgaria | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Canada | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% and company paying is a company engaging in industrial undertaking ▪ 20% when recipient holds directly shares at least 25% |
| Chile | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| China | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% of capital of company paying ▪ 20% Applied for every case |
| Cyprus | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Czech | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Denmark | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Estonia | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Finland | 10% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% of capital of company paying dividend and a company paying engaged in industrial undertaking ▪ 20% when recipient holds directly shares at least 25% of capital of company paying |

| Countries | Dividends | Notes |
|----------------------|------------------|---|
| France | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% of capital of company paying dividend and a company paying engaged in industrial undertaking ▪ 20% when recipient holds directly shares at least 25% of capital of company paying |
| Germany | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% in case of company paying engaged in industrial undertaking and Germany which is recipient holds at least 25% of voting shares ▪ 20% in case of company paying engaged in industrial undertaking or Germany which is recipient holds at least 25% of voting shares |
| Great Britain | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% in case of company paying engaged in industrial undertaking and UK which is recipient holds at least 25% of voting shares ▪ 20% in case of company paying engaged in industrial undertaking or UK which is recipient holds at least 25% of voting shares |
| Hong Kong | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Hungary | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds shares at least 25% of capital in company paying dividend and a company paying engages in industrial undertaking ▪ 20% when recipient holds directly shares at least 25% of capital of company paying dividend |
| India | 15%, 25% | <ul style="list-style-type: none"> ▪ 15% in case of company paying engaged in industrial undertaking and India which is recipient holds at least 25% of voting shares ▪ 25% in case of company paying engaged in industrial undertaking or India which is recipient holds at least 25% of voting shares |
| Indonesia | 15%, 25% | <ul style="list-style-type: none"> ▪ 15% when company paying dividend engages in industrial undertaking ▪ 25% is applied to other case |
| Ireland | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Israel | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Italy | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% in case of company paying engaged in industrial undertaking and Italy which is recipient holds at least 25% of voting shares ▪ 20% in case of company paying engaged in industrial undertaking or Italy which is recipient holds at least 25% of voting shares |

| Countries | Dividends | Notes |
|--------------------|--------------------|--|
| Japan | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when the recipient holds share at least 25% of voting shares in Thailand among 6 months continuing period before end of accounting year which this dividend is paid and paid by is a company engaged in industrial undertaking ▪ 20% when the recipient holds share at least 25% of voting shares in Thailand among 6 months continuing period before end of accounting year which this dividend is paid |
| Korea | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Kuwait | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Laos | 15% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Luxembourg | 5%, 15% | <ul style="list-style-type: none"> ▪ 5% when recipient holds directly shares at least 25% of capital of company paying dividend ▪ 15% is applied to other case |
| Malaysia | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds at least 15% of voting shares in company paying dividend and a company paying engaged in industrial undertaking ▪ 20% when recipient holds at least 15% of voting shares in company paying dividend in other case |
| Mauritius | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Myanmar | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Nepal | 10%, 15% | <ul style="list-style-type: none"> ▪ 10% when recipient holds directly shares at least 10% of capital of company paying ▪ 15% is applied to other case |
| Netherlands | 10%, 15%, 20%, 25% | <ul style="list-style-type: none"> ▪ 10% (1) When Thailand is a company engaged in industrial undertaking and corporate tax rate exceeds 30% but not more than 40% including the recipient holds share at least 25%. (2) When taxpayer pays tax more than 40% and holds share at least 25% ▪ 15% (1) When Thailand is a company engaged in industrial undertaking and corporate tax rate must not exceed 30% including the recipient holds share at least 25%. (2) When Thailand is not a company engaged in industrial undertaking and corporate tax rate exceeds 30% but not more than 40% including the recipient holds share at least 25% ▪ 20% when the recipient holds share at least 25% and corporate tax rate which is collected by company paying the dividend must not exceed 30% ▪ 25% in general case |

| Countries | Dividends | Notes |
|---------------------|------------------|--|
| New Zealand | 15% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Norway | 10%, 15% | <ul style="list-style-type: none"> ▪ 10% when recipient holds directly shares at least 10% of capital of company paying ▪ 15% is applied to other case |
| Oman | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Pakistan | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% and company paying is a company engaging in industrial undertaking ▪ 25% is applied to other case |
| Philippines | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds at least 15% of voting shares in company paying dividend and a company paying engaged in industrial undertaking ▪ 20% when recipient holds at least 15% of voting shares in company paying dividend and a company paying is not engaging in industrial undertaking |
| Poland | 20% | <ul style="list-style-type: none"> ▪ 20% when recipient holds directly shares at least 25% of capital of company paying dividend ▪ |
| Romania | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds at least 25% of voting shares in company paying dividend and a company paying engaged in industrial undertaking ▪ 20% is applied to other case |
| Russian | 15% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Seychelles | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Singapore | 20% | <ul style="list-style-type: none"> ▪ When recipient holds at least 25% of voting shares in company paying dividend |
| Slovenia | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| South Africa | 10%, 15% | <ul style="list-style-type: none"> ▪ 10% when recipient holds directly shares at least 25% of company paying dividend ▪ 15% is applied to other case |
| Spain | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Sri Lanka | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% of capital of company paying dividend and a company paying engaged in industrial undertaking ▪ 20% when recipient holds directly shares at least 25% of capital of company paying dividend in other case |
| Sweden | 15%, 20% | <ul style="list-style-type: none"> ▪ 15% when recipient holds directly shares at least 25% of capital of company paying dividend and a company paying engaged in industrial undertaking ▪ 20% when recipient holds directly shares at least 25% of capital of company paying dividend in other case |

| Countries | Dividends | Notes |
|--------------------------------|------------------|--|
| Switzerland | 10%, 15% | <ul style="list-style-type: none"> ▪ 10% when recipient holds directly shares at least 10% of company paying dividend ▪ 15% is applied to other case |
| Taiwan | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Tajikistan | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Turkey | 10%, 15% | <ul style="list-style-type: none"> ▪ 10% when recipient holds directly shares at least 25% of capital of company paying ▪ 15% is applied to other case |
| Ukraine | 10%, 15% | <ul style="list-style-type: none"> ▪ 10% when recipient holds directly shares at least 25% of company paying dividend ▪ 15% is applied to other case |
| United Arab Emirates | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| United State of America | 10%, 15% | <ul style="list-style-type: none"> ▪ 10% when recipient holds at least 10% of voting shares in company paying dividend ▪ 15% is applied to other case |
| Uzbekistan | 10% | <ul style="list-style-type: none"> ▪ Applied for every case |
| Vietnam | 15% | <ul style="list-style-type: none"> ▪ Applied for every case |

Source: RD, 2020

From the table above, we can see that the countries have different tax rates charged for dividend income. Hence, to eliminate international double taxation treaties need to be relevant and appropriate for each country. However, the tax rate under DTTs in case of dividends are arranged entirely as lower tax rate rather than without DTTs.

3.17 Summary

DTTs are mutually consigned agreements on an international level, generally designed and implemented for the elimination of double taxation and particularly in the context of developing countries such as Thailand (Chua and Lim, 2017). DTTs provide several benefits to the member states by attracting international investments (Schellekens, 2016). The majority of the advantages of DTTs are the consequential effects of double taxation. Currently, 61 states have mutually agreed and signed DTTs with Thailand. The signing of DTTs has been

recognised as a signal for potential investors for the long run while also promoting improvements in the local business environment of the member countries (Hong, 2018).

Foreign Direct Investment, as defined by the IMF, promotes industry and commerce and helps to eliminate international double taxation. Thereby it assists in achieving the objective of the implementation of DTT. DTT implementation in Thailand has been extensively debated as a major objective. As per the evidence from current literature, double taxation has been eliminated to some extent (Sangsubhan and Wangcharoenrungs, 2011). For developing countries, loss of tax revenue and additional administrative costs might be of significant value and may affect the enactment of DTT policies in the state. Double taxation elimination may stimulate the inflow of FDI which may later supersede the costs associated with DTT (Jogarajan, 2018). From an economic perspective and through analysis of the economic status of Thailand, after DTT signing and implementation, an increase in revenues on international level has been observed and reported in the literature (Braun and Fuentes, 2016). Since the elimination of double taxation invites international investments, the economic status of Thailand after DTT implementation has reported to be improved and this may encourage interest and investments from foreign international firms (Ahmed and Gafri, 2015).

When compared with other parts of the world, ASEAN a highly integrated economic region. However, in terms of taxation, a wide variation in taxation policies has been identified (Schreiber, 2013). Despite ever-growing challenging issues, ASEAN tax coordination is limited to the a completion of network of double tax treaties and the elimination of certain withholding taxes among ASEAN states (Palan, et al., 2013). Under the provisions of ASEAN countries, applicable taxable businesses include personal income tax, corporate income tax, goods and services tax, withholding tax and value added tax (Daniel et al., 2016). Despite extensive processes of DTT implementation, ASEAN member states still fail to fully benefit from the long-term objectives of DTTs (Hong, 2018).

Bilateral double taxation agreements have allowed the majority of developing countries to participate in the taxation treaties updating process and the regulation of affairs through internationally recognised models that are the UN and the OECD Model of Convention (Ahmed and Giafri, 2015). Both models comprise of extensive but comprehensive legislative frameworks, facilitating the implementation of taxation laws in developed as well as developing countries (Borrego, 2016). On the basis of the second objective of DTTs i.e. the exchange of information between governments, these models ensure the provision of accurate information to the contracting states (Büthe and Milner, 2014).

Despite developing tax elimination strategies in the form of DTTs, alternative strategies are also useful in some case scenarios for the elimination of international double taxation. The OECD and UN Model of Convention have also presented alternative solutions in order to promote FDI, tax evasion and the prevention of losses by the contracting states that may affect other participating bilateral countries' taxation treaties (Ponjan and Thirawat, 2016). The DTTs are highly recognised alternate strategy to harmonise taxation policies to increase flow of trade and investment between developed as well as developing countries (Davie, 2015). Well established international tax management models have also recommended revision of DTTs by the countries disagreeing with particular provisions and policies to integrate the DTTs being enacted within their state, thereby enhancing double taxation elimination objective (Razin and Sadka, 2012).

CHAPTER 4

METHODOLOGY

4.1 Introduction

The aim of this thesis is to investigate the effects of DTT on FDI inflows to Thailand as the host country, from 9 sampling bilateral countries as home countries. The principal aim is to examine whether the methods of eliminating double taxation under the DTT which Thailand has concluded with its bilateral countries in relationship with the dividends, has boosted the flow of investment into Thailand. At present, the Thai government promotes DTTs by emphasising the importance of FDI, as evident from the Thailand Board of Investment (BOI). Additionally, it gives tax privileges for foreign investors to promote inward investment especially regarding MNEs investing in Thailand. However, a pure focus on DTTs and the tax benefits to be derived, will not succeed without practical improvements in eliminating the barriers that exist within the Thai tax system.

In this chapter, the researcher presents the subject of primary sources of data together with the secondary types of data. It also considers research philosophies, describes the views on applying the considered methods and provides a justification for the pragmatic nature of the study. Pragmatism is the integration of using quantitative and qualitative approaches (mixed research design) to obtain the results from the analysis, along with explaining how the data was collected and analysed. Moreover, it also analyses the methods used to analyse the relationships and to test for reliability and validity. Additionally, the discussion regarding the circumstantially generalised outcomes is evaluated. As a final point, the following chapter demonstrates the methods of data analysis.

4.2 Research Paradigm

The research questions are ascertained from the review of the literature and the gaps identified. A research process should explore possible explanations regarding particular questions identified. To ensure that the process to search for the answers to the questions is acceptable in academic and research circles, the researcher needs to explore various processes systematically to examine the cause and effect relationship (Christensen et al., 2011). In conducting research, the methodology has been divided into three approaches (parts) which are qualitative, quantitative, and mixed research. Mixed research is a mixture of qualitative and quantitative research, this helps minimise the shortcomings of the research conducted in each category, effectively they complement one another.

Moreover, to assess the substance of this study's aims, the researcher employs pragmatism as a deconstructive research paradigm. For several years, pragmatic approach has ensured high credibility of the DTTs that has improved Thailand's standing amongst states. The DTTs are real solution and as results of a positive consequence (Creswell, 2009). Pragmatism is interested in problem solving using contemporary practices. In order to modify them and make them useful to apply to existing situations, the researcher must apply the knowledge acquired to implement DTTs (Fendt et al., 2008). With pragmatism, it allows the researcher to involve the core approaches, which are qualitative and quantitative.

However, the issues of applying either qualitative, quantitative or mixed research approach are widely debated as to their suitability and which approach can deliver maximum or tangible efficiency to reach the truth. Frequently, many researchers conduct their research without complete prior knowledge and a clarified understanding of the field or the method to be used for the research. Such an approach may result in errors during the research process, which can result in natural inconsistencies between the result and the reality. Therefore, the researcher requires clarity in the research philosophy, research strategy and research method.

It ensures that the process of conducting research is adequate and that the results will lead the researcher to find the truth and thus will provide ultimate benefits to society and nation.

The research methodology is determined by the assumptions of philosophy to operationalise the research paradigm carefully to operationalise the study. Henceforward, after selecting a particular research method, the researcher lays confidence on identifying the research paradigm. The essence of understanding research paradigm is to ensure we are able to critically reflect on three basic concepts, ontology, epistemology and methodology as following (Wahyuni, 2012).

(1) Ontology or the determination of knowledge has the aim of obtaining an answer on what is the truth and how questioning the basis of reality.

(2) In the research domain, epistemology is the concept of the investigation of the nature of the information. It allows the researcher to differentiate between falsehood and truth, and a study based on epistemological nature focuses on the measures of acquiring knowledge. Dana and Dumez (2015) state that epistemology is about questions on the matter of the origin, nature of knowledge and creation of knowledge or "Theory of Knowledge" which is different between belief and opinion. Thus, epistemology addresses the process of measuring the inaccuracy of knowledge.

(3) The methodology is the process applied to find the truth or belief (Guba, 1990; Lincoln and Guba, 1994). Additionally, Christensen et al. (2011) convey that it is a process or technique recommended in research when associating and referring to the cause and effect of data.

4.3 Research Philosophy

Taxation policy and administration are a main responsibility of every country when dealing with either their individual citizens, corporation or international investors. Public services and goods are funded from the tax revenue which the governments of each country receive from imposing tax. This chapter examines some philosophical perspectives. The researcher considers the significance of the research philosophy in relation to the taxation topic. This research focuses on matters related to taxation policy, DTTs and their impact on the country's ability to attract FDI. Consideration of approaches used to carry out research links research philosophy and the research within the field of tax. The research examines the role of DTT in motivating inward foreign investment.

4.3.1 Ontology

The word "Ontology" is derived from the Greek language, which means studying concepts through logic about the existence of entities. Ontology is the exploration of whether there is one or multiple realities (Rovetto, 2011). This research falls within the field of ontology because this study presents readers with an understanding of the methods of taxation that are linked with the agreed DTTs with other countries, as part of social reality. This study offers opportunities to examine the tax regimes of Thailand and to provide empirical results to demonstrate how the process of tax methods under DTT work.

4.3.2 Epistemology

Epistemology like ontology, is also a branch of philosophy. Though it has varying explanations, in essence the approach attempts to study the nature and origin of knowledge. Crotty (1998) defined epistemology as 'the understanding of knowledge, and the system of revealing the theory of knowledge on what has been learnt'. However, all definitions attempt

to capture a similar theme in that they want to theoretically consider the validity and scope of the study to discover reasonable knowledge and the truth. In particular, the researcher should have adequate knowledge in the relevant area of study (Bryman and Bell, 2007). Zakus *et al.* (2007) claimed that the way people possessed the empirical or rational knowledge is debatable. In this research, the researcher employs an epistemological approach to use the statistical data to study the relationships and to test the hypotheses to provide answers for the research questions. The selected method primarily investigates the methods of how eliminating double taxation affects FDI flows into Thailand from its bilateral countries.

4.3.3 Axiology

In a broad context, the concept of axiology in research methodology emerges from the philosophy that studies judgements and assumptions about the value. Axiology identifies the assessment procedure for the researcher based on the value adjusted by the researcher himself for a particular variable, or at a particular stage of the research (Chatzistavrakidis *et al.*, 2012). The aim of the research also defines the axiological perspectives and it attempts to clarify the research problems. Based on an axiological approach, the researcher is to focus on the application and valuation of research. There is an element of subjectivity when the researcher, at any stage uses appropriately or inappropriately, a particular method while addressing the research problems. Axiology, therefore, identifies the perspectives of the researcher and the value assigned to different activities in the study (Rescher, 2013).

4.3.4 Methodology

Methodology is a systematic or logical approach used to investigate and acquire knowledge in science. It is also meant for examining the potential and limitations of techniques or processes of study (Grix, 2010) or the methods that scholars in each field use to seek knowledge (Guba and Lincoln, 1994). These methods may further include procedures as to how to formulate and question the existing research; the approach effectively uses a systematic approach through exploring the data and methods of data analysis.

4.4 Research Method

The topic under investigation employs empirical data as well as secondary literature data, thus, it lends itself to a mixed method approach. Therefore, this research employs the mixed research methods by combining qualitative research and quantitative research. The research means to adapt the data which is gained from investigation and secondary data from existing works of literature by using a qualitative method. The selected mixed method approach, enables the researcher to provide a deeper understanding of the critical findings of core facts through researching independent and dependent variables. The quantitative approach has been chosen to be used for this study, as this approach is suitable for setting up the hypotheses, questionnaires and interviews (Creswell, 2009).

To conduct the research, the data will be collected using qualitative and quantitative means. Using appropriate methods, the researcher will use the econometric gravity equation model to evaluate the relationship between DTTs and FDI. The researcher also tests the consistency of the data to generate accurate testing results of effective DTT that affects an increasing amount of FDI inflow into Thailand. To create a suitable structure for this research model equation, the researcher has thoroughly reviewed existing studies relating to the topic and the variables used to develop the model to be tested.

The study uses qualitative methods to examine the impact of DTT on FDI inflow to Thailand. In the context of the effect of DTT on such international movement of capital by home countries to Thailand, the qualitative method demonstrates its essential role in aiding the researcher in clarifying their understanding of MNEs' decisions on moving their capital in terms of FDI. This research, moreover, considers the preferable investment opportunities as the reasons why MNEs invest capital in Thailand. Furthermore, this research additionally speculates on whether there is any benefit to be gained through signing a DTT with Thailand. Nevertheless, an investigation of economic factors has been carried out in this research model equation, to investigate their impact on FDI inflow to Thailand. In addition, for this study an in-depth questionnaire was also used which is explained further in the section below. The following section considers the methods used in this research paper.

4.4.1 Hypotheses

Having undertaken a literature review within the field of DTTs, FDI and cross border investment, a gap in the literature was identified that led to the development of the hypotheses that consider the effect of DTTs on FDI inflow. This approach is expected to build upon the understanding of how different methods help to eliminate double taxation under DTT on FDI and leads to attracting an inflow of investment into Thailand from bilateral countries which are classified as developed countries, developing countries and Group of countries aligned with Thailand (specifically, ASEAN). Based on the literature review, the researcher formulated a list of hypotheses which are tested in this research, as following:

Hypothesis 1: Do the double taxation treaties lead to an increase in foreign direct investment for Thailand from developed countries?

Hypothesis 2: Is there a relationship between the double taxation treaties and foreign direct investment for Thailand and developing countries?

Hypothesis 3: Does having no double taxation treaty have any effect for foreign direct investment into Thailand?

Hypothesis 4: Is there a relationship between the double taxation treaties on the inflow of foreign direct investment from ASEAN to Thailand?

Hypothesis 5: Does having no double taxation treaty with ASEAN member countries have any effect for FDI into Thailand?

Hypothesis 6: Does applying the credit method under double taxation treaties between Thailand and developing countries have an effect on FDI inflow to Thailand?

Hypothesis 7: Does applying the credit method under double taxation treaties between Thailand and developed countries have an effect on FDI inflow to Thailand?

Hypothesis 8: Does applying the exemption method under double taxation treaties between Thailand and developing countries have an effect on FDI inflow to Thailand?

Hypothesis 9: Does applying the exemption method under double taxation treaties between Thailand and developed countries have an effect on FDI inflow to Thailand?

4.4.2 Primary Data

This research uses a primary data collection for this study. The information from the primary sources was collected to ensure that the data is relevant for the research questions identified, which cannot be answered solely by the use of documented data sources. Combining the benefits of primary and secondary data sources provide new insights and such a combination of information, an aspect that has not been disclosed until now. Primary sources allow the researcher to obtain relevant, timely and appropriate data from appropriate sources to meet the needs of the specific research questions. The researcher uses the primary data collection method to seek further information about the reasons behind the FDI decisions of bilateral countries to invest in Thailand and whether the methods chosen to eliminate the double taxation under DTTs, have any impact on such decisions. Another reason for choosing primary data sources was that the current secondary data from documented sources is insufficient to highlight validity and reliability when analysing the results of this research. The merit of this study is that it specifically examines the impact of DTTs on FDI. Thus, this method and study is unique to Thailand and has learning outcomes for policy makers in Thailand when developing strategies to attract FDI flows into Thailand from bilateral countries.

The collection of primary data also has disadvantages in terms of its high cost and time commitment to collect complete, reliable and interpretable data (Adams et al., 2007). Primary data is expensive to collect because the researchers need to identify the target participants, obtain consent, collect the data and then analyse it using an appropriate method that would require computing infrastructure. Thus, these types of data collection and evaluation method are time consuming, expensive and give rise to other ethical considerations as well.

In addition, the participants are occasionally not willing to answer the research questions which may lead to, at times, incomplete answers. Therefore, not taking care when implementing questionnaires may inadvertently provide inaccurate findings. However, with

respect to the body of this research, there is a need to use information from primary data to ensure that the data is relevant. In addition, adequate checks are made so that the data validity and reliability are ensured for the research findings. There is existing literature which provides valuable suggestions on how to reduce the cost of conducting primary data sourcing, such as operating an internet survey as a tool to collect primary data (Fan and Yan, 2010). Likewise, this method of minimising cost is employed in this research. Beneath are the primary data collection instruments exercised in conducting this research.

4.4.2.1 Survey Method

To conduct a robust survey, it is necessary to ensure that the sample for the study is representative of the population at large. The views, behaviour and characteristics of a population can be collected through survey methods and the findings can be inferred through interpretations of their responses (Jackson, 2011). Business studies commonly employs the survey method to collect data and uses the deductive research approaches to infer conclusions. The survey method has both advantages and disadvantages, but these methods are designed so that they select the most appropriate respondents who are able to provide insight into the study at hand. Presently, the most common survey mode is a web survey, but it also has major limitations. Its main advantage is that it provides the researcher with multiple options for creating the design of the survey. Web surveys can be an efficient and cost-effective tool to assist the researcher to quickly access a large number of individuals. This approach helps to eliminate the challenges of conducting surveys and eradicates the tedium of sending questionnaires to the respondents and telling the respondents to complete and return them to the researcher. The process of implementing questionnaires, physically or by post, tends to produce low returns. The advantage of questionnaires is that answers are current, and reliable and will provide researchers the information to evaluate the current challenges of the

respondents rather than historical ones, as the case may be with quantitative data. Therefore, the research findings tend to be a realistic representation of the population provided the group representative of the population is valid (Al-Omiri, 2007).

The disadvantages of the survey method are the possibility of having a low rate of completion and maybe a low number of completed questionnaires. The number of respondents can be determined by using the number of completed units, divided by the number of eligible units in the sample (Fan and Yan, 2010). However, it cannot be said that the validity and reliability of the research findings are entirely dependent on the rate of response. On the subject of the advantages of surveying methods, the researcher can decide to learn and refine the questionnaire whilst administering the data collection. In addition, the questionnaires, albeit shorter can be carried out through telephone calls which can also be a challenge when recruiting participants, but it has been suggested that telephone surveys help to improve the rate of responses from the respondents to the study (Dillman, 2009). In order to achieve a rapid response rate, the researcher administered 55 questionnaires and these were face-to-face interviews using the questionnaire and the rest 55 questionnaires using the services of the researcher; the assistant researcher was trained before conducting the face-to-face and in-depth interviews with the respondents. Using this approach, the researcher surveyed in total 110 respondents. The respondents were selected using personal and social networks, an approach often referred to as the convenient sampling method. The researcher recognises the limitations of the approach and where it was felt the responses were inadequate, the questionnaires were removed from the study. A total of 10 responses were excluded from an actual total sample of 110 as the researcher has been prepared these extra 10 questionnaires to handle with errors from collecting questionnaires. All the questionnaires were distributed to 110 respondents and were completed by the researcher through face-to-face interaction. Only willing and able respondents were selected to conduct the in-depth interviews. To ensure all the questionnaires

were valid, the researcher reviewed all the responses completed by both the researcher and the assistant researcher and any variation was analysed; this led to the exclusion of 10 completed questionnaires.

All the questionnaires were checked by the researcher for reliability by checking the responses of the questionnaires completed by the research assistant against the questionnaires completed by the researcher herself. The questionnaires were written in English and translated into the Thai language for the ease of implementation. To ensure the integrity and validity, the questionnaires were translated from Thai to English to ensure there is no confusion.

To administer the questionnaire for this research, the researcher employed an individual who had experience of the DTT field such as the Revenue Department of Thailand, Thailand Ministry of Finance, Accounting Offices and law firms. This combination of methods ensured that access to the respondents was quick and that the information was gathered in a short period of time. Saunders et al. (2007) explained that another disadvantage of employing the survey method, is the limitations of the questions written on the questionnaire. To overcome this kind of disadvantage, the researcher compensated by conducting interviews face-to-face and through telephonic conversations. The survey method enabled the researcher to revisit the respondents, with their consent, to seek clarification or additional information. This ensured that the researcher was able to access current and detailed responses. In the proceedings sections below, further details of the survey methods are explained.

(a) Questionnaire

Focusing on the objectives of the research is important in creating suitable questions for the questionnaire design. The researcher needs to understand how the information collected with the questionnaire will lend itself to an adequate level of analysis, before administering the questionnaire. To ensure efficiency and that the correct information is collected, it is always advisable that the questionnaires are piloted to ensure that the responses

collected are adequate to answer the research questions. Incomplete data and inadequate results may not serve any useful purpose. Furthermore, it is important that ethical considerations are taken into account and the researcher ensures that Data Protection legislation is fulfilled in this research (O'Leary, 2014).

Bearing in mind the above advantages and limitations of the questionnaire approach, the researcher designed and piloted the questionnaire bearing in mind, the approach yields suitable data for outlining the research aims for designing appropriate questions. The identifying sampling size has been properly prepared and there were 110 respondents who work close to the DTT field, from the Revenue Department of Thailand, the Thailand Ministry of Finance and Accounting Offices and Law Firms. Next, the researcher decided to generate the questionnaire and administer it. The final questionnaires were handed to the researcher to administer to the respondents in Thailand. The process of preparing questionnaires took over 4 months. The next stage was to analyse the data to infer conclusions from the questionnaires using the data as suggested by Cohen (2013).

(b) Interview

This research involved interviews to gather additional data, which can affirm both validity and reliability. It enabled the researcher to compare these results with other findings to discover the right answers for the research questions and the research objectives (Campion, M., 1998). The interview technique can be generally divided into either structured or standardised, unstructured or open-ended and semi-structured or guided interviews (Brinkmann, 2013). A structured interview is a well-defined interview process that enables researchers to gather detailed data, the approach is generalised and easily understood by the respondents. The principal reason for structured interviews is to ensure the respondent understands the question

and can share their experiences. It makes data collection more accessible and straightforward in common with improving the efficiency and validity of data.

4.4.3 Secondary Data

This kind of data can be found via different sources, such as, the reports published by government sectors, organisations, companies, National Research Councils, journals. External data sources are also used in this research, these come from well-known organisations, for example, the OECD, the Revenue Department, UNCTAD and the Bank of Thailand. There are benefits of using secondary data as it saves time and resources. Moreover, a secondary data source of information can benefit the researcher as it relieves him/her of possible ethical issues which often come with carrying out primary data. Secondary data is accessed by using reliable and official sources. One reason for employing secondary data is to collect robust and credible data to answer the questions. However, the data obtained from the secondary sources can be both questionable and debatable (Cohen, 2013).

4.4.4 Panel Data Analysis

This research mainly employs the mixed research method to investigate the subject in the question and selected panel data analysis. This field of research usually consists of more than one unit and the data is collected across multiple periods to discover an estimated value. At some points, a time series analysis or cross-section analysis is inappropriate in its usage. Cross-Section Analysis gathers and analyses data from different cross over sectors, but it stands useful only for one point in time. Panel Data Analysis is the combination of Time Series Analysis and Cross-Section Analysis, and it is reasonably suitable with the data sets that the researcher organises (Baltagi, et al.,1992). The data elements in this research consists of the

multiple units of countries which have negotiated DTTs with Thailand across multiple periods of time. Data sets predict an estimation of whether the DTT is helpful in attracting FDI inflow to Thailand or not. Furthermore, the methods of analysis in the subjects of Balanced Panel and Unbalanced Panel are different from each other. Therefore, the researcher should accurately classify which one should be applied in this study. The panel data in this research is categorised as a balanced panel as the researcher groups the data from 9 different countries by way of cross-section analysis. These countries are considered while analysing data following the period of 1970 to 2017.

4.4.5 Fixed Effect Model Multiple Regression

Based on the situations and circumstances of this research, the appropriate model to run multiple regression apply to test the panel data is the Fixed Effect Model (FEM) Multiple Regression. The reason for selecting the practice of FEM by the researcher is to take into account individual effect. If the individual effect persists in different individual variables and correlates to the independent variable, afterwards FEM is applied then this will highlight questionable findings. While if the individual effect is not correlated with an individual or independent variable, the Random Effect Model (REM) is recommended.

To ensure the results are representative of the world, the sample ought to be randomly selected to avoid biases. In this research for instance, the researcher considers whether the samples in this study are from a random number or otherwise . Unless, it is determined that the samples are selected (or fixed samples) or elected with concerning research's inference. Here, the research's inference means to 9 countries as sampling target countries that are not derived from a random number of samples. The sampling countries are chosen as they are the complaint units of countries with whom Thailand has concluding and non-concluding DTTs.

Subsequently, the 9 countries are the only available units that are used in this research and are not derived from numerous odd samples.

Thus, the sample composition provides the justification for using the FEM Multiple Regression. Consequently, the FEM Multiple Regression is carried out to estimate the theoretical gravity of equation model. This estimation technique has been selected after reviewing the literature to ensure the suitability of the multiple regression method for this research.

Table 4.1. Model Specification from Previous Selected Literatures

| Author (s) | Title | Estimation Technique (s) |
|---|---|---|
| Blonigen, B.A. and Davies, R.B., 2002 | Do bilateral tax treaties promote foreign direct investment? | -Ordinary Least Squares -Fixed Effects Model Regression |
| Blonigen, B.A. and Davies, R.B., 2004 | The effects of bilateral tax treaties on U.S. FDI activity | -Ordinary Least Squares -Fixed Effects Model Regression |
| Egger, P., Larch, M. and Pfaffermayr, M. and Winner, H., 2006 | The impact of endogenous tax treaties on foreign direct investment: theory and evidence | -Fixed Effects Model Regression |
| Neumayer, E., 2007 | Do double taxation treaties increase foreign direct investment to developing countries? | -Fixed Effects Model Regression -Random Effects Model Regression |
| Barthel, F., Busse, M. and Neumayer, E., 2010 | The impact of double taxation treaties on foreign direct investment: evidence from sizeable dyadic panel data | -Generalised Method of Moment Estimators |
| Barthel, F., Busse, M., Kreyer, R. and Neumayer, E., 2010 | The relationship between double taxation treaties and foreign direct investment | -Fixed Effects Model Regression |
| Davies, R., Norbäck, P. and Tekin-Koru, A., 2010 | The effect of tax treaties on multinational firms: New evidence from microdata | -Fixed Effects Model Regression -Survey Method |

| | | |
|----------------|--|--|
| Ohno, T., 2010 | Empirical analysis of international tax treaties and foreign direct investment | -Generalised Method of Moment Estimators |
|----------------|--|--|

| Author (s) | Title | Estimation Technique (s) |
|---|--|---|
| Egger, P. and Merlo, V., 2011 | Statutory corporate tax rates and double-taxation treaties as determinants of multinational firm activity | - Quasi-Likelihood Estimation Model |
| Baker, P., 2014 | An analysis of double taxation treaties and their effect on foreign direct investment | -Propensity Score Estimation -Fixed Effects Model Regression |
| Marques, M. and Pinho, C., 2014 | Tax-Treaty effects on foreign investment: evidence from European multinationals | -Fixed Effects Model Regression |
| Murthy, K. V. and Bhasin, N., 2015 | The impact of bilateral tax treaties: A multi-country analysis of FDI inflows in India | -Fixed Effects Model Regression |
| Braun, J. and Fuentes, D., 2016 | The effects of double tax treaties for developing countries. A case study of Austria's double tax treaty network | -Fixed Effects Model Regression |
| Castillo-Murciego, Á. and López-Laborda, J., 2019 | The effect of double taxation treaties and territorial tax systems on foreign direct investment | -Fixed Effects Model Regression |
| Dong, Y., 2019 | The Impact of Double Tax Treaties on Inward FDI in ASEAN Countries | -Fixed Effects Model Regression |

Source: Author's own compilation

4.5 Variables and Data Sources

The panel data used in this study is composed of statistics from 9 different countries, which are chosen based on the conditions set by the researcher to cover the research analysis. The time period of this study covers the years 1970 to 2017 regarding some of the target countries which concluded DTTs a long time ago. The sampling countries date was selected

from reputable sources such as official online statistical data, such as UNCTAD, the World Bank Report as well as the report by the Bank of Thailand.

4.5.1 Dependent Variables

The factors influencing the flow of FDI have been mentioned in various existing pieces of literature, where each study contains different variables. The study of Amal et al., (2010) investigates the factors that affected FDI in Latin American countries between the years 1996–2008. They found that FDI has a positive correlation with economic stability, economic growth, trade openness and the state of political institutions. Nevertheless, Ang (2007) studied the factors that determined FDI in Malaysia between 1996–2005. The study shows that FDI has a positive impact on real GDP. At the same time, GDP growth rates also have positive impacts on FDI flow. For the flow of FDI in relation to its explanatory variables, the financial system, infrastructure and level of trade openness can increase the inflow of FDI as well. In addition, the study of Khrawish and Siam (2010) sheds light on the factors that determined FDI in Jordan, based on macroeconomic data from 1997–2007. This study shows that FDI in Jordan is associated with economic growth as well as economic and financial stability.

Nevertheless, there is bias in the study of FDI in Thailand and the relationship between FDI and the macroeconomic variables of Thailand, which are GDP, internal demand and inflation. These conclusions were arrived at using the Granger causality test to examine the causal relationship between variables in the years 1993–2004 (Jantarangs, 2004). The result shows that the increase in GDP and private investments are the main factors that attract FDI, while FDI is not associated with inflation. In addition, this study also found that an increase in the inflow of FDI does not affect GDP and private investments since the proportion of FDI to GDP and private investments is smaller in comparison. Notwithstanding, Nurudeen et al (2011) studied the factors that determined FDI in Nigeria between 1970–2008. The study found that

factors that have a positive impact on FDI, include the level of trade openness of a country, privatisation, the level of infrastructure development, and whether the value of the currency has depreciated, while inflation has no effect on FDI.

The change in FDI flowing from the United States to Latin American countries and Asian countries between 1979–2009 was analysed by Al Nasser (2007). The results of his study showed that the factors that led to an increase in FDI included market size, GDP growth rate, macroeconomic stability, level of trade openness, and the state of infrastructure in host countries that helped to attract FDI from the U.S to different regions. In addition, the study found that Latin American countries attract more U.S investors than Asia due to a superior educational infrastructure.

Additionally, the study in the matter of economic factors affecting FDI inflows in India, Indonesia and Pakistan during 1971–2005 was carried out by Azam and Lukman (2010). The results showed that the main factors that determine the inflow of FDI are external debt, the level of trade openness of a country, market size, domestic investment, and transportation. In addition, this study suggests that these countries should set appropriate policies to support FDI inflow, such as reducing loans from foreign countries, building democratic politics, and developing infrastructure.

Empirical studies by Cai (1999) on the determinants of outward FDI in China present factors such as natural resources, which are the chief motivation for China's outward FDI in less developed countries. On the other hand, Blomkvist and Drogendijk (2013) stated that this relationship is not important. The study on the relationship between FDI and unemployment carried out by Billington (1999). Billington noted that a higher number of labourers in the host country would attract more FDI. In other words, higher unemployment rates are a proxy of the readiness of labourers in the host country. Hence, high unemployment rates can attract more FDI as foreign investors will have the ability to take advantage of labour resources, which is

one of the main reasons for driving high FDI flow into host countries. Friedman et al (1992) argued the same points in their study. Moreover, FDI regarding its relationship with DTT is mentioned in the study of Barthel, Busse, Krever and Neumayer (2010). This study put together a more comprehensive data set than before with a longer period for analysis. They found out that there is more significance to the relationship of DTTs on attracting FDI rather than the relationship of other independent variables on FDI.

In this research, the inflow of FDI from sampling bilateral countries to Thailand is used as the main measurement. This research chooses to use the flow of FDI instead of FDI stock regarding which there is more literature. The determinants of FDI flow are more relevant than FDI stock. The natural log of FDI flow is used in this study to maintain a balanced distribution across each variable amount, where disparity is evident. The data obtained for the inflow of FDI for the sampled bilateral countries to Thailand is from the Bank of Thailand statistical report, the World Bank indicator report, and the UNCTAD. The data of FDI flow in this study is recorded in the U.S dollar, and the data used falls between 1970–2017, as the researcher can capture FDI flows from a historical period till the present during which Thailand has been entering DTTs with bilateral countries. Notwithstanding, there are other databases to collect FDI data since the researcher began the period of study in 1970.

4.5.2 Explanatory Variables

Overall, this study relates to 5 explanatory variables, one of which is the DTTs between Thailand and bilateral countries. Notwithstanding, the other explanatory variables correspond to most of the literature on the matter of FDI flows regarding the model specified earlier. The variables regarding general economic policies consider the production factor, exchange rates and the quality of the institutions in the host countries. This research uses the UNCTAD

statistic report, the World Bank report, the Bank of Thailand and the Thai Revenue Department as its main sources of information. In the following sections, the list of explanatory variables involved in this study is shown, including the details of each variable.

4.5.2.1 Exchange Rate

The Exchange Rate is one of the factors which is included in several research studies to determine its effect on FDI. Many studies have concluded that the exchange rate has no effect on the outward FDI of MNEs (Buckley et al., 2007; Bhasin and Jain, 2013; Das, 2013). This result complies with the study of Duanmu and Guney (2009) where they found out that the exchange rate of the host country has no influence on outward FDI from India, while it does have an effect on outward FDI from China. This is because the outward FDI from China tends to invest in a host country, which has a currency depreciation, because the Chinese MNEs pay more attention to the exchange rate determinant of the host country. Similar to the study of Kueh et al. (2010), this study considered the exchange rate from the viewpoint of the push factor, which found that the currency appreciation of Singapore is the push factor that helps support Singapore's MNEs increase their outward FDI.

The impact of the exchange rate changes FDI flows and this can help investors profit or lose capital gain from currency depreciation depending on when they invest and the currency that they rely on. Currency depreciation can work as an incentive, which can be the motivation for investment from MNEs due to the fact that their dollar investment is converted into the local currency. On the other hand, Ancharaz (2003) mentions that currency depreciation can also increase the cost of imported products and decrease the value of profits in foreign currencies. As the country's currency is depreciated in the exchange rate, it is assumed that the inflow of FDI will increase. Hence, the indicator of the relationship of the exchange rate affecting the FDI represents a negative sign.

4.5.2.2 Unemployment Rate

The relationship between FDI and the labour market is an important topic in the literature as these variables are related to the study of FDI. Botric and Skuflic (2006) state that the stability of a country's economy can use its employment or unemployment rate as a proxy on determining it. Many studies also mentioned that the Unemployment Rate (UER) could be reduced by the inflow of FDI. However, the relationship between the unemployment rate and FDI has to be based on the economic structure of each country, the types of FDI, and the period of time in which FDIs have been conducted. Hence, there are some experts such as Aktar et al. (2009) who conclude that a country which has a higher employment rate can encourage more FDI.

On the other hand, Brozen (1958) explains that when the unemployment rate is too high in a country, it may be considered as losing control of the balance of the macro economy in the host country with a high unemployment rate and is hence considered to be an unsuitable country for FDI. In this study, the percentage of labourers able to work but unemployed are used as the measure of the unemployment rate to carry out the hypotheses.

4.5.2.3 Natural Resource

The Natural Resources (NR) of the host country are a pull factor to encourage outward FDI from the home country (Buckley et. al., 2007; Duanmu and Guney,2009). In 2010, Beule and Bulcke used the percentage of export of minerals and metals of the host country as the proxy of the study. Beule and Bulcke (2010) found that outward FDI from China and India tends to be invested in a country which has plentiful natural resources. They also used the percentage of gasoline exports in the study and found out that the result complies with the study

of Dunning (1993). Dunning (1993) mentions that MNE will invest in Resource Seeking, while the studies of Buckley et al. (2007) and Duanmu and Guney (2009) found that the natural resources of the host country have not been a significant factor in influencing FDI from China and India.

Sachs and Andrew (1997) state that the method to determine the natural resources of a country, is the exports of its natural resources, which are measured as the percentage of GDP. The export data of natural resources such as agriculture, minerals, and fuels are obtained from the World Development Indicators database. Most FDI inflows to developing countries is passed through the investment of natural resources. Hence, natural resources in the host country are expected to encourage FDI.

4.5.2.4 Institutions

The quality of institutions in the country is difficult to consider as a singular factor of measurement. Therefore, the appropriate way to show the quality of institutions are the relevant factors, which determine the location of FDI. However, there are studies that use different measures to identify the quality of institutions. For example, there are some researchers who mention political stability and the rule of law as the proxies to measure the quality of institutions. Nevertheless, there are some authors that measure the quality of institutions differently, in which the proxies of study are the host country's levels of corruption as well as bureaucratic efficiency. For the proxies in the study regarding the effect of institutions on FDI, this study uses the information from the International Country Risk Guide (ICRG), which is provided by the Political Risk Services (PRS).

The ICRG index offers 22 variables in three main risks categories, which consist of finance, economy and politics. To signify the protection of property and contract rights, the standard and quality of the institution is important within the of this study is necessary. The

combined score of the two elements which are related to DTTs is exploited, which are investment profiles and law and order elements to be involved in testing the hypothesis. The investment profile index has a score rank from 0 (highest risk) to 12 (lowest risk), which are involved in the ranking of the scores consisting of repatriating profits, delaying the payments of profits, and practicality of contract. For law and order, it has a ranking of score from 0 (highest risk) to 6 (lowest risk) (PRS Group, 2019). Hence, in this study, higher values in score represent superior institutions. It is expected that the host countries which have higher index scores will encourage more FDI.

4.5.2.5 Double Taxation Treaties

There are a few empirical studies which carry out the impact of DTT on FDI. However, these studies provide contradictory results in their research. Some articles present the negative impacts of DTT on FDI, while others report the positive impacts of DTT on FDI. The study of Blonigen and Davies (2002) which determines the results of the test on the impacts of FDI by uses ordinary least squares method which they adopted for testing from the study of Markusen and Maskus (1999). At the final stage, they found that there is a negative relationship between DTT and FDI. For this study, they used the data for the developed countries as the home country and developing countries as the host country, for the period between 1982–1992. In accordance with the study of Egger et al. (2006), they stated that there is a significant negative impact of DTT on FDI which was analysed using the FDI flows from developed countries to developed countries between 1980–1999. Notwithstanding, there is some research that contests the aforementioned results such as the study of Coupé, Orlova and Skiba (2009) who found no evidence to present the impact of DTTs on FDI, which coincides with the example of OECD countries as home countries and economic transitioning countries as the host countries. Neumayer (2007) studied the impact of DTTs on FDI in the case of the U.S as the home country

and developing countries as the host country, as well as OECD countries as home countries and developing countries as the host countries. All these studies reported that there is a significant positive impact of DTT on FDI.

The impact of the methods of relieving double taxation, such as the credit method and the exemption method on the moving of capital among countries have been investigated in very few instances and there is a dearth of literature within this area. For example, the study of Davies (2003) uses the sampling countries which look symmetric, to investigate the way of determining methods of eliminating double taxation under the OECD Model Tax Conventions, which suggest using the credit and exemption methods of reducing double tax burdens. The findings show that both countries chose to apply the credit method. Notwithstanding, there is the study by Thomas Dickescheid (2004), in which the author examines the effect of methods of relieving double taxation for two small countries which have an exchange of FDI in place. The findings present that the exemption method makes both countries have the highest welfare funds, while the effect of tax exports can create a weakness to their tax exemption on foreign income, if they choose to use high tax rates.

Based on the evidence presented above, where several studies have been conducted to examine the relationship between DTTs and FDIs, there is evidence that the relationship holds. This research builds on the above findings and analyses the effect of DTT on influencing FDI as well as the methods used under DTT for influencing FDI to Thailand from its bilateral countries.

Table 4.2. Variables, Explanation, and Predictable Signs

| No. | Dependent Variable | Abbreviation | Explanation | |
|-----|--------------------------|--------------|--|--|
| 1 | FDI Inflows | FDI | The natural log of amount of FDI flows into Thailand | |
| No. | Explanatory Variables | Abbreviation | Explanation | Predictable Impact (+ Positive,-Negative, 0 No Effect) |
| 2 | Having DTT with Thailand | DTT | The countries where conclude DTTs with Thailand | + |
| 3 | Unemployment Rate | UER | Percentage of labour who are able to work but they are unemployed | - |
| 4 | Exchange Rate | ER | Currency rate which is changes in real rate (Baht/US\$) | - |
| 5 | Natural Resources | NR | The percentage of merchandise exports from raw material, fuel, ores and metals | + |
| 6 | Institutions | IST | The scores of countries which are given by ICRG | + |

Source: Author's own compilation

4.6 Summary

The variables selected for this study are described in table 4.2. To summarise, the variables which are used in the model specification were adjusted by using a natural logarithm for FDI flows into Thailand from sampling bilateral countries. There are 5 explanatory variables used in this analysis. Thereafter, the 5 explanatory variables underneath consist as dummy variables. The dummy variables are proxies for countries which have concluded DTTs with Thailand and countries which have no DTT with Thailand. Furthermost, this research's interest is dedicated to the estimated effect of using different methods on eliminating double taxation.

Dummy Variables are included to measure the impact of DTT on FDI inflow to Thailand. The dummy variables are only used for the essential variables on the hypothesis testing to predict whether the conditions of entering into DTTs are met regarding the influencing of FDI, along with the expectation of achieving incremental FDI inflow from bilateral countries. Considering the review of the existing literature, the researcher realises that DTTs are negotiated using several methods to mitigate international double taxation. Furthermore, there are different types of deals that have been agreed when negotiating DTTs among countries as for N-S and S-S. This study additionally acknowledges that some countries decide to ignore the prospect of entering DTTs by giving the reasons that have previously been explained in the literature review, Chapter 2 section.

CHAPTER 5

MODEL FOR ESTIMATION

5.1 Model for Estimation and Analysis

This study is based on the investigation of global financial matters by utilizing an econometric equation analysis which employs the economic gravity-type model to test the research's hypotheses through running the Fixed Effect Multiple Regression. This model is widely used to analyse the trading blocs and flows between countries (Kepaptsoglou et al., 2010). Initially, the econometric gravity equation model is applied for only a single country's time-series-data or cross-section data (De Benedictis et al., 2011). So, this condition restricts the scope of analysis of the econometric gravity model. However, in current literary evidence, the econometric gravity model is frequently recommended and applied for a panel data set comprising of several time-series of cross-section data. The application of this model in analytical methods, has facilitated the evaluation of data collected from different sources (Anderson et al., 2011).

Applying the econometric gravity equation model in this study, is based on the concepts of Bevan and Estrin who have analysed data on inward FDI flow into Thailand by the different variables involved (Bevan and Estrin, 2004). To capture noise, the researcher uses several dummy and explanatory variables as per the requirements of the model. The gravity equation model can ensure that the analysis of the DTTs findings are explained and assessed in the study which thereby explains the strategies that are approached for the elimination of double taxation. The theory of gravity model assists in identifying the sources and strategies to attract international investments, based on a country's financial position and in the context of treaties signed by the country with other bilateral states (Baltagi et al., 2014).

5.2 Model of Study on the Effect of DTT and Inflow FDI

The objective of this research is to compare the usage DTT and of different methods to eliminate the incidence of double taxation to attract FDI from abroad to Thailand, thus, this study employs the Economic Gravity Equation Model as a pilot to examine the relationship of DTT and FDI in this study. Henceforth, the researcher applies the Dunning (1981) model which is based on the characteristics of data that will be appropriately employed in this research to test the hypothesis.

Figure 5.1. Econometric Gravity Equation Model Specification

$$f_{i,t} = \alpha_i + x_{i,t} \beta + u_{i,t} + \varepsilon_{it}$$

By $i=1, \dots, n$ and $t=1, \dots, t$
And $f_{i,t}$ is FDI from abroad
 α is own individual effect
 $x_{i,t}$ is explanatory variables
 i is bilateral countries at n countries
 t is time period
 β is a parameter which is assumed to be equal
across countries
 $u_{i,t}$ is an intercept term
 ε_{it} is an error

The following table explains both dependent variable and explanatory variables which are used in this research.

Table 5.1. Summary of Variables which are employed in Hypothesis Testing

| No. | Dependent Variable | Abbreviation | Explanation |
|-----|--------------------------|--------------|--|
| 1 | FDI Inflows | FDI | The natural log of amount of FDI inflows to Thailand |
| No. | Explanatory Variables | Abbreviation | Explanation |
| 2 | Double Taxation Treaties | DTT | The countries where conclude DTTs with Thailand |
| 3 | Unemployment Rate | UER | Percentage of labour force who are able to work but they are unemployed |
| 4 | Exchange Rate | ER | Currency rate which is changes in real rate (Baht/US\$) |
| 5 | Natural Resources | NR | The percentage of merchandise exports from raw material, fuel, ores and metals |
| 6 | Institutions | IST | The scores of countries which are given by ICRG |

Source: Author's own compilation

Considering the data, within this research, the logarithm is used for the variable. Notwithstanding, this research contains dummy variables as proxies for testing DTTs and applying different methods under DTTs that affect FDI inflow to Thailand. In 1998, the study of James and Hines has identified the value of a dummy variable to be 1 if the country applies tax sparing with Thailand. The value will be 0 if the country does not apply tax sparing with Thailand. Thereby, the researcher applies this idea of valuing dummy variables. The value will be 1, if the country has DTT with Thailand and the value will be 0 if the country has no DTT with Thailand.

5.3 The Research Model

The research model has been already explained as below:

$$FDI = f [(Investment\ Treaties), (Economic\ Fundamentals)]$$

↓

$$FDI = f (Double\ Taxation\ Treaties, Unemployment\ Rate, Exchange\ Rate, Natural\ Resource, Institutions,)$$

↓

$$FDI_{i,t} = \alpha_i + \beta_{1,i} DTT_{i,t} + \beta_{2,i} UER_{i,t} + \beta_{3,i} ER_{i,t} + \beta_{4,i} NR_{i,t} + \beta_{5,i} IST_{i,t} + \mathcal{E}$$

5.4 Estimating Categories

In this part, the researcher carries out a number of estimations, that are classified and detailed as follows;

1. The estimated impacts of DTT on FDI inflow to Thailand from selecting bilateral countries.
2. The estimated impacts of credit method and exemption method on FDI inflow to Thailand from selecting bilateral countries.
3. The estimated impacts of developed countries which do have and do not have DTTs with Thailand (N-S), developing countries which have and do not have DTTs with Thailand (S-S) and ASEAN countries which have and do not have DTTs with Thailand on FDI inflows to Thailand.

Within this research, the details of the DTT affecting FDI inflow to Thailand are categorised into three parts which have an estimated in-depth of potential DTTs aiding higher FDI which is presented as following;

Category No. 1 investigates the effect of concluding DTTs with Thailand by the selected countries. For this research case, Thailand will act as the host country and the other countries will stand on the position of resident countries or home countries. This category's estimation analyses the significance of the research's model equation to explore the comparison between countries which have and have no DTT with Thailand. The finding of significance is concerned with the matter of the effect of FDI inflow to Thailand by DTT.

Category No. 2, the researcher prefers to use the methods to mitigate double taxation under DTT in the case of dividend. The dividend is chosen in this study based on the main reason that bilateral countries of Thailand are selecting various methods to repatriate income that helps them to minimise double taxation. This allows the researcher to capture multiple methods regarding the subject of the impact of DTTs on FDI. It means that in the section of dividend income article, each country may decide to apply different methods to eliminate international double taxation tax liability. Some bilateral countries may use the credit method, and some may use the exemption method. Consequently, this classification of categories enables researchers to study how each method affects inflowing FDI.

Category No. 3, besides the previous two categories, the third category assigns DTTs with developing countries and Thailand, developed countries with Thailand, Economic group countries in the case of ASEAN countries with Thailand regarding the effect of the FDI inflows from these selected sampled bilateral countries to Thailand. Moreover, a few earlier studies have identified the impacts of the different levels of development of countries when they entered bilateral agreements among nations.

Once these three categories are analysed, the estimates will be recognised as useful and entirely covering the sensitive components of DTTs, which may affect the movement of FDI flows. As a result, these estimations may cover the missing ideas that are omitted from other previous studies.

The sampling countries are included as proxies to test the hypotheses based on the selection of countries which had high direct investment during the years 1970 to 2017 in Thailand and have different agreement conditions when negotiating DTTs as the estimating categories' lists have mentioned previously.

Table 5.2 summarises the countries for which the relationship was tested between DTTs and their effect on FDI. The table shows the flow of FDI between developed and developing countries, ASEAN and Thailand. These countries are where the sample was drawn. The table in the last column provides an explanation as to the method used. The countries from which the data was used are divided into developed, developing and ASEAN countries. To investigate the relationship of a country that does not have a DTT with Thailand, the Cayman Islands was selected as it has large FDI investment in Thailand. The 9 formulated hypotheses were used for the 9 countries in table 5.2 below.

Table 5.2. The Flow of Foreign Direct Investment for Countries with the Double Taxation Treaties

| Developed | To | Thailand | US\$ (million) | Methods |
|---|-----------|-----------------|---------------------------|--|
| Great Britain | To | Thailand | 6867.22 | Used credit method |
| Japan | To | Thailand | 64,724.37 | Tested whether DTT will lead to increase in investment to Thailand |
| Sweden | To | Thailand | 1193.596 | Used exemption method |
| Developing | To | Thailand | US\$ (million) | |
| South Korea | To | Thailand | 2,901.64 | Tested whether DTT will lead to increase in investment to Thailand |
| Singapore | To | Thailand | 42,848.37 | Used credit method |
| Taiwan | To | Thailand | 4,009 | Used exemption method |
| ASEAN Countries | To | Thailand | US\$ (million) | |
| Philippines | To | Thailand | 492.66 | Tested whether DTT will lead to increase in investment to Thailand |
| Brunei | To | Thailand | 293.37 | Tested whether having no DTT will lead to increase in investment to Thailand |
| Cayman Islands has high Foreign Direct Investment to Thailand but does not have a double taxation treaty | | | | |
| Cayman Islands | To | Thailand | 5,132.33 | Tested whether having no DTT will lead to increase in investment to Thailand |

Source: Author's own compilation

5.5 Dealing with Missing Data

Missing data is common when researchers are conducting research. The researcher needs to consider a suitable method for managing missing data. The researcher has several options to use, to deal with the missing data for evaluation purposes. Failure to adequately deal with missing data has significant implications and the findings could distort the analysis. The study of Wood et al. (2004) which has been published in journals, such as the BMJ, JAMA and the Lancet finds that 79% of the research conducted, faced the problem of missing data, and only 21% of the research considered the management of missing data adequately. Wood's result shows that the consideration and management of missing data is still neglected when conducting research.

The purpose of this research is to ensure that the results of the analysis are unbiased. Therefore, measures to eliminate the probability of missing data have been carefully considered and accounted for. The method appropriate for this research is the "Listwise Data Deletion" method. This method is simple because it only analyses the complete data, and sections with missing data are ignored. This method is appropriate in those cases where only a small set of data is missing. Moreover, this method is set as the principal standard for managing missing data in the computer's general statistic programs.

In this study, there is some missing data, especially the data from sampling bilateral countries - such as FDI statistic data - as only a few bilateral countries provided the complete data between 1970–2017. However, this research is expected to analyse the data of sampling bilateral countries with a high FDI flow to Thailand. So, the researcher omits any missing data by selecting only the bilateral countries where statistic data has been provided to complete the analysis.

5.6 Reverse Causality

The issue of Reverse Causality usually happens in the Econometrics Model in many cases as reported in other studies. However, this issue could exist when conducting this study too. The researcher is applying the methods of eliminating double taxation under DTT agreement and examines how this influences the FDI of MNEs from the capital-exporting countries to Thailand. If the Reverse Causality issue is not handled properly, it may have the reverse effect for MNEs when they trade with bilateral countries this may affect investment in Thailand. Therefore, countries would like to sign a DTT with Thailand as this may give them preferential tax privileges. Hence, this event results in a reverse causality effect in MNEs' FDI influencing a DTT to happen.

If the FDI from MNEs can promote the increasing number of DTTs, then the consideration of solving the Reverse Causality issue should take place to prevent any error in the research results. The possible reason for the error to exist could be due to the governments of the capital-exporting countries observing that their MNEs have core investment with some recipient countries and their tax revenues are negatively impacted. Subsequently, the governments may desire to enter DTTs with those recipient countries to grow tax revenue which may lead to the cause of Reverse Causality.

Some contemporary literature evidence resembles this research's variables and findings, such as the studies by Neumayer (2006) and Baker (2012), these studies provide the same suggestions to resolve this issue. According to these studies, Reverse Causality could be solved by assigning Instrumental Variable Regression. The procedure of Instrumental Variable Regression is finished by delaying the time of all explanatory variables by one year to evade the coincidence of dependent variable and explanatory variables. Conclusively, if this regression procedure could not successfully resolve this issue, the research's result from utilising FEM could still be used when it presents at acceptable levels and is entirely consistent.

CHAPTER 6

EMPIRICAL RESULTS

6.1 Introduction

With the emergence of different businesses within different countries and their ensuing complexities, the issues associated with double taxation are getting further complicated and require more attention. At the same time taxation regulations, both domestic and international are also becoming complex. Therefore, to develop and implement strategies to eliminate the incidence of double taxation requires constant review and consideration. Moreover, with the high rate of interconnectivity and development of international businesses, the policy of double taxation is recognised to affect more and more national economies and enterprises. On an international as well as a national level, double taxation has been recognised as a negative factor by the private sector, that limits cross border activity. This study aims to identify strategies that can be applied to ensure that the impact of double taxation is limited in Thailand. This study exclusively focused on examining the relationship and the impact of the DTTs and methods under DTTs negotiated by Thailand and other countries.

Within this chapter, we discuss links between the analysis of the literatures and the hypotheses of the research that bridges the information gap through evaluating different sources and literature. The study analyses the different DTTs signed by Thailand with different countries to examine their effectiveness in eliminating the incidence of double taxation and its effects on the economic health of the country and inflow of FDIs. Moreover, the study also identifies the effects of DTTs on FDI in the context of Thailand (Miller and Oats, 2016). DTTs have a significant impact on FDI inflow in the case of bilateral countries, sharing agreements for the elimination of double taxation. The study also assesses the diverse range of similarities and dissimilarities between the elimination strategies for double taxation between different

countries. This research has extensively used the Guidelines for Tax Information Releases (TIRs) by the Revenue Department of Thailand to analyse the impact of DTTs agreed by Thailand with other countries (Feld and Heckemeyer, 2011).

This chapter discusses the findings of the hypotheses and their implications explored within the context of DTTs and their impact on the inflows of FDIs. The effect of DTTs on FDI inflows was hypothesised in the context of three different geographical domains for Thailand; from developing countries (South-South), from developed countries (North-South) and FDI inflows from ASEAN countries. It analysed the positive effects of DTTs as double taxation elimination strategies in three geographical domains highlighting the importance and essentiality of these DTTs and the endeavours which can be enjoyed by Thailand in the long run (Barrios, et al., 2012). Finally, this chapter provides a review of the results which were derived through conducting a critical analysis of the literature, questionnaires and in-depth interviews. The findings support the hypotheses and the evidence derived from the literature.

6.2 Effect of Double Taxation Treaties on Foreign Direct Investment Inflows

FDI inflows in Thailand are significantly impacted by various factors governing the international market, annual tax revenues, economic fluctuations and the status of the country. Double taxation has had a great impact on taxation systems in countries where it has been implemented (Jogarajan, 2012). The literature that examined the bilateral practices, also confirms the widespread effects of DTTs on FDI. The negotiation and implementation of DTTs between different bilateral countries has led to the elimination of double taxation, this has helped countries to undertake trade transactions between international businesses and trade between the countries. Scholars have suggested that the implementation of long-term treaties among the host nation and home state provides greater certainty for firms when investing

overseas. Greater certainty helps to attract FDI as it offers reliable trade and investments between partnering countries (Collins, 2011).

Bilateral countries are considered to have greater advantages once DTTs policies have been implemented long term which can be attributed to the fact that these countries attract more FDI inflow as compared to other countries which are not a part of such treaties. The analysis of the research carried out in this study, provides information regarding how bilateral tax treaties' impact has been assessed in combination with the FDI inflows and outflows of Thailand (Thuronyi and Brooks, 2016). Within the legislative frameworks, DTT has been defined to be employed in the case of Thailand. The agreement incorporates certain terms and conditions, by the respective nationals and companies of countries, for private investment. Thus, bilateral tax treaties, as in case of DTTs, the Thai taxation system includes definition and scope of investment, national treatment, admission and establishment, and various other factors (Miller and Oats, 2016).

6.2.1 From ASEAN countries

According to the ASEAN Investment Report 2017, the ASEAN members together, are recognised as the second largest and growing economic block. The block has been expanding at a rate of 4.8% over the recent past. ASEAN countries have also been involved in mutual agreements with Thailand in a larger number of DTTs over the few decades. On a global scale, FDI inflows have grown significantly. According to a report, an 11% increase in FDI inflows has been gained by bilateral states from ASEAN countries, this has led to an increase in investment in most ASEAN countries (ASEAN Investment Report, 2017).

Thus, in the context of Thailand as a developing country, DTTs agreements with ASEAN countries have proved to be advantageous for Thailand's economy; this has led to increased inward investment. However, amongst the ASEAN members, Singapore has been

particularly successful in attracting over half of its total investment whereas Malaysia, Thailand, Indonesia collectively attracted over 35% of FDI inflow. For the economic growth of Southeast Asia, FDI has been recognised as a powerful instrument. Singapore, among the Southeast Asian countries, largely relies on FDI inflow for its economic development due to a shortage of natural resources. Other countries including Malaysia, Indonesia, and Philippines also have a high reliance on FDI inflows from ASEAN countries (Jacob and Jacob, 2013).

Tax reforms implemented in Thailand are generally aimed at widening the tax base system of taxation. However, this change does not prevent the foreign national and companies from evading double taxation. However, there are no common principles for harmonising tax compliance as there are no agreed policies in terms of how to deal with such issues. Thus, it is suggested by analysts, that tax harmonisation in ASEAN countries impeded the growth of greater trade. To compete for foreign investment, the majority of ASEAN countries have also focused on a range of tax incentives such as DTTs to attract FDI and boost economic growth and trade (Castillo-Murciego and López-Laborda, 2019).

6.2.2 From Developing Countries (S-S)

In the case of developing countries or states of S-S origin, DTTs effect on FDI inflow has not been thoroughly researched. Instead, developing countries have invested scarce resources as well as time, to negotiate DTTs with developed countries. FDI inflow from developing countries has impacted economic activities that were induced through negotiating DTTs. However, the countries which agreed favourable DTTs to the developed countries have encountered a loss of multiple tax revenues as the treaties least favoured source-based taxation and instead strongly supported residence-based taxation. The ratio of FDI inflows in

developing countries is low, FDI inflow in Thailand from developing countries is also reduced to a certain ratio (Dong, 2019).

S-S countries generally sign DTTs in order to eliminate double taxation, improve taxation systems and to attract more FDI from developed countries. FDI inflow in developing countries appears as a reward in cases when they succumb to restrictions on their ability to apply tax on corporate income by attracting international or foreign investors. Attracting FDI inflows through DTTs has remained debatable in developing countries. Some reports have also shown that the potential of DTT is limited in attracting FDI inflow in developing countries. Thus, the primary objective of negotiating DTTs is to minimise tax evasion. However, there are other means to avoid double taxation, such as through transfer pricing by multinational companies (Genser and Holzmann, 2016).

Thailand, being a developing country, also received FDI inflows that happened because of the DTT impacts on FDI inflows in Thailand, though the benefits of this, from S-S are still being investigated. Despite evidence from different scholarly sources, the impact of DTT on the FDI inflow from developing countries into Thailand requires further research and analysis and considerations which in this thesis will provided them (Thuronyi and Brooks, 2016).

6.2.3 From Developed Countries (N-S)

According to the findings of the study, for FDI, financial systems must be well-developed to stimulate FDI related economic growth and to attract FDI for the long term. In some studies, reviewed for this research, the effects of high FDI inflows have also been observed to give rise to regional inequality. Developed countries and the North-South states with well-designed and updated FDI systems, can provide higher revenues through FDI outflows to the developing countries, including Thailand. According to a recent report, the

effect of the DTTs in developing countries are considered to be significant. FDI has also been considered to be significant importance for developed countries too (Feld and Heckemeyer, 2011).

With a greater number of DTTs signed by developing countries with N-S, states possessing major capital exporting potential, enjoy higher overall FDI stock and shares of stock as well as FDI flow. These countries are considered to receive more FDI inflows and higher share of inflows. No negative impacts of DTTs on Thailand with developed countries have been observed. However, such conclusions are arbitrary which are not backed with the support of empirical research by scholars. While a greater number of negotiated DTTs in developing countries signed with developed states, has led to greater FDI inflows, this has also led to an increased level of annual tax revenues being generated. Thus, DTTs are beneficial for developing and developed economies to increase economic activity and raise tax revenues (Jacob and Jacob, 2013).

In the past few decades, Thailand has gained several benefits in the form of FDI inflows and has attracted a large number of foreign investors, enhancing the international trade and business of the country. Developed countries have remained a dominating source and major donors of FDI, however, after 2003, FDI inflow from developed countries has reduced by 31% (Collins, 2011).

6.3 Strategies in Methods of Double Taxation Elimination

From the review of scholarly articles, different strategies and taxation systems have been identified that they have been employed for the elimination of double taxation. The aim of the DTTs is to overcome tax evasion strategies whilst minimising the incidence of double taxation within a country through the country's legislative infrastructure. There are two

exemption methods which have been identified for double taxation elimination, the exemption with progression and the full exemption method. The credit method for double taxation elimination includes ordinary and full credit, both used by different states to eliminate double taxation (Thuronyi and Brooks, 2016).

Other double taxation elimination methods include underlying tax credit, tax sparing credit and participation exemption. In 1963, Thailand signed its first DTT with Sweden, since this time, the DTT network of Thailand has been expanding and since then it has been updated. Each DTT negotiated and implemented in Thailand aims to eliminate double taxation using different taxation methods. In general, when considering methods to eliminate double taxation, the exemption method and credit methods are most frequently applied. The tax regime implemented in the country is recognised as the key factor for the local or international level business, when deciding to invest in other markets or countries (Genser and Holzmann, 2016).

The methods used to eliminate double taxation in Thailand through the use of DTTs have significantly and positively impacted the attraction of foreign investments but this also lets foreign companies use tax evasion methods too. Moreover, according to the income tax treaty between Thailand and Hong Kong, regarding the sale of shares of a corporation resident in another jurisdiction, article 13 provides reforms for the elimination of taxes on corporate income tax levels (Arnold, 2019). Such measures bring greater transparency when transferring profit between countries, but this also gives rise to new tax evasion practices too.

6.4 Effect of Using Different Methods

An essential idea while conducting DTT is to eliminate double taxation. To achieve this objective, double taxation under DTTs can use two main methods, under article 23 on the subject of relieving international double taxation issue, these are the credit and exemption

method. These two methods are favoured in almost most countries where DTTs are negotiated and implemented. Under DTTs between Thailand and bilateral countries, there are no states which apply the full credit method with Thailand. Nevertheless, bilateral countries that employ the credit method with Thailand select the ordinary credit method to mitigate the tax burden for their resident investors who invest in Thailand.

For the exemption method under DTT, there are no bilateral countries that have applied for the full exemption method when dealing with Thailand. If these countries are not using the ordinary credit method, then they tend to apply for the exemption with progression method. Both methods assist in promoting Thai investors to invest in bilateral countries as well as encouraging MNEs of bilateral countries to invest in Thailand as they provide a relief from double taxation.

From the taxpayers' perspective, the ACH method can eliminate double taxation under the DTT treaties; it can provide tax relief from the double taxation issue and make the taxpayer receive different net income from different countries. However, to eliminate the double taxation burden, only the DTT provisions or the methods cannot be relied on, also the tax rate of the source country and residence country are also important. The collection of tax revenue depends on the rates charged and whether they are progressive or fixed tax rates and it also depends on how taxable income is derived before taxation.

6.4.1 Using Exemption Method

To understand the issues of taxation, this section examines the use of the exemption method to eliminate double taxation. Therefore, this section explains how the exemption method is linked to the taxation law of the country. For a competent and effective tax system, it needs to have a tax base, tax rate and the system needs to be able to undertake computation accurately. The exemption method can be considered either under the Distributive Rule or

Double Taxation Relief. This is because the process of using the exemption method is to eliminate income that has been taxed at the source country and also accounts for tax that has been paid on domestic income in the resident state. Besides, the exemption method, there is also the sub-method; it is a full exemption method, and exemption with progression. Each method is used to deal with the certain items of income from the tax base in the resident country and generates the tax aggregate to derive the difference to be taxed for the total.

When using the exemption method, the country has an obligation to provide exemption and this is irrespective of the amount of tax it has paid at source country. This is because the fee which is paid in the source country will be exempted from the tax base on domestic income in the resident state. This may be good for tax administrative reasons when computing aggregate tax. The exemption method is easily applied and its computations are easier and that leads to a more reliable summary on aggregate rather than credit method. However, the consideration of the exemption with progression method could add more complications. The tax administration will have to consider the tax base of domestic income in the resident country. According to the income method, income earned at the source country will have to account for domestic income in the resident country, this will ensure it uses the total income for the required tax rate progression required for the resident country. This tax rate is then used to compute the taxable income, but the income incurred in the source country will be deducted from the calculation.

Full Exemption Method

Where the tax base in the contracting state where the exemption is applied does not include the exempted income, it is called “Full exemption”. Full exemption provides double taxation relief on the income in the contracting state where exempted income is not included for the determination of the tax computation that is levied on the income in question. Since the administration cost is considered as substantial advantage, full exemption is of more benefit

when compared with exemption with progression. Within this context, how other countries estimate income is of no importance in countries where double taxation relief is provided. However, it is important to determine which items of income should be excluded when estimating the final income to be taxed in accordance with the country's internal law.

The main principle, the principle of credit, is applied when estimating income relief for double taxation purposes in Thailand. In Thailand the matter relating to the exempted income for the purposes of the computation of tax is regulated in conjunction with the DTTs with bilateral countries and Thailand. Therefore, if a resident of Thailand earns income that is exempted under the DTT, the tax base of the country of residence shall not include income in the question of computation. To reduce the obligation load of the Thai Tax Agency, the exempted income is not taken into the calculations due the tax base as a main reason. This approach is employed to overcome the complexity of taxation legislation and its operations. The tax exemption rules are the main reason for why Thailand loses some tax revenue.

However, if considering tax neutrality and equity, full exemption may be considered as a drawback as the taxpayer does not pay tax on his/her income; thus, the income earned is not exempted nor is it not taken into computation for tax purposes. In the case of Thailand, certain items are exempted from taxation, items such as income from employment that is taxed once and thereafter it is not considered to calculate tax on the remaining income. The importance of progressivity taxation is that income is separated that is earned within Thailand and that that is earned within the contracting states.

Exemption with Progression Method

As in the case of full exemption, the state which provides double taxation relief is not taking the exempted income into account when calculating tax base. However, in the matter of

exemption with progression, the exempted income is firstly included as tax base for determining the tax rate and then the amount of tax is calculated which should be levied in the state that provides the double taxation relief.

The OECD suggests that the exemption with progression as an alternative to the principle of exemption. To use the OECD model, it is necessary to determine the income that is earned within the host country and the amount that is to be charged using the DTTs agreed principle. Nevertheless, the progressive rate which is charged against the remaining income is the difference between exemption with progression and full exemption. Consequently, increasing the amount that should be taxed leads to increasing the effective tax rate charged for the income subjected to tax progressive rates.

Progressive taxation is beneficial when the state of residence includes the income source and treats it as a taxable income, within the state where the income was sourced. The higher taxation and transparency in the way taxation is dealt with leads to an increase in the tax revenue of the host country and fair taxation revenue is earned by the state of residence too. Though, a lower tax on the remaining income can arise if the state of residence does not consider the exempted income.

As the progressive rate is considered when the exemption with progression is applied, worldwide income is enumerated in the state which provides exemption with progression taxation rates, the approach is consistent with its tax laws. There is no need to declare the amount of tax that is levied in other contracting states, accordingly the exemption with progression is less significant in the matter of administrability than full exemption and the principle of credit.

6.4.2 Using Credit Method

Full Credit Method

This method does not pay attention to whether TR_S exceeds TR_R or otherwise. The reason being that the investor of the resident country who invests in the source country will receive full credit for tax on the same income which has been paid at the source country. This will make TR_S work against tax on the domestic income of the resident country. Therefore, several states prefer not to apply this method because it seems to lessen the ability of the resident state to charge taxes, which causes the resident state to lose the tax revenue of the resident country. Thus, at times the Foreign Tax Credit Limitation has to set a tax ceiling for credit in the resident country that will lead to an exemption from taking tax which has been paid in the source country, needing to also be credited in the resident country.

The resident country's perspective is that the full credit method will not decrease tax revenue when it is applied and this is the limitation of the Foreign Tax Credit. Also, in the viewpoint of the taxpayer, he/she may feel that the tax burden resulting from international double taxation is adequately mitigated. So, when a resident country applies for the Foreign Tax Credit Limitation, it will help to secure a tax credit of resident country under the full credit method which will not affect the tax on the domestic income of the resident country. This is the reason for the occurrence of CEN.

Table 6.1. Working of Ordinary Credit Method

| SOURCE COUNTRY (S) | SIGN | RESIDENT COUNTRY (R) | EXPLANATION |
|--------------------|------|----------------------|---|
| Tax rate S | > | Tax rate R | Tax rate of S exceeds R, then R cannot impose the tax. The investor of R has to pay fee at S equal to the Tax rate of S. |
| Tax rate S | < | Tax rate R | R can impose some part of the tax. By Tax rate R minus Tax rate S will be equal to the amount of tax that can be collected in the resident country. |

Source: Author's own compilation

Table 6.1 above demonstrates how the method impacts on the source and resident country when the taxation is used. The amount of tax which can be collected through the usual credit method is the amount of the income that will be taxed at the highest tax rate of S or the tax rate of R. However, if the investor has no benefit from getting a lower tax rate from S, it will generate a tax incentive which is essential for an FDI decision. In the case when the aggregate tax rate is equal or less than the tax rate of R or tax rate of S, then the international double taxation will be relieved completely. It can be said that the ordinary credit has effectively achieved the goal of the DTT.

The method of ordinary credit can be divided into two main parts which include a claiming tax and the right to impose tax on income. To insist on tax, S will have priority to tax income before R. Next about the right to tax on income, R will have right to impose the on the amount, which remains after credit, that is the amount of tax which carries from S. Nevertheless, the credit method is related to the ability to reach neutrality. On the subject of the credit method, it can achieve CEN which the taxpayer who has a business transaction in S, as well as in home country R, can have a moderate concern about the difference incurring in the aggregate tax. Thus, the CEN will be achieved when the full credit method is applied.

Ordinary Credit Method

The standardised method, which is used to eliminate double taxation allows taking the tax that has been paid in one country from the income or profits received in that country. However, the deduction charges must be paid in another country from the same amount of revenue or profit. It may be deducted as the amount of tax paid in the first country but must not exceed the number of charges that must be paid in another state which will be calculated from the same income or profit called the "Ordinary Credit Method". For example, the Thai company has a branch in Indonesia. It operates and has an income which is paid to the Indonesian

government. The 25 per cent of the net profit is paid as tax. It is a branch of a Thai company which also must bring the benefit from the Indonesia branch to pay taxes in Thailand at the rate of 20 per cent by using the ordinary credit method. The Thai company can bring tax paid in Indonesia as credit to Thailand, at the amount, which is not more than Thai tax, that is 20 per cent of net profit else it would not be refunded.

On the other hand, if the branch of a Thai company operates in Singapore, it will have to pay income tax in Singapore at the tax rate of 17 per cent of the net profit. Thus, the Thai company can bring a fee that is paid in Singapore to credit in Thailand in full amount of tax because the Singapore tax rate does not exceed the tax that must be paid in Thailand that is 20 per cent. The principle of the tax credit with an ordinary credit method is defined under the DTTs that Thailand has agreed with all ASEAN member countries (except Brunei which Thailand does not have a DTT with).

Besides, in the DTTs that Thailand concludes with member countries, there is another method of tax credit which is referred to as the tax sparing credit. The method is to allow tax that should be paid, to be is exempted or reduced by tax law, tax incentive or tax promotion for the investment to be considered as a tax credit. For example, Thailand provides investment promotion to the companies of Vietnam that invest in Thailand, and when the Thai company sends the dividend back to the shareholders in Vietnam, this income tax will receive tax exemption under the Thai Investment Promotion. This means that the profit is not subjected to tax at 10% in Thailand.

Shareholders of Vietnam still have to bring dividends from Thailand to tax in Vietnam. The tax sparing credit method is to allow shareholders in Vietnam to pay tax at a rate of 10 per cent according to Thai tax. In some DTTs, there are tax credit methods which are subdivided in other ways, as agreed under the DTTs that Thailand has agreed with Malaysia in case of dividend income.

For example, if it is a dividend paid to a company that holds stocks of at least 15 per cent of the company, the dividend paid will receive the underlying credit. Moreover, the underlying credit is the tax credit method which the Malaysian company will bring. In short, it is the tax which has been deducted in Thailand from the dividend income at 10 per cent to use as a tax credit in Malaysia, as well as tax paid by Thai companies is the tax which is credited in proportion to the shareholding. The DTTs define the method of the tax credit, which may be different or have specific conditions. Therefore, using the tax credit method, businesses must study the requirements of DTT by country. Besides this, domestic law must also be considered, such as Thailand will give credit only for taxes that have been paid in the same cycle as the income record.

6.5 Examples of Using Methods in Eliminating Double Taxation

Company A is the UK company (resident country) which receives the income from the domestic (resident Country) 100,000 baht, also has income from Thailand (source country) 40,000 baht. This can be counted in the total income of company A at 140,000. Assume that the tax rate in the UK is 20% and in Thailand 30%. The example below demonstrates how the tax will be treated for the three scenarios

- a. The total amount of taxable income which A has to pay
- b. The amount of tax which the UK can earn
- c. The amount of tax which Thailand can get

Case 1: UK has no DTT with Thailand

| | |
|------------------------------|-------------------------------|
| Tax paid in UK | = 140,000 x 20% = 28,000 baht |
| Tax paid in Thailand | = 40,000 x 30% = 12,000 baht |
| Total tax which A has to pay | = 40,000 baht |

Credit Method

Case 2: UK has DTT with Thailand by applying full credit method

Tax paid in Thailand = $40,000 \times 30\% = 12,000$ baht

Tax burden in UK = $140,000 \times 20\% = 28,000$ baht

Received tax credit which has been paid in Thailand = 12,000 baht

So, Tax paid in UK = 16,000 baht

Total tax which A must will have to pay = $16,000 + 12,000 = 28,000$ baht

Case 3: UK has DTT with Thailand by applying ordinary credit method

Tax paid in Thailand = $40,000 \times 30\% = 12,000$ baht

This income if it was incurred in the UK;

It will pay tax = $40,000 \times 20\% = 8,000$ baht

So, the amount of tax credit = 8,000 baht

Tax burden in UK = $140,000 \times 20\% = 28,000$ baht

Received tax credit = 8,000 baht

So, Tax paid in UK = 20,000 baht

Total tax which A will have to pay = $20,000 + 12,000 = 32,000$ baht

This can be summarised as follows: company A's tax burden would be reduced by applying DTT than otherwise. When each type of credit method is observed, it can be seen that without entering into a DTT the amount of tax which company A will be forced to pay is at 40,000 baht. While if company A, however, was under the DTT, it would pay tax at 28,000 baht. Next, if company A applies the ordinary credit method, company A will have to pay tax at 32,000 baht.

Without the DTT, company A will be forced to pay at the resident country, applying the full credit method and the ordinary credit method at 28,000-baht, 16,000 baht and 20,000

baht, respectively. While Thailand, which acts as a source country will receive tax from the company at the same amount whether it has DTT with the UK or not. Thus, using DTT is advantageous to the taxpayer. However, it will reduce tax revenue for the resident country. If the resident state chooses the ordinary credit method to resolve double taxation, it will help the resident country to reduce the loss of tax revenue less than applying the full credit method. It has been observed that the bilateral countries which use the credit method with Thailand, choose to apply the ordinary credit method for relieving their investor tax burden. So, conducting DTT is like supporting the investment of the companies of the resident country to operate their business abroad by accepting that there will be some tax revenue losses for the country.

Thailand entered into DTT because the government realises that this can help to attract foreign investors to invest more in Thailand. Hence, DTT is the method to promote investment. However, in this study Thailand acts as source country and it will not affect its tax revenue but it will change to resident countries who have to choose their proper method of taxation for their investor to invest in Thailand.

Exemption Method

Case 4: UK has DTT with Thailand by applying full exemption method

$$\text{Tax paid in Thailand} = 40,000 \times 30\% = 12,000 \text{ baht}$$

$$\text{Tax burden in UK} = 100,000 \times 20\% = 20,000 \text{ baht}$$

$$\text{Total tax which A will have to pay} = 20,000 + 12,000 = 32,000 \text{ baht}$$

Case 5: UK has DTT with Thailand by applying exemption with progression method

$$\text{Tax paid in Thailand} = 40,000 \times 30\% = 12,000 \text{ baht}$$

The tax burden in the UK can be computed as follows;

$$\text{Total income of company A} = 100,000 + 40,000 = 140,000 \text{ baht}$$

Paid tax at rate 20%

But the income in Thailand is exempted in the UK, so, it has a negative impact from tax base.

So, Tax burden in UK = $(140,000 - 40,000) \times 20\% = 20,000$ baht

Total tax which A must will have to pay = $20,000 + 12,000 = 32,000$ baht

Therefore, either the full exemption method or exemption with progression gives the same result to the UK and Thailand. This is because the corporate tax rate in the UK is Fixed Rate, not progressive rate. If the corporate tax rate of the UK is progressive, then the exemption with progression will give the UK higher tax revenue and will be more than using a full exemption method. The tax which company A must pay in Thailand will be the same amount for all the cases that have been mentioned. If comparing the credit method with both exemption methods in the case that the resident country uses a fixed rate for corporate income tax, both exemption methods will give the same result which is similar to the conventional credit method but different from the full credit method. Because applying total exemption will mean the UK receives a lower tax revenue with these three methods. The reason for lower tax revenue for the UK when using the full credit method is that the tax rate of the source country is higher than the tax rate of the resident country. If the tax rate of both countries is the same, the full credit method will give the same result with other three methods.

6.6 Using Tax Sparing Credit

The measure of Tax Sparing Credit is used with the DTT. The method under DTT such as the Ordinary Credit Method, is when the source country has provided tax privileges to foreign investors who invest in the source country in the form of tax deduction or tax exemption for some classes of income to attract FDI. At any time, the source country can conclude DTT

with another state and decide to apply for the exemption method to mitigate the impact of double taxation. Thus, it will not have any limitations when giving tax privilege to the investors. The reason is that the resident country will have the obligation in exempting tax on the income that incurred it and where tax has paid to the source country.

However, if a country wants to use the DTT and has decided to apply the credit method to mitigate double taxation, then this method will make the tax privilege of the source country nullified. This will be the case if the resident country agrees to use tax credit only in the case when the tax has actually been paid in the source country. Therefore, the income which has been adjusted with a tax deduction or tax exemption in the source country, will be able to use credit in the resident country at the lesser amount (in the case of receiving low tax rate in source country). Otherwise, it will not be able to claim for credit at the resident state (in the case of receiving tax exemption in the source country). It is like the investors who got a tax privilege in the source country will have to bring this income to pay tax again in the resident state. This method will provide no advantage for any tax privilege from the source country which tried to provide some opportunities to foreign investors (resident country). It may seem that the source country attempted to lose its tax revenue for attracting FDI while the resident state can collect more tax.

Tax Sparing Credit is used to decide whether the taxpayer gets the tax deduction or tax exemption in the source country. A taxpayer with the help of Tax Sparing Credit, will be able to use the tax deduction or exemption to benefit from the tax that is paid in the resident country. Tax Sparing Credit will play the role as if the taxpayer paid a fee in the source country in spite of the taxpayer getting offered tax privileges from the source country. Thailand to date, has concluded over 61 DTTs with countries. This is essentially due to the reason that Thailand is a developing country and it needs investment from foreign investors. Hence, DTTs help Thailand to set up the legislation to promote investment and induce MNEs to invest in Thailand.

The law that promotes inward investment, the Investment Promotion Act, B.E.2520, is still in use. The research study involves the analysis of the problem of exercising Tax Sparing Credit under the DTTs of Thailand in order to learn about Thai situation as a source country. Once Thailand has decided to use Tax Sparing Credit with other countries, then that will lead to the foreign investors gaining the privilege of tax exemption or tax deduction following the Investment Promotion Act, B.E. 2520. Through this condition, the tax which is not paid in Thailand can be taken as a credit at the resident country by the foreign investor. Also, this situation can happen with the classes of income that are dividend and royalties paid by Thailand to the resident countries.

The study has demonstrated that using a different measure of the tax credit method provides an understanding of how the tax credit method under a DTT is used. The analysis of different methods suggests, having considered the benefits of all the methods, that developing countries use the tax credit method. The developed countries, especially those which are a member of OECD have observed that the tax sparing credit method is not able to achieve the objective of promoting investment and also has many issues such as it can damage the CEN of the resident country. Thus, tax sparing credit acts as a measure to aid other countries which have less transparency and clarity. The help of the tax sparing credit triggers excessive refunds for the resident country. Moreover, the critical issue which Thailand could face at the current time is that the developed countries can detect a steady increase in the use of tax sparing credit to plan tax policy and prevent tax evasion. This can be considered as using charge sparing credit in the wrong way as it can lead to a considerable amount of the tax revenue losses for both the resident country and the source country.

However, the developed countries are attempting to correct the processes that force them to use tax sparing credit thus giving rise to issues for the developed countries. On the one hand, there are some amendments on the adjustment with the tax sparing credit provision which

under the DTT need to be made clearer and more concise for the definition of “Tax Incentive” underneath the measure of Tax Sparing Credit which states the time duration of using Tax Sparing Credit. There are limitation of the tax rates that can be used for Tax Sparing Credit. There are also restriction on the types of business which can get the right of using Tax Sparing Credit.

The DTTs negotiated between Thailand and developing countries including the provisions about Tax Sparing Credit, have altogether 22 treaties. All of them set clear individual details under each DTT. In the case that bilateral countries which concluded DTTs with Thailand are OECD countries, the provision of Tax Sparing Credit will let Thailand give Tax Sparing Credit solely to those countries, with the exception being the case of the Czech Republic. If the of DTTs are agreed among the group of developing countries such as the case between Thailand and its bilateral developing countries, then the provision of Tax Sparing Credit will be used under those bilateral developing countries’ DTTs. This situation is considered as the exchange among the contracting states of DTTs except in the case of Singapore and Romania. Otherwise, the researcher has performed the analysis of the provision on Tax Sparing Credit under DTTs, can be divided into three characteristics, but their features do not have classification under the Investment Promotion Act.

Along with this, are the characteristics that have been identified as the Investment Promotion Act and the limitation of the time duration to make use of Tax Sparing Credit. For the Tax Sparing Credit, the researcher concludes from the analysis that Thailand should develop a strategy so that it can identify the problem and finding the best way to resolve issues arising when implementing the policies. For instance, the importance of the measure of Tax Sparing Credit to help to promote investment in Thailand which can be divided into two categories: the set up DTTs between Thailand and developed countries and also among Thailand and developing countries.

For signing DTTs between Thailand and developed countries, regarding the group of countries which are not offering the exercising of Tax Sparing Credit provision to Thailand, it does not mean that the tax exemption or the tax deduction that lies under the Investment Promotion Act will be wasteful. According to the resident countries of the investor, some countries have decided on making use of the full exemption method and the exemption with progression method and some may use the Matching Credit Method. Also, when the researcher looks at the amount of FDI for the group of countries which did not use the Tax Sparing Credit method they will see that the investors from those countries are still willing to invest in Thailand even without the exercising of Tax Sparing Credit. In addition to this, some of them are central countries which have invested a significant amount in Thailand for a long time such as Germany, Netherland and the United States of America.

6.7 Effect of Double Taxation Treaties for Double Taxation Elimination on Foreign Direct Investment Inflows from Bilateral Countries

Bilateral countries have signed a wide range of DTTs for the elimination of double taxation and to attract FDI inflows. The elimination of double taxation in bilateral countries which are mutually in agreement on several DTTs, have also shown to have an enhanced impact on FDI inflows. According to the report presented on countries mutually agreeing on tax evasion techniques, the original function of bilateral conventions and the primary objectives of these treaties involved positive impacts on the FDI inflows for the country. Moreover, the elimination of double taxation through treaties was also recognised to increase global trade during the years 60s and 70s (Miller and Oats, 2016).

In order to achieve the maximum effect of DTTs for double taxation elimination, FDI is exclusively focused and evaluated on a regular basis in developed as well as developing

states, including Thailand. Several provisions included in a DTT are aimed at increasing the FDI inflows in bilateral countries and according to evidence, a major positive effect was observed on the US bilateral FDI data during the years 1966 to 1992. The regular updating of DTT has been ensured to enhance international investments. Industrialised countries are motivated by political and economic interests, when selecting their BIT partners, which is one of the long-lasting advantages of providing strategy (Barrios, et al., 2012).

A majority of the models that study the relationship between FDI and DTTs are negotiated between developed and developing countries. BITs have enhanced the FDI inflows into Thailand although they are based on former models based on bilateral relationships (Covrig, 2011).

6.8 Impact of Similarities and Differences between Double Taxation Elimination Methods on Thai Tax System

The Thai tax structure is framed by the Royal Thai government. The Thailand derives its revenues from different sources of taxes including import duties, value added tax, income tax, and excise taxes. The exemption and credit methods are the major strategies employed under different DTTs and the similarities and differences between these tax elimination strategies define the scope of each elimination method. The Thai tax system follows both strategies for double taxation elimination and the impact of these strategies has been excessively researched and assessed. The OECD model and UN Convention model support the recently implemented multilateral treaties, however, developing countries including Thailand have mainly used bilateral treaties (Jogarajan, 2012).

Both methods i.e. the exemption and credit method, for double tax elimination follow the provisions of the UN convention model which has been critically analysed by economists

and found compatible with the Thai tax evasion system. According to the provision of the OECD model, which is substantially followed in exemption method based DTTs, the resident of a contracting state is exempt on the income tax level, when owning capital or deriving the income from the contracting state. The exemption method of double tax elimination has significant differences when compared with the credit method however, the impact of these differences on the Thai taxation system have been least analysed and reported (UN, 2013).

The exemption method follows the provision provided in article 23 of the OECD model for the elimination of double taxation. The exemption method is recognised as advantageous for the resident of Thailand on the basis of exempted income, as no tax is then payable in the resident state (Dong, 2019).

6.9 General Principles of Double Taxation Treaties and Status of Double Taxation Treaties according to Thai Internal Law

The status of DTT in relation to the law about the relationship between international law has been defined. DTTs are considered as agreements. Thus, they have the status as international law, in line with the Vienna Convention on the Law of Treaties in the year 1969. In terms of internal code, the enforcement of DTT has relied on the Constitution or Master Law of the countries with whom they entered DTTs with. Thereby, to implement DTT in internal law, it must follow the provisions of Constitution or Master Law of those countries. In the case of Thai domestic law, the DTT is the agreement about imposing a tax on Thailand and country partners, so, it affects tax revenue for Thailand directly.

DTT impacts on the rights and tax obligations for Thai citizens. Also, the provisions under DTT can negatively impact on the sovereignty of Thailand to charge certain taxes. At the same time, DTT can limit the power of the legislature not to be able to change or amend

the provisions of internal law which can give rise to conflicts under DTT. Hence, DTT must be agreed by the National Legislature because DTTs play an essential role in changing the state power and later it will be prescribed in the Constitution of Thailand.

6.10 Double Taxation Treaties development in Thailand with respective countries and the Role of TIRs by Revenue Department of Thailand

DTTs are negotiated and approved by the government of Thailand with multiple bilateral states. The objective of double tax elimination is to attract a greater amount of FDIs. The OECD model of Tax Convention provides an effective framework providing reforms for bilateral tax convention and plays a crucial role in order to remove the tax related economic barriers, thus accelerating cross border trade and investments. The OECD model forms the basis for negotiation as well as the application of bilateral tax treaties; assisting enterprises on a private and public level (Chen, et al., 2017).

Moreover, the provisions of the OECD model support the TIRs and their interpretation, helping to prevent tax evasion and avoidance. In the field of international double taxation, TIRs play an important role by providing a means for settling on a uniform basis for the most common challenges and issues of taxation system. DTTs developed and signed by Thailand support the TIRs and achieve their objectives by the allocation of taxing rights to either of the Contracting States?. These taxing rights are substantially for specific categories of income or gains, providing relief from double taxation (Castillo-Murciego and López-Laborda, 2019).

The research conducted in this study explores the effects of DTTs on FDI inflows in Thailand and the role it serves to eliminate double taxation which can be applied in accordance to the legislative taxing infrastructure of the country. The inward and outward flow of FDI is significantly influenced by the types of DTTs. The FDI inflow, particularly in developing

countries, significantly relies on the double taxation elimination method used under a DTT; thereby affecting the role of TIRs (Braun and Zagler, 2014).

6.11 The Difference in Employing Methods between Internal Law and Double Taxation Treaties

Regarding the provisions to eliminate double taxation from international investment in the case of dividend incurring in Thailand by MNE (no permanent establishment), Thailand may use the right under Thai internal law for helping the MNE. This help could be to reduce tax burden as well as in the case of Thailand entered DTT so it may use the right under the DTT to provide the privilege to this MNE. But either choosing to use internal law or DTT, there still will be differences for the processes and details of mitigating tax liability. For the case of dividend income, which is earned in Thailand by firms, the country can use DTTs to resolve double taxation under Thai internal law and DTT as summarised in table 6.2.

Table 6.2. Comparing Methods between Internal Law and DTT of Thailand

| Methods | Internal Law | DTT |
|-----------------|---|---|
| Types of Income | | |
| Dividend | Following Thai Decree No. 300, MNE may use conventional credit method. Moreover, the exemption method in Thai Decree No. 10 may be used by MNE in its country of a resident under the condition of law. | Almost of bilateral countries choose to use ordinary credit method with Thailand as well as some country Thailand provides tax sparing credit. The rest of them applied for an exemption with progression method. |

Source: RD, 2020

Table 6.2 above shows the Comparing Methods used to Eliminate Double Taxation between the Internal Law and DTT of Thailand. If an MNE acquires income in Thailand and the MNE is not from the country which has the DTT with Thailand, then the MNE will have the chance to choose how to relieve its double tax burden. MNE may bring the tax which has been paid in the resident country to exempt the tax which will be forced to tax in Thailand following the Thai Decree No. 10. Moreover, this MNE may receive ordinary tax credit which has been paid at its resident country in Thailand following Thai Decree No. 300. However, both ways have to be based on Thai tax law conditions.

6.12 The Relationship between DTT and Internal Law in Case of Exemption Method

The relationship between DTT and internal law may raise both issues of conflict or support. The details provided below is to help the readers to understand better the process and operation of DTTs. The DTT which employs the exemption method helps to mitigate double taxation is less complicated than using the credit method. So, in the big picture, many countries which sign the exemption method sometimes have no need to have internal law to be complement of DTT to aid more understanding on the process of relieving double taxation by exemption method. Moreover, if there are the domestic laws that are well written about the exemption method then all most of all of them will mention the rule of exemption in it. Beyond this, they often use the internal rule to show qualification, the process of computation, or how accurate the tax base is under the exemption method. As well, they may mention the tax rate, which will be possible if the exemption with progression method is applied.

In the case of Thailand's internal law, there is no domestic rule which states and relates to the exemption method under DTT. However, the Income Tax Act of Thailand will indicate the non-deductibility expenses regarding the income which incurred in the source country. These expenses will be allowed to be subtracted from the income which is earned in the source country under DTT. This deducting of payments will not have any effect on the full exemption method, but only in the matter of exemption with progression method does it cause an outcome. If it allows non-deductibility expenses to be subtracted from income, this will affect the tax base of the resident country. The tax base of the resident country will be smaller which may have lower tax base. Finally, a loss of the tax revenue of the resident country will occur, if the Income Tax Act about non-deductibility expenses is enacted.

6.13 The Relationship between DTT and Internal Law in Case of Credit Method

Internal law plays a significant role in the article of double taxation relief. With regard to the principle of credit, described guidelines are not included within DTTs in the matter of foreign tax credit, in addition there are no procedure guidelines for any of the rules. This could partly mean that if the principle of credit is applied, several features of it have to be apportioned on mentioning the procedures and rules of the contracting state's internal law.

Several DTTs of many contracting states, have the reference of some description on how the principle of credit is to be aligned with the internal laws. In the event of Thailand, the DTTs of Thailand refer to the principle of credit to "foreign tax credit under the provisions of Thai law". Therefore, it is important that the expression of references regarding the DTTs to the country's internal law must rely on the direction of internal rules. It seems to be that these references are only a declaration. There is a lack of clarity as to how the alignment may happen. According to the limitations under DTTs which may rely on internal law's responsibilities as

DTTs are governed with reference to internal law. Hence, to claim the principle of credit under DTTs, there are a few possible means. With reference to Thailand and the bilateral countries mostly the references are linked to internal law with regards to foreign tax credit.

Thailand applies the Foreign Tax Credit Act under both unilateral credit and credit under DTTs. When considering these two methods, one method will be more favourable than the other. Once Foreign Tax Credit Act grants lower tax credit than the credit the DTT provision provides, this issue can be solved by using the DTT as the Foreign Tax Credit Act which states that the scope of additional credit shall be specified for applying DTT which delivers a higher tax credit than the Foreign Tax Credit Act.

Many states permit taxpayers to select between following credit under internal law and credit under a DTT. This means that unilateral credit can be practised albeit DTT is also applied in those states. If unilateral credit is more favourable than the credit under DTT, hence there is no choice to the Foreign Tax Credit Act to force in following the credit under DTT. If the DTT covers foreign income, national income tax, foreign tax and the municipal income tax, the applicable unilateral credit for this Act is not accessible. However, in the event that a taxpayer is a non-resident for which DTT is not agreed provided, to determine the taxing right for this type of taxpayer, it would therefore be necessary for unilateral credit to be used for such a taxpayer in question.

On such an occasion, if there is no provision provided for the options between DTT credit and unilateral credit, in this scenario, it should consider using DTT credit or unilateral credit. In an event, if it is more favourable for the taxpayer to apply unilateral credit, since the taxpayer may experience higher burden of under using the DTT credit, then applying unilateral credit is more appropriate. In general, internal law provisions often contain the features which are not included under the DTT. Additionally, the DTT provisions are only used to limit taxing

rights; otherwise these are presented under internal law provisions. The obligation of unilateral credit is not limited by the state of residence, it is also used with respect to DTT to relive double taxation issue. Within the Foreign Tax Credit Act, many provisions apply to both unilateral credit and DTT credit, and as suggested before, both of these achieve the same objectives. Despite that, in the case of Thailand if foreign income, the foreign tax, the national income tax and the municipal income tax are covered under DTT, there is no clause available to apply unilateral credit.

6.14 Results for Fixed Effect Model Regression

DATA ANALYSIS

The research model has been already explained as below:

$$FDI = f [(Investment\ Treaties), (Economic\ Fundamentals)]$$

↓

$$FDI = f (Double\ Taxation\ Treaties, Unemployment\ Rate, Exchange\ Rate, Natural\ Resource, Institutions)$$

↓

$$FDI_{i,t} = \alpha_i + \beta_{1,i} DTT_{i,t} + \beta_{2,i} UER_{i,t} + \beta_{3,i} ER_{i,t} + \beta_{4,i} NR_{i,t} + \beta_{5,i} IST_{i,t} + \mathcal{E}$$

Table 6.3. Panel Regression Results with FDI Inflows of Thailand as a Dependent Variable

Source: Results for regression analysis generated using SPSS.

Table 6.4. Summary Descriptive Statistics for Explanatory Variables

| N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | | |
|---------------------------|---------|---------|-------|----------------|-----------|------------|-----------|------------|------|
| | | | | | Statistic | Std. Error | Statistic | Std. Error | |
| FDI | 432 | .00 | 4.04 | 1.2506 | 1.12433 | .367 | .117 | -1.041 | .234 |
| DTT | 432 | 0 | 1 | .43 | .495 | .291 | .117 | -1.924 | .234 |
| UER | 432 | .49 | 5.90 | 1.8376 | 1.43065 | 1.408 | .117 | .851 | .234 |
| ER | 432 | 1.00 | 13.23 | 4.4957 | 2.89094 | 1.323 | .117 | 1.062 | .234 |
| NR | 432 | .01 | 73.64 | 13.2284 | 16.87225 | 1.397 | .117 | 1.279 | .234 |
| IST | 432 | .00 | 7.06 | 3.8512 | 2.52115 | -.789 | .117 | -1.171 | .234 |
| Valid N (listwise) | 432 | | | | | | | | |

Source: Results for descriptive statistics generated using SPSS.

Table 6.5. Correlation among Explanatory Variables

| Correlations | | | | | | |
|--------------|-------|-------|-------|-------|------|-----|
| | FDI | DTT | UER | ER | NR | IST |
| FDI | 1 | | | | | |
| DTT | .464 | 1 | | | | |
| UER | -.093 | -.069 | 1 | | | |
| ER | -.311 | -.404 | -.231 | 1 | | |
| NR | .056 | .101 | -.042 | -.099 | 1 | |
| IST | .335 | .425 | .140 | -.839 | .128 | 1 |

| Variables | Fixed Effect Model Regression | | |
|--------------------------|-------------------------------|-----------------|----------|
| | Coefficients | Standard errors | p-values |
| FDI_{i,t} | -- | -- | |
| DTT_{i,t} | .234 | .112 | <.001 |
| UER_{i,t} | -.108 | .025 | <.001 |
| ER_{i,t} | -.114 | .021 | .039 |
| NR_{i,t} | .283 | .007 | .006 |
| IST_{i,t} | .119 | .025 | .038 |
| Const. | 2.401 | .224 | <.001 |
| R-square | .810 | | |
| R-square Adj. | .656 | | |

Source: Results for correlations generated using SPSS.

Research Findings with FDI Inflows of Thailand as a Dependent Variable

In Table 6.6, there are reported the dependent variable FDI and the 5 independent (explanatory) variables with their expected signs obtained from previous studies and research.

| FDI | DTT | UER | ER | NR | IST |
|--------------------|------------|------------|-----------|-----------|------------|
| Dependent Variable | + | - | - | + | + |

Table 6.6. Explanatory variables with expected signs

In Table 6.7, there is a comparison between the expected and the effective signs of the 5 explanatory variables used for this study.

| Variable | Expected signs | Effective signs |
|-----------------|-----------------------|------------------------|
| DTT | + | + |
| UER | - | - |
| ER | - | - |
| NR | + | + |
| IST | + | + |

Table 6.7. Comparison between expected and effective signs of the explanatory variables

$$FDI = 2.401 + 0.234DTT - 0.108UER - 0.114ER + 0.283NR + 0.119IST$$

When finding the effect of having DTT with Thailand, by sampling countries regarding the inflow FDI to Thailand, the valid signs match the expected signs for the explanatory variable DTT, UER, ER, NR and IST which have coefficients of **0.234**, **-0.108**, **-0.114**, **0.283** and **0.119**, respectively. These mean that the presence of DTTs between sampling countries and Thailand can increase the effective FDI by **0.234**. All of the explanatory variables are significant in affecting the FDI. These are DTT and UER with p-value of **<0.001**, immediately followed by NR with p-value of **0.006**, IST with p-value of **0.038** and ER with p-value of **0.039**.

The statistical analysis presented above shows that it is possible to obtain the following research findings to answer the research question: how DTTs affect the inflow of FDI inflows from bilateral countries to Thailand?. These findings need to be considered as potentially valid for other countries that are not present in this research but which have the similar characteristics to those included by the researcher in this study. For entering DTTs between Thailand and bilateral countries, it is possible to expect that the presence of DTTs will positively affect the inflow of these investments, as reported above, this effect's presence is strong significance. Also, the FDI in Thailand is positively and significantly affected by natural resources and institutions, while the unemployment rate and the exchange rate are strong significance too, however, their sign are negative on the final result.

Table 6.8. Panel Regression Results with DTTs affecting FDI Inflows of Thailand by

| Variables | Fixed Effect Model Regression | | |
|--|-------------------------------|-----------------|----------|
| | Coefficients | Standard errors | p-values |
| Thailand and Japan ^a | .317 | .097 | <.001 |
| Thailand and South Korea ^b | .369 | .109 | <.001 |
| Thailand and Cayman Islands ^c | .342 | .116 | <.001 |
| Thailand and Philippines ^d | .487 | .100 | <.001 |
| Thailand and Brunei ^e | .268 | .110 | <.001 |
| Thailand and Singapore ^f | .265 | .110 | <.001 |
| Thailand and Great Britain ^g | .356 | .116 | <.001 |
| Thailand and Taiwan ^h | .431 | .107 | <.001 |
| Thailand and Sweden ⁱ | .399 | .106 | <.001 |

different sampling countries as a Dependent Variable

Source: Results for regression analysis generated using SPSS.

Notes: Denotation 'a' shows the effect of having DTT with Thailand by developed countries (Japan as sampling country) on inflow FDI to Thailand. Whereas 'b', shows the effect of having DTT with Thailand by developing countries (South Korea as sampling country) on inflow FDI to Thailand. 'c' shows the effect of having no DTT with Thailand by countries (Cayman Islands as sampling country) on inflow FDI to Thailand. Denotation 'd' show the effect of having DTT with Thailand by ASEAN countries (Philippines as sampling country) on inflow FDI to Thailand. In the case of 'e' it shows the effect of having no DTT with Thailand by ASEAN countries (Brunei as sampling country) on inflow FDI to Thailand. With respect to 'f' shows the effect of applying credit method with Thailand by developing countries (Singapore as sampling country) on inflow FDI to Thailand. The denomination 'g' is the effect of applying credit method with Thailand by developed countries (Great Britain as sampling country) on inflow FDI to Thailand. The note 'shows the effect of applying exemption method with Thailand

by developing countries (Taiwan as sampling country) on inflow FDI to Thailand. And finally, the note 'I' shows the effect of applying exemption method with Thailand by developed countries (Sweden as sampling country) on inflow FDI to Thailand.

From the table 6.3 to 6.8 that provides the results of the statistical analysis, it is possible to obtain the following research findings.

For developing countries that have high FDI in Thailand and have DTTs with this country, it is possible to expect that the presence of DTTs will positively and strongly affect the inflow of these investments at coefficient 0.369. It means that if Thailand is entering into a DTT agreement with a developing country, it will increase FDI inflows to Thailand at 0.369. For developed countries that have high FDI in Thailand and have DTTs with this country, it is possible to expect that the presence of DTTs will positively and strongly affect the inflow of these investments at 0.317. However, it can help to attract FDI into Thailand less than concluding DTTs between Thailand and developing countries. For the countries which have no DTTs with Thailand they can also increase trade, but that will be less than the countries that entered into DTTs with Thailand.

For ASEAN countries that have FDI invested in Thailand and have negotiated DTTs with this country, it is possible to expect that the presence of DTTs will positively and strongly affect the inflow of investments at coefficient 0.487. It means that if Thailand is entering into the DTT between an ASEAN country, it will help to increase FDI inflows to Thailand at 0.487. While ASEAN countries that have FDI in Thailand without DTTs with this country, it is considered to be similar as having no DTTs will have a positive impact on the inflow of these investments at coefficient 0.268 which is less than those having DTTs.

For developing countries that have FDI in Thailand with exemption method with this country, it is possible to expect that the presence of DTTs will positively and strongly affect

the inflow of these investments at coefficient 0.431. This effect will be very relevant. For developing countries that have FDI in Thailand with the credit method with Thailand, it is possible to expect that the presence of DTTs will positively and strongly affect the inflow of these investments at coefficient 0.265, even though this effect will aid in increasing FDI inflows to Thailand less than the developing countries that have FDI in Thailand with exemption method with this country.

For developed countries that have FDI in Thailand with exemption method with this country, it is possible to expect that the presence of DTTs will positively and strongly affect the inflow of these investments at coefficient 0.399. For developed countries that have FDI in Thailand with credit method with this country, it is possible to expect that the presence of DTTs will positively and strongly affect the inflow of these investments at coefficient 0.356 which can help to stimulate FDI but less than developed countries that have FDI in Thailand with exemption method with Thailand.

In conclusion, the evidence indicates that the exemption method is able to increase FDI far more than the credit method, especially applying exemption method between Thailand and developing countries within ASEAN member. The findings make a strong case for Thailand to renegotiate DTTs with bilateral countries because DTTs lead to a positive impact on FDI between Thailand and both developed countries and developing countries.

Table 6.9. Panel regression results finding “Do the double taxation treaties lead to an increase in foreign direct investment for Thailand from developed countries?” (Japan as

| Case of Japan and Thailand Variables | Coefficients | Panel Regression Standard errors | p-values |
|---|---------------------|---|-----------------|
| FDI | -- | -- | |
| DTT | .317 | .097 | <.001 |
| UER | -.106 | .031 | .008 |
| ER | -.095 | .003 | .183 |
| NR | .106 | .028 | .008 |
| IST | .122 | .031 | .084 |
| Const. | .797 | .258 | .002 |
| R-square | .633 | | |
| R-square Adj. | .400 | | |

sampling country)

Source: Results for regression analysis generated using SPSS.

Finding “Do the double taxation treaties lead to an increase in foreign direct investment for Thailand from developed countries?” (Japan as sampling country) → Japan: the valid sign (+) did match the expected one (+) for DTT, which has a coefficient of 0.317. This means that the presence of DTTs between this country and Thailand can increase the effectiveness of the FDI by 0.317. For this country, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.122 (expected sign) at p-value 0.084, immediately followed by NR with a coefficient 0.106 (expected sign) at p-value 0.008, ER with a coefficient -0.095 (expected sign) and UER with a coefficient -0.106 (expected sign) at p-value 0.008.

Table 6.10. Panel regression results finding “Is there a relationship between the double taxation treaties and foreign direct investment for Thailand and developing countries?”

| Case of South Korea and Thailand Variables | Coefficients | Panel Regression Standard errors | p-values |
|---|---------------------|---|-----------------|
| FDI | -- | -- | |
| DTT | .369 | .109 | <.001 |
| UER | -.105 | .035 | .018 |
| ER | -.083 | .031 | .299 |
| NR | -.104 | .003 | .747 |
| IST | .035 | .035 | .114 |
| Const. | .993 | .290 | <.001 |
| R-square | .499 | | |
| R-square Adj. | .249 | | |

(South Korea as sampling country)

Source: Results for regression analysis generated using SPSS.

Finding “Is there a relationship between the double taxation treaties and foreign direct investment for Thailand and developing countries?” (South Korea as sampling country) → South Korea: the valid sign matches the expected one for DTT, which has a coefficient of 0.369. This means that the presence of DTTs between this country and Thailand can increase the effective FDI by 0.369. For this country, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.035 (expected sign), immediately followed by ER with a coefficient -0.083 (expected sign), NR with a coefficient -0.104 (no expected sign) and UER with a coefficient -0.105 (expected sign) at p-value 0.018.

Table 6.11. Panel regression results finding “Does having no double taxation treaty have any effect for foreign direct investment into Thailand?” (Cayman Islands as sampling

| Case of Cayman Islands and Thailand Variables | Coefficients | Panel Regression Standard errors | p-values |
|--|---------------------|---|-----------------|
| FDI | -- | -- | |
| NO DTT | .342 | .116 | <.001 |
| UER | -.107 | .035 | .015 |
| ER | -.089 | .031 | .264 |
| NR | .016 | .003 | .724 |
| IST | .128 | .035 | .105 |
| Const. | 1.024 | .289 | <.001 |
| R-square | .503 | | |
| R-square Adj. | .253 | | |

country)

Source: Results for regression analysis generated using SPSS.

Finding “Does having no double taxation treaty have any effect for foreign direct investment into Thailand?” (Cayman Islands as sampling country) → Cayman: During the period under analysis (1970-2017), Cayman had high FDI without DTTs in Thailand. Consequently, it is possible statistically to support, to an extent a coefficient of 0.342. This means that the presence of having no DTTs between this country and Thailand can increase the effective FDI by 0.342 and direction (sign) having no DTTs can positively affect the FDI in Thailand, but less than the countries with having DTTs with Thailand. For this country, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.128 (expected sign), immediately followed by NR with a coefficient 0.016 (expected sign), ER with a coefficient -0.089 (expected sign) and UER with a coefficient -0.107 (expected sign) at p-value 0.015.

Table 6.12. Panel regression results finding “Is there a relationship between the double taxation treaties on the inflow of foreign direct investment from ASEAN to Thailand?”

(Philippines as sampling country)

| Case of Philippines and Thailand Variables | Coefficients | Panel Regression Standard errors | p-values |
|---|---------------------|---|-----------------|
| FDI | -- | -- | |
| DTT | .487 | .100 | <.001 |
| UER | -.093 | .031 | .021 |
| ER | -.056 | .028 | .434 |
| NR | -.115 | .003 | .004 |
| IST | .108 | .032 | .128 |
| Const. | 1.085 | .145 | <.001 |
| R-square | .624 | | |
| R-square Adj. | .390 | | |

Source: Results for regression analysis generated using SPSS.

Finding “Is there a relationship between the double taxation treaties on the inflow of foreign direct investment from ASEAN to Thailand?” (Philippines as sampling country) → Philippines: the valid sign matches the expected one for DTT, which has a coefficient of 0.487. This means that the presence of DTTs between this country and Thailand can increase the effective FDI by 0.487, which can be considered strongly relevant. For this country, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.108 (expected sign), immediately followed by ER with a coefficient -0.056 (expected sign), UER with a coefficient -0.093 (expected sign) at p-value 0.021 and NR with a coefficient -0.115 (no expected sign) at p-value 0.004.

Table 6.13. Panel regression results finding “Does having no double taxation treaty with ASEAN member countries have any effect for FDI into Thailand?” (Brunei as sampling country)

| Case of Brunei and Thailand Variables | Coefficients | Panel Regression Standard errors | p-values |
|--|---------------------|---|-----------------|
| FDI | -- | -- | |
| NO DTT | .268 | .110 | <.001 |
| UER | -.119 | .033 | .005 |
| ER | -.105 | .030 | .169 |
| NR | .015 | .003 | .707 |
| IST | .147 | .034 | .052 |
| Const. | 1.185 | .278 | <.001 |
| R-square | .557 | | |
| R-square Adj. | .310 | | |

Source: Results for regression analysis generated using SPSS.

Finding “Does having no double taxation treaty with ASEAN member countries have any effect for FDI into Thailand?” (Brunei as sampling country) → Brunei: as already stated before, during the period under analysis (1970-2017), Brunei had FDI without DTTs in Thailand. Consequently, it is possible to statistically show a coefficient 0.268. This means that the presence of no DTTs between this country and Thailand can increase the effective FDI by 0.268 and direction (sign) no DTTs can positively affect the FDI in Thailand. However, this DTT’s coefficient is less than the ASEAN countries which signed DTTs with Thailand. For Brunei, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.147 (expected sign) at p-value 0.052, immediately followed by NR with a coefficient 0.015 (expected sign), ER with a coefficient -0.105 (expected sign) and UER with a coefficient -0.119 (expected sign) at p-value 0.005.

Table 6.14. Panel regression results finding “Does applying the credit method under double taxation treaties between Thailand and developing countries have an effect on FDI inflow to Thailand?” (Singapore as sampling country)

| Case of Singapore and Thailand Variables | Coefficients | Panel Regression Standard errors | p-values |
|---|---------------------|---|-----------------|
| FDI | -- | -- | |
| DTT | .265 | .110 | <.001 |
| UER | -.122 | .033 | .004 |
| ER | -.106 | .030 | .167 |
| NR | -.026 | .003 | .518 |
| IST | .154 | .034 | .043 |
| Const. | 1.008 | .276 | <.001 |
| R-square | .557 | | |
| R-square Adj. | .310 | | |

Source: Results for regression analysis generated using SPSS.

Finding “Does applying the credit method under double taxation treaties between Thailand and developing countries have an effect on FDI inflow to Thailand?” (Singapore as sampling country) → Singapore: the valid sign (+) did match the expected one (+) for DTT, which has a coefficient of 0.265. This means that the presence of DTTs between this country and Thailand can increase the effective FDI by 0.265. For this country, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.154 (expected sign) at p-value 0.043, immediately followed by NR with a coefficient -0.026 (no expected sign), ER with a coefficient -0.106 (expected sign) and UER with a coefficient -0.122 (expected sign) at p-value 0.004.

Table 6.15. Panel regression results finding “Does applying the credit method under double taxation treaties between Thailand and developed countries have an effect on FDI inflow to Thailand?” (Great Britain as sampling country)

| Case of Great Britain and Thailand Variables | Coefficients | Panel Regression Standard errors | p-values |
|---|---------------------|---|-----------------|
| FDI | -- | -- | |
| DTT | .356 | .116 | <.001 |
| UER | -.109 | .035 | .014 |
| ER | -.086 | .032 | .284 |
| NR | -.054 | .005 | .428 |
| IST | .134 | .036 | .094 |
| Const. | 1.007 | .290 | <.001 |
| R-square | .500 | | |
| R-square Adj. | .250 | | |

Source: Results for regression analysis generated using SPSS.

Finding “Does applying the credit method under double taxation treaties between Thailand and developed countries have an effect on FDI inflow to Thailand?” (Great Britain as sampling country) → Great Britain: the valid sign (+) did match the expected one (+) for DTT, which has a coefficient of 0.356. This means that the presence of DTTs between this country and Thailand can increase the effective FDI by 0.356. However, this DTT’s coefficient is less than the developing countries which signed DTTs under credit method with Thailand. For this country, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.134 (expected sign) at p-value 0.094, immediately followed by NR with a coefficient -0.054 (no expected sign), ER with a coefficient -0.086 (expected sign) and UER with a coefficient -0.109 (expected sign) at p-value 0.014.

Table 6.16. Panel regression results finding “Does applying the exemption method under double taxation treaties between Thailand and developing countries have an effect on FDI inflow to Thailand?” (Taiwan as sampling country)

| Case of Taiwan and Thailand Variables | Panel Regression | | |
|---------------------------------------|------------------|-----------------|----------|
| | Coefficients | Standard errors | p-values |
| FDI | -- | -- | |
| DTT | .431 | .107 | <.001 |
| UER | -.091 | .034 | .034 |
| ER | -.069 | .030 | .371 |
| NR | .048 | .003 | .265 |
| IST | .100 | .034 | .192 |
| Const. | .781 | .282 | <.001 |
| R-square | .542 | | |
| R-square Adj. | .294 | | |

Source: Results for regression analysis generated using SPSS.

Finding “Does applying the exemption method under double taxation treaties between Thailand and developing countries have an effect on FDI inflow to Thailand?” (Taiwan as sampling country) → Taiwan: the valid sign (+) did match the expected one (+) for DTT, which has a coefficient of 0.431. This means that the presence of DTTs between this country and Thailand can increase the effective FDI by 0.431. For this country, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.100 (expected sign), immediately followed by NR with a coefficient 0.048 (expected sign), ER with a coefficient -0.069 (expected sign) and UER with a coefficient -0.091 (expected sign) at p-value 0.034.

Table 6.17. Panel regression results finding “Does applying the exemption method under double taxation treaties between Thailand and developed countries have an effect on FDI inflow to Thailand?” (Sweden as sampling country)

| Case of Sweden and Thailand Variables | Coefficients | Panel Regression Standard errors | p-values |
|--|---------------------|---|-----------------|
| FDI | -- | -- | |
| DTT | .399 | .106 | <.001 |
| UER | -.102 | .034 | .019 |
| ER | .030 | -.076 | .330 |
| NR | .003 | -.045 | .294 |
| IST | .034 | .121 | .116 |
| Const. | .283 | 1.045 | <.001 |
| R-square | .528 | | |
| R-square Adj. | .279 | | |

Source: Results for regression analysis generated using SPSS.

Finding “Does applying the exemption method under double taxation treaties between Thailand and developed countries have an effect on FDI inflow to Thailand?” (Sweden as sampling country) → Sweden: the valid sign (+) did match the expected one (+) for DTT, which has a coefficient of 0.399. This means that the presence of DTTs between this country and Thailand can increase the effective FDI by 0.399. However, this DTT’s coefficient is less than the developing countries which signed DTTs under exemption method with Thailand. For this country, the most affecting explanatory variables for the FDI are IST with a coefficient of 0.034 (expected sign), immediately followed by ER with a coefficient 0.030 (no expected sign), NR with a coefficient 0.003 (expected sign) and UER with a coefficient -0.102 (expected sign) at p-value 0.019.

From the previous section, it is possible to summarise the main research findings as in table below.

Table 6.18. Summary of the research findings

| <i>Country Status</i> | <i>Method</i> | <i>DTTs' Effect Sign/Coefficient</i> | | <i>Strong Positive Factors</i> | <i>Strong Negative Factors</i> |
|-------------------------------|---------------|--------------------------------------|------|--------------------------------|--------------------------------|
| All sampling countries | DTTs | + | .234 | DTT, NR, IST | UER, ER |
| Developed | DTTs | + | .317 | DTT, NR, IST | UER |
| Developing | DTTs | + | .369 | DTT | UER |
| Country | No DTTs | + | .342 | No DTTs | UER |
| ASEAN | DTTs | + | .487 | DTTs | UER,NR |
| ASEAN | No DTTs | + | .268 | No DTTs, IST | UER |
| Developing | Credit | + | .265 | Credit, IST | UER |
| Developed | Credit | + | .356 | Credit, IST | UER |
| Developing | Exemption | + | .431 | Exemption | UER |
| Developed | Exemption | + | .399 | Exemption | UER |

Source: Author's own compilation

From the table above, the research results determine the impacts of DTTs on FDI inflows to Thailand by different sampling countries. At the final stage, this research found out that there are positive impacts of DTT on FDI for which the sampling target on testing are developed countries, developing countries and ASEAN countries as the home countries and Thailand as the host country between 1970–2017. In accordance with this study, the results can explain that there is a significant positive impact of DTT on FDI inflows to Thailand. Notwithstanding, it is evident how the presence of DTTs have the highest positive effect on FDI for ASEAN countries which concluded DTTs with Thailand, especially for developing countries that adopted an exemption method under DTT, in the FDI in Thailand. However, for ASEAN countries and other countries that have not adopted DTTs with Thailand, these effects can be considered significant that having no DTTs still has a positive effect on FDI but they can be less attractive in stimulating FDI inflows to Thailand rather than the country types that

have been stated before. In addition, it is possible to highlight that for countries that have DTTs and are applying the exemption method with Thailand, they are seen to have a strong and positive impact in the final FDI rather than countries that have DTTs and are applying the credit method with Thailand. Vice versa, all sampling countries, which present a DTT effect, have at all of explanatory variables that have a substantial and positive effect on the final FDI.

Therefore, they have a substantial impact on determining the overall degree of FDI. In addition, it is possible to highlight that for developing countries that have DTTs with Thailand, they are able to attract more FDI inflows to Thailand rather than concluding DTTs with developed countries. Moreover, the other explanatory variables included in this research that can have a strong and positive impact in the final FDI, are natural resources and institutions. For unemployment rate and exchange rate, they have a strong and negative impact on the final FDI inflows from bilateral countries to Thailand and vice versa, all countries, which present a DTT effect, have at least two explanatory variables that have a significant effect on the final FDI.

Regarding previous studies, Botric and Skuflic (2006) suggest that the stability of a country's economy can use its employment or unemployment rate as a proxy on determining it. Many studies also mentioned that the unemployment rate (UER) could be reduced by the inflow of FDI. This research result met the expected results for all sampling countries in the matter that UER can discourage FDI. Moreover, the exchange rate (ER) sign met the expected results for all sampling countries except Sweden (Ancharaz, 2003), which they are significant negative effect on FDI inflows to Thailand. The expected sign of unemployment rate has been verified by all sampling countries, its relevance was verified as a negative impact on FDI inflows to Thailand (Brozen, 1958; Chard, 2011). For the expected result of natural resources (NR) sign has been verified by Japan, Cayman Islands, Brunei, Taiwan and Sweden which confirmed that this variable has a strong influence on FDI (Buckley et al., 2007; Duanmu and

Guney, 2009). Regarding the last variable, institutions (IST), it was verified by all sampling countries as having a positive effect on FDI (PRS Group, 2007).

From this research, it emerged how the presence of DTTs represent a relevant aspect for potential FDI in Thailand since it has been able to enhance investment from countries that is different in terms of development (developed or developing) to Thailand. However, the eventual presence of DTTs was statistically significant, the coefficient of this variable was relatively high. However, this study also has some limitations that have to be considered when trying to conclude which is the best method or approach to be adopted between Thailand and the bilateral countries that may invest in this country. The first limitation was related to the fact that the main findings of this research were exclusively based on the analysis of an individual country because Thailand entered DTTs with small number of countries and future research should try to use more countries for analysis. Also, future research should consider how and to what extent, the presence of DTTs and other financial tools have affected the FDI in the period when they were or not present, rather than during whole time slot when there were sub-periods with and others without these financial tools. This approach can support an understanding of the effectiveness and efficiency of these tools better since they can be analysed individually rather than together.

6.15 Questionnaires Analysis

Semi structured questionnaires were developed after having reviewed the literature that have use the instrument to investigate qualitative factors that are not easily studied using the quantitative approach. The approach used to develop questionnaires is discussed in chapter 4. Draft questionnaires were developed and piloted and amendments were made to ensure they were fit for the purpose. Table 6.19 to 6.42 below summarises the results of the questionnaires and the following sections provide their analysis.

Results from Collecting Questionnaire

The respondents for the questionnaire were recruited from Department of Provincial revenue (46), Ministry of Finance (32), Law Firms (11), Accounting Office (4) and others (7), a total of 100 useable questionnaires. In terms of the gender, 29 males and 71 females were interviewed. This high percentage of female respondents are representative of the women working for the government departments. In terms of education of respondents, 59 had a Bachelor Degree, 38 persons had a Master Degrees and two persons had under Bachelor Degree and one Doctoral Degree.

The respective tables in next section provide an analysis of respondents relating to the use, understanding and the effect of DTT and method of eliminating double taxation under DTTs on FDI.

| Level of understanding of how the Double Taxation Treaty (DTT) work | | | | | |
|--|-----------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Excellent | 13 | 13.0 | 13.0 | 13.0 |
| | Good | 32 | 32.0 | 32.0 | 45.0 |
| | Fair | 37 | 37.0 | 37.0 | 82.0 |
| | Poor | 18 | 18.0 | 18.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.19: Frequency of Level of Understanding DTT

Table 6.19 presents the level of understanding of how the Double Taxation Treaty (DTT) work. Most of the respondents have a fair knowledge and understanding of DTT, 37 persons, representing 37.0%, demonstrated good knowledge, 32 persons, representing 32.0%, had poor knowledge with the number of 18 persons accounting for 18.0% and the last order is 13 persons, representing 13.0%.

| 1.Double taxation is a barrier to international business transactions | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 7 | 7.0 | 7.0 | 7.0 |
| | I somewhat disagree | 18 | 18.0 | 18.0 | 25.0 |
| | Normal | 10 | 10.0 | 10.0 | 35.0 |
| | I somewhat agree | 40 | 40.0 | 40.0 | 75.0 |
| | I strongly agree | 25 | 25.0 | 25.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.20: Frequency of Questionnaire Question 1

| Statistics | | |
|---|---------|-------|
| 1. Double taxation is a barrier to international business transactions | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.58 |
| Std. Deviation | | 1.241 |

Table 6.20.1: Statistic of Questionnaire Question 1

Table 6.20, it is shown that whether double taxation is a barrier to international business transactions or not. Most of the respondents somewhat agreed in the matter of double taxation is a barrier to international business transactions, 40 persons, representing 40.0%. From table 6.20.1, it is found that respondents somewhat agreed with this matter at mean 3.58.

| 2. Double Taxation may cause delay to investment in Thailand | | | | | |
|---|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 8 | 8.0 | 8.0 | 8.0 |
| | I somewhat disagree | 27 | 27.0 | 27.0 | 35.0 |
| | Normal | 12 | 12.0 | 12.0 | 47.0 |
| | I somewhat agree | 28 | 28.0 | 28.0 | 75.0 |
| | I strongly agree | 25 | 25.0 | 25.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.21: Frequency of Questionnaire Question 2

| Statistics | | |
|---|---------|-------|
| 2. Double Taxation may cause delay to investment in Thailand | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.35 |
| Std. Deviation | | 1.329 |

Table 6.21.1: Statistic of Questionnaire Question 2

From table 6.21, it presents that most of the respondents somewhat agreed in the matter of double taxation may cause delaying on investment in Thailand, 28 persons, representing 28.0%. From table 6.21.1, it is found that respondents somewhat agreed with this matter in the overall picture at a level (Mean = 3.35).

| 3. Double taxation makes FDI inflow into Thailand less attractive | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 8 | 8.0 | 8.0 | 8.0 |
| | I somewhat disagree | 22 | 22.0 | 22.0 | 30.0 |
| | Normal | 7 | 7.0 | 7.0 | 37.0 |
| | I somewhat agree | 37 | 37.0 | 37.0 | 74.0 |
| | I strongly agree | 26 | 26.0 | 26.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.22: Frequency of Questionnaire Question 3

| Statistics | | |
|--|---------|-------|
| 3. Double taxation makes FDI inflow into Thailand less attractive | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.51 |
| Std. Deviation | | 1.307 |

Table 6.22.1: Statistic of Questionnaire Question 3

The question was asked whether double taxation makes FDI less attractive as an inflow into Thailand or not. Table 6.22 above presents that most of the respondents somewhat agreed in the matter of double taxation makes FDI less attractive flow into Thailand, 37 persons, representing 37.0%. From table 6.22.1, suggest that respondents somewhat agreed with this proposition, giving an in the overall mean value of 3.51.

| 4. Double taxation makes Thailand less competitive than rival countries | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 10 | 10.0 | 10.0 | 10.0 |
| | I somewhat disagree | 14 | 14.0 | 14.0 | 24.0 |
| | Normal | 10 | 10.0 | 10.0 | 34.0 |
| | I somewhat agree | 47 | 47.0 | 47.0 | 81.0 |
| | I strongly agree | 19 | 19.0 | 19.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.23: Frequency of Questionnaire Question 4

| Statistics | | |
|--|---------|-------|
| 4. Double taxation makes Thailand less competitive than rival countries | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.51 |
| Std. Deviation | | 1.235 |

Table 6.23.1: Statistic of Questionnaire Question 4

It was asked from the participants that whether double taxation is the reason that discourage Thailand's economy with rivals countries or not. Table 6.23 presents that most of the respondents somewhat agreed that double taxation is the reason that discourages Thailand's economy when compared with rival competitive countries, 47 persons, representing 47.0%. From Table 6.23.1, it is found that respondents somewhat agreed with this and the overall mean was 3.51.

| 5. Double taxation can undermine Thailand's long-term economic growth | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 20 | 20.0 | 20.0 | 20.0 |
| | I somewhat disagree | 23 | 23.0 | 23.0 | 43.0 |
| | Normal | 15 | 15.0 | 15.0 | 58.0 |
| | I somewhat agree | 33 | 33.0 | 33.0 | 91.0 |
| | I strongly agree | 9 | 9.0 | 9.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.24: Frequency of Questionnaire Question 5

| Statistics | | |
|--|---------|-------|
| 5. Double taxation can undermine Thailand's long-term economic growth | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 2.88 |
| Std. Deviation | | 1.313 |

Table 6.24.1: Statistic of Questionnaire Question 5

The question was asked whether double taxation can undermine Thailand's long-term economic growth or not. Table 6.24 presents that most of the respondents somewhat agreed with this statement that double taxation can undermine Thailand's long-term economic growth, 33 persons, representing 33.0%. From table 6.24.1, it is found that respondents somewhat agreed with this matter in the overall picture with a mean of 2.88.

| 6. Having DTT can help foreign direct investors to predict the status of the economic condition of Thailand so if there is an investment, the investment will be fair to these investors. | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 1 | 1.0 | 1.0 | 1.0 |
| | I somewhat disagree | 5 | 5.0 | 5.0 | 6.0 |
| | Normal | 10 | 10.0 | 10.0 | 16.0 |
| | I somewhat agree | 63 | 63.0 | 63.0 | 79.0 |
| | I strongly agree | 21 | 21.0 | 21.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.25: Frequency of Questionnaire Question 6

| Statistics | | |
|--|---------|------|
| 6. Having DTT can help foreign direct investors to predict the status of the economic condition of Thailand so if there is an investment, the investment will be fair to these investors. | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.98 |
| Std. Deviation | | .778 |

Table 6.25.1: Statistic of Questionnaire Question 6

The question was asked that whether having DTT can help foreign direct investors to predict the status of the economic condition of Thailand. If there is an investment, the investment will be fair to these investors or not. Table 6.25 above presents that most of the respondents somewhat agreed that DTT can help foreign direct investors to predict the status of the economic condition of Thailand as inward investment is a fair predictor of future outcome. 63 persons, representing 63.0% agreed with this proposition. In table 6.25.1, it is found that respondents somewhat agreed with this matter in the overall picture with a mean of 3.98.

| 7. DTT provides protect for foreign investors in the matter of double tax relief in the case of dividends | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 2 | 2.0 | 2.0 | 2.0 |
| | I somewhat disagree | 9 | 9.0 | 9.0 | 11.0 |
| | Normal | 20 | 20.0 | 20.0 | 31.0 |
| | I somewhat agree | 52 | 52.0 | 52.0 | 83.0 |
| | I strongly agree | 17 | 17.0 | 17.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.26: Frequency of Questionnaire Question 7

| Statistics | | |
|--|---------|------|
| 7. DTT provides protect for foreign investors in the matter of double tax relief in the case of dividends | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.73 |
| Std. Deviation | | .920 |

Table 6.26.1: Statistic of Questionnaire Question 7

The participants were asked whether DTT provides rights to protect foreign investors in the matter of double tax relief in the case of dividends or not. The table 6.26 above presents that most of the respondents somewhat agreed in the matter of DTT provides proper right to protect foreign investors in the matter of double tax relief in the case of dividends, 52 persons, representing 52.0%. From table 6.26.1, it is found that respondents somewhat agreed with this matter in the overall picture at mean 3.73.

| 8. DTT between Thailand and developing countries attracts direct investment to Thailand, rather than concluding DTT between Thailand and developed countries | | | | | |
|---|---------------------|-----------|----------|---------------|--------------------|
| | | Frequency | Per cent | Valid Percent | Cumulative Percent |
| Valid | I somewhat disagree | 10 | 10.0 | 10.0 | 10.0 |
| | Normal | 33 | 33.0 | 33.0 | 43.0 |
| | I somewhat agree | 45 | 45.0 | 45.0 | 88.0 |
| | I strongly agree | 12 | 12.0 | 12.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.27: Frequency of Questionnaire Question 8

| Statistics | | |
|---|---------|------|
| 8. DTT between Thailand and developing countries attracts direct investment to Thailand, rather than concluding DTT between Thailand and developed countries | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.59 |
| Std. Deviation | | .830 |

Table 6.27.1: Statistic of Questionnaire Question 8

The question was asked whether DTT between Thailand and developing countries can attract direct investment from those countries to Thailand, rather than concluding DTT between Thailand and developed countries or not. Table 6.27 above shows that most of the respondents somewhat agreed that DTT between Thailand and developing countries can attract direct investment from those countries to Thailand 45 persons, representing 45.0% response. Table 6.27.1, shows that respondents somewhat agreed with this question, providing an overall mean of 3.59.

| 9. If improvements are made to increase efficiency of DTT, it will help in attracting more MNEs to make investments in Thailand | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 1 | 1.0 | 1.0 | 1.0 |
| | I somewhat disagree | 4 | 4.0 | 4.0 | 5.0 |
| | Normal | 12 | 12.0 | 12.0 | 17.0 |
| | I somewhat agree | 47 | 47.0 | 47.0 | 64.0 |
| | I strongly agree | 36 | 36.0 | 36.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.28: Frequency of Questionnaire Question 9

| Statistics | | |
|--|---------|------|
| 9. If improvements are made to increase efficiency of DTT, it will help in attracting more MNEs to make investments in Thailand | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 4.13 |
| Std. Deviation | | .849 |

Table 6.28.1: Statistic of Questionnaire Question 9

In the questionnaire, respondents were asked if improvements are made to make DTT more efficient, will it help to attract more MNEs to make more direct investments in Thailand. Table 6.28, it shows that most of the respondents somewhat agreed with this question that efficient DTTs will attract more MNEs to make more direct investments in Thailand, 47 persons, representing 47.0%. From table 6.28.1, it is found that respondents somewhat agree with this matter in the overall picture at mean 4.13.

| 10. The agreement on concluding DTT with bilateral countries of Thailand is worthwhile, although the cost is relatively high. | | | | | |
|--|---------------------|-----------|----------|---------------|--------------------|
| | | Frequency | Per cent | Valid Percent | Cumulative Percent |
| Valid | I somewhat disagree | 5 | 5.0 | 5.0 | 5.0 |
| | Normal | 22 | 22.0 | 22.0 | 27.0 |
| | I somewhat agree | 46 | 46.0 | 46.0 | 73.0 |
| | I strongly agree | 27 | 27.0 | 27.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.29: Frequency of Questionnaire Question 10

| Statistics | | |
|--|---------|------|
| 10. The agreement on concluding DTT with bilateral countries of Thailand is worthwhile, although the cost is relatively high. | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.95 |
| Std. Deviation | | .833 |

Table 6.29.1: Statistic of Questionnaire Question 10

The respondents were asked whether the agreement on concluding DTT with bilateral countries of Thailand is worthwhile, although the cost is relatively high. Table 6.29 shows that most of the respondents somewhat agree in the matter of the agreement on concluding DTT with bilateral countries of Thailand that it is worthwhile, although the cost is relatively high, 46 persons, representing 46.0%. From table 6.29.1, it is found that respondents somewhat agree with this matter in the overall picture at mean of 3.95.

| 11. Countries with DTT will be able to attract more FDI than countries without DTT | | | | | |
|---|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 8 | 8.0 | 8.0 | 8.0 |
| | I somewhat disagree | 11 | 11.0 | 11.0 | 19.0 |
| | Normal | 13 | 13.0 | 13.0 | 32.0 |
| | I somewhat agree | 52 | 52.0 | 52.0 | 84.0 |
| | I strongly agree | 16 | 16.0 | 16.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.30: Frequency of Questionnaire Question 11

| Statistics | | |
|---|---------|-------|
| 11. Countries with DTT will be able to attract more FDI than countries without DTT | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.57 |
| Std. Deviation | | 1.130 |

Table 6.30.1: Statistic of Questionnaire Question 11

The question was asked from the respondents that countries with DTT will be able to attract more FDI than countries without DTT. From table 6.30, the respondents agreed with the proposition that it will countries with DTT will be able to attract more FDI than countries without DTT, 52 persons, representing 52.0%. From table 6.30.1, it is found that respondents somewhat agreed with this matter in the overall picture at mean 3.57.

| 12. Increasing DTTs between Thailand and other countries will encourage FDI flows into Thailand | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 1 | 1.0 | 1.0 | 1.0 |
| | I somewhat disagree | 5 | 5.0 | 5.0 | 6.0 |
| | Normal | 10 | 10.0 | 10.0 | 16.0 |
| | I somewhat agree | 58 | 58.0 | 58.0 | 74.0 |
| | I strongly agree | 26 | 26.0 | 26.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.31: Frequency of Questionnaire Question 12

| Statistics | | |
|--|---------|------|
| 12. Increasing DTTs between Thailand and other countries will encourage FDI flows into Thailand | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 4.03 |
| Std. Deviation | | .810 |

Table 6.31.1: Statistic of Questionnaire Question 12

In table 6.31, it is asked whether Thailand increasing DTTs will help to encourage further inflow of FDI into Thailand or not. As shown in the table most of the respondents somewhat agreed in the matter of the increasing of Thailand's DTTs will help on encouraging FDI flows into Thailand, 58 persons, representing 58.0%. From table 6.31.1, it is found that respondents somewhat agreed with this matter in the overall picture with a mean of 4.03.

| 13. The ineffectiveness of DTT will be an obstacle to FDI | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 1 | 1.0 | 1.0 | 1.0 |
| | I somewhat disagree | 5 | 5.0 | 5.0 | 6.0 |
| | Normal | 20 | 20.0 | 20.0 | 26.0 |
| | I somewhat agree | 56 | 56.0 | 56.0 | 82.0 |
| | I strongly agree | 18 | 18.0 | 18.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.32: Frequency of Questionnaire Question 13

| Statistics | | |
|--|---------|------|
| 13. The ineffectiveness of DTT will be an obstacle to FDI | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.85 |
| Std. Deviation | | .809 |

Table 6.32.1: Statistic of Questionnaire Question 13

In the literature it was suggested that the effectiveness of DTT would cause an obstacle to FDI. However, from table 6.32, it shows that most of the respondents somewhat agreed in the matter of the effectiveness of DTT will be an obstacle to FDI, 56 persons, representing 56.0%. From table 6.32.1, it is found that respondents somewhat agreed with this matter in the overall picture with a mean of 3.85.

| 14. DTTs between Thailand and the bilateral countries are fair and transparent | | | | | |
|---|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 4 | 4.0 | 4.0 | 4.0 |
| | I somewhat disagree | 12 | 12.0 | 12.0 | 16.0 |
| | Normal | 28 | 28.0 | 28.0 | 44.0 |
| | I somewhat agree | 45 | 45.0 | 45.0 | 89.0 |
| | I strongly agree | 11 | 11.0 | 11.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.33: Frequency of Questionnaire Question 14

| Statistics | | |
|---|---------|------|
| 14. DTTs between Thailand and the bilateral countries are fair and transparent | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.47 |
| Std. Deviation | | .979 |

Table 6.33.1: Statistic of Questionnaire Question 14

The participants were asked whether DTTs between Thailand and the bilateral countries are fair and transparent or not. In table 6.33, most of the respondents somewhat agree in the matter of DTTs between Thailand and the bilateral countries that DTTs are fair and transparent, 45 persons, representing 45.0%. From table 6.33.1, it is found that respondents somewhat agree with this matter in the overall picture with a mean of 3.47.

| 15. DTTs between Thailand and the bilateral countries give the taxpayer appropriate rights | | | | | |
|---|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 3 | 3.0 | 3.0 | 3.0 |
| | I somewhat disagree | 6 | 6.0 | 6.0 | 9.0 |
| | Normal | 22 | 22.0 | 22.0 | 31.0 |
| | I somewhat agree | 51 | 51.0 | 51.0 | 82.0 |
| | I strongly agree | 18 | 18.0 | 18.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.34: Frequency of Questionnaire Question 15

| Statistics | | |
|---|---------|------|
| 15. DTTs between Thailand and the bilateral countries give the taxpayer appropriate rights | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.75 |
| Std. Deviation | | .925 |

Table 6.34.1: Statistic of Questionnaire Question 15

The proposition was that it has been observed that DTTs between Thailand and the bilateral countries give the taxpayer appropriate rights. Table 6.34 show that most of the respondents somewhat agree in the matter of DTTs between Thailand and the bilateral countries that DTTs give the taxpayer necessary rights. 51 persons, representing 51.0% agreed with this proposition. From table 6.34.1, it is found that respondents somewhat agree with this matter in the overall picture with a mean of 3.75.

| 16. DTT has greatly helped to alleviate double taxation problems in Thailand | | | | | |
|---|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 2 | 2.0 | 2.0 | 2.0 |
| | I somewhat disagree | 8 | 8.0 | 8.0 | 10.0 |
| | Normal | 20 | 20.0 | 20.0 | 30.0 |
| | I somewhat agree | 60 | 60.0 | 60.0 | 90.0 |
| | I strongly agree | 10 | 10.0 | 10.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.35: Frequency of Questionnaire Question 16

| Statistics | | |
|---|---------|------|
| 16. DTT has greatly helped to alleviate double taxation problems in Thailand | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.68 |
| Std. Deviation | | .839 |

Table 6.35.1: Statistic of Questionnaire Question 16

The participants' opinion was sought as to whether DTT has greatly helped to alleviate double taxation problems in Thailand. Table 6.35 shows that that most of the respondents somewhat agreed in the matter of DTT has contributed significantly to alleviate dual taxation problems in Thailand, 60 persons, representing 60.0%. From table 6.35.1, it is found that respondents somewhat agreed with this matter in the overall picture with a mean 3.68.

| 17. The tax rates in the case of dividends under the DTTs of Thailand made with the bilateral countries are at an appropriate price. (Current tax rate is 10%-25%) | | | | | |
|---|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 2 | 2.0 | 2.0 | 2.0 |
| | I somewhat disagree | 13 | 13.0 | 13.0 | 15.0 |
| | Normal | 27 | 27.0 | 27.0 | 42.0 |
| | I somewhat agree | 39 | 39.0 | 39.0 | 81.0 |
| | I strongly agree | 19 | 19.0 | 19.0 | 100.0 |
| Total | | 100 | 100.0 | 100.0 | |

Table 6.36: Frequency of Questionnaire Question 17

| Statistics | | |
|--|---------|-------|
| 17. The tax rates in the case of dividends under the DTTs of Thailand made with the bilateral countries are at an appropriate rate. (Current tax rate is 10%-25%) | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.60 |
| Std. Deviation | | 1.005 |

Table 6.36.1: Statistic of Questionnaire Question 17

In question 17, we tested whether the tax rates in the case of dividends under the DTTs of Thailand made with the bilateral countries are at an appropriate rate. Table 6.36 shows that that most of the respondents somewhat agreed with this proposition regarding the dividends arrangements agreed under the DTTs for Thailand and with the bilateral countries that they are at an appropriate rate (Current tax rate is 10%-25%), 39 persons, representing 39.0%. From table 6.36.1, it is found that respondents somewhat agree with this matter in the overall picture with a mean of 3.60.

| 18. The tax rates applied to dividends under DTTs have an impact on FDI | | | | | |
|--|---------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | I strongly disagree | 7 | 7.0 | 7.0 | 7.0 |
| | I somewhat disagree | 18 | 18.0 | 18.0 | 25.0 |
| | Normal | 27 | 27.0 | 27.0 | 52.0 |
| | I somewhat agree | 45 | 45.0 | 45.0 | 97.0 |
| | I strongly agree | 3 | 3.0 | 3.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.37: Frequency of Questionnaire Question 18

| Statistics | | |
|--|---------|-------|
| 18. The tax rates applied to dividends under DTTs have an impact on FDI | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 3.19 |
| Std. Deviation | | 1.002 |

Table 6.37.1: Statistic of Questionnaire Question 18

The participants were asked whether the tax rates which were agreed in the case of dividends under DTTs have an impact on FDI. Table 6.37 shows that most of the respondents somewhat agreed in the matter of the tax rates which are shown in the case of dividends under DTTs having an impact on FDI, 45 persons, representing 45.0%. From table 6.37.1, it was found that the respondents somewhat agreed with this matter in the overall picture with a mean of 3.19.

| 19. In your opinion, what are the main reasons for having DTT? | | | | | |
|---|---------------------------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Attracting FDI | 52 | 52.0 | 52.0 | 52.0 |
| | Preventing tax evasion | 28 | 28.0 | 28.0 | 80.0 |
| | International exchange of information | 9 | 9.0 | 9.0 | 89.0 |
| | Reducing paying double tax | 11 | 11.0 | 11.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.38: Frequency of Questionnaire Question 19

| Statistics | | |
|---|---------|-------|
| 19. In your opinion, what are the main reasons for having DTT? | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 1.79 |
| Std. Deviation | | 1.008 |

Table 6.38.1: Statistic of Questionnaire Question 19

The respondents were asked what were the main reasons for having DTT. They suggested that the reasons included attracting FDI, preventing tax evasion, international exchange of information and reducing paying double tax. Table 6.38 above shows that most of the respondents think that the main reason for having DTTs is to attract FDI, 52 persons, representing 52.0%. From table 6.38.1, it can be seen that the respondents have the opinion that DTT aims to attracting more FDI with a mean of 1.79.

| 20. In your opinion, can DTT lead to an increase in FDI? | | | | | |
|---|-----------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Positive | 88 | 88.0 | 88.0 | 88.0 |
| | Negative | 6 | 6.0 | 6.0 | 94.0 |
| | No Impact | 6 | 6.0 | 6.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.39: Frequency of Questionnaire Question 20

| Statistics | | |
|---|---------|------|
| 20. In your opinion, can DTT lead to an increase in FDI? | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 1.18 |
| Std. Deviation | | .520 |

Table 6.39.1: Statistic of Questionnaire Question 20

Using the chart, respondents were shown positive, negative or no impact signs and were asked which of the following signs did they think was the result of the DTT affecting the direction of FDI. In table 6.39, it can be seen that most of the respondents believe that the result from the DTT affecting the path of FDI is a positive, 88 persons, representing 88.0%. From table 6.39.1, it can be seen that the respondents have the opinion that the result from the DTT affecting the direction of FDI has a positive impact with a mean of 1.18.

| 21. In your opinion, do DTT methods help to eliminate double taxation and positively affect FDI inflows to Thailand? | | | | | |
|---|-----------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Positive | 85 | 85.0 | 85.0 | 85.0 |
| | Negative | 3 | 3.0 | 3.0 | 88.0 |
| | No Impact | 12 | 12.0 | 12.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.40: Frequency of Questionnaire Question 21

| Statistics | | |
|---|---------|------|
| 21. In your opinion, do DTT methods help to eliminate double taxation and positively affect FDI inflows to Thailand? | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 1.27 |
| Std. Deviation | | .664 |

Table 6.40.1: Statistic of Questionnaire Question 21

The respondents were asked, which of the following signs did they think would lead to the elimination of double taxation affecting FDI inflows to Thailand. Table 6.40 shows that most of the respondents believed that the result from the practices of eliminating double tax affecting FDI inflows to Thailand is positive, 85 persons, representing 85.0%. From table 6.40.1, it is found that the respondents have the opinion that the result from the methods of eliminating double taxation affecting FDI inflows to Thailand has a positive impact with a mean of 1.27.

| 22. Which of the following methods do you think is the best to encourage FDI inflows to Thailand? | | | | | |
|--|---|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Credit Method | 22 | 22.0 | 22.0 | 22.0 |
| | Exemption Method | 58 | 58.0 | 58.0 | 80.0 |
| | Both methods are not too much different | 20 | 20.0 | 20.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.41: Frequency of Questionnaire Question 22

| Statistics | | |
|--|---------|------|
| 22. Which of the following methods do you think is the best to encourage FDI inflows to Thailand? | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 1.98 |
| Std. Deviation | | .651 |

Table 6.41.1: Statistic of Questionnaire Question 22

The participants were asked which method they consider is sufficient to eliminate double taxation. The credit method, the exemption method or none of them were proposed to the participants. The responses of the participants are shown in table 6.41. Most of the respondents thought that the method to eliminate the double taxation under DTT is the best method as it encourages FDI inflows to Thailand. This was stated by 58 persons, representing 58.0%. Table 6.41.1 shows that the respondents have the opinion that the best method on eliminating double taxation under DTT, which is the best method for encouraging FDI inflows to Thailand, is the exemption method with a mean of 1.98.

| 23. Which of the following methods used under DTT will have a greater influence on FDI inflows into Thailand? | | | | | |
|--|-----------------------------|-----------|----------|---------------|--------------------|
| | | Frequency | Per cent | Valid Percent | Cumulative Percent |
| Valid | Developing Country | 21 | 21.0 | 21.0 | 21.0 |
| | Developed country | 45 | 45.0 | 45.0 | 66.0 |
| | The economic group as ASEAN | 34 | 34.0 | 34.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Table 6.42: Frequency of Questionnaire Question 23

| Statistics | | |
|--|---------|------|
| 23. Which of the following methods used under DTT will have a greater influence on FDI inflows into Thailand? | | |
| N | Valid | 100 |
| | Missing | 0 |
| Mean | | 2.13 |
| Std. Deviation | | .734 |

Table 6.42.1: Statistic of Questionnaire Question 23

The respondents were asked which types of countries did the participants think were suitable for FDI inflow to Thailand. Table 6.42 shows that most of respondents believed that Thailand having DTT with developed countries will attract more FDI inflows to Thailand, 45 persons, representing 45.0%. In table 6.42.1, it can be seen that the respondents agreed that Thailand has DTT with the economic group as ASEAN countries will influence more FDI inflows to Thailand with a mean of 2.13.

6.16 Analysis of Interview

To gain an in depth understanding of DTT processes and benefits, in-depth interviews were conducted for the this research for the benefit of recommending appropriate DTTs and tax method directions under DTTs between Thailand and bilateral countries. Thus, improving and developing DTTs in article of Double Taxation Relief relates to the case of dividend payments on international taxation as desired. The researcher conducted interviews with 10 respondents in the related field, between 18th October 2018 to 23rd December 2018. The target group was identified and targeted to recruit them for interviews, they were interviewed in the group of five: which are the respondents who work in the Revenue Department/Provincial Revenue, the Ministry of Finance/Provincial Treasury Office, Law Firm, Accounting Office and others. The expert respondents' responses were summarized according to the issues which the researcher will present in the section below.

Table 6.43. Interview Data Analysis

Table 6.43 summarises the responses and provides an alternative perspective and view point about the subject of negotiating the use of DTTs in improving the inflow of investment for Thailand and how best to develop the DTTs. For this purpose, a number of questions were asked to the respondents which are stated below along with the replies.

Table 6.43.1 Interview Data Analysis Question 1

| Question 1 | Do you think DTTs can help to increase FDI flows into Thailand? | | |
|------------|---|--|---|
| Respondent | Place of Work | Category | Narrative |
| 1 | Revenue Department | <p>1.1) Respondent agrees that DTTs encourage MNEs' FDI.</p> <p>1.2) DTTs protect MNEs from international tax risks.</p> <p>1.3) DTTs can lead to loss of some tax revenues.</p> | <p>1.1.1) Concluding DTTs encourages MNEs to invest in Thailand.</p> <p>1.2.1) DTTs can reduce tax risk as DTTs relieve double taxation which can make MNEs have confidence to invest in Thailand.</p> <p>1.3.1) Scarifying tax revenue from entering DTTs can happen. However, Thailand will cover this loss from increasing FDI.</p> |
| 2 | Revenue Department | <p>2.1) Respondent agrees that DTTs encourage MNEs' FDI.</p> <p>2.2) DTTs reserve MNEs' tax privileges.</p> <p>2.3) DTTs can lead to loss of some tax revenues.</p> | <p>2.1.1) DTTs attract more FDI.</p> <p>2.2.1) DTTs can help to relieve the excess of tax burden.</p> <p>2.2.2) Scope of domestic law may not be able to allow MNEs to eliminate double taxation and control tax evasion, sufficiently like DTTs do.</p> <p>2.3.1) For many developing countries like Thailand, they are sacrificing their tax revenue to exchange with resulting from increasing of FDI.</p> |
| 3 | Ministry of Finance | <p>3.1) Respondent agrees that DTTs encourage MNEs' FDI.</p> <p>3.2) DTTs protecting MNEs from international tax risks.</p> <p>3.3) DTTs reserve MNEs' tax privileges.</p> <p>3.4) DTTs create good corporation.</p> | <p>3.1.1) FDI of Thailand can be increased by using DTTs as an important tool.</p> <p>3.2.1) DTTs help the facilitation of international investment as well as transferring technology and skills.</p> <p>3.3.1) Tax privileges are offered under DTTs such as Tax Credit Sparing between Thailand and some contracting countries.</p> <p>3.4.1) Governments step on mutual assistance under a legal framework which create relationship between contracting countries.</p> |
| 4 | Ministry of Finance | <p>4.1) Respondents agree that DTTs encourage MNEs' FDI.</p> <p>4.2) DTTs reserve MNEs' tax privileges.</p> | <p>4.1.1) To boost FDI, DTTs are needed as to build confidence of MNEs.</p> <p>4.2.1) To prevent exceeding the tax liability on income of MNEs, hence DTTs are needed.</p> <p>4.2.2) DTTs contain the taxing rights between contracting countries to evade double taxation and prevent tax.</p> |
| 5 | Law Firm | <p>5.1) Respondents agree that DTTs encourage MNEs' FDI.</p> <p>5.2) DTTs reserve MNEs' tax privileges.</p> | <p>5.1.1) Negotiation of DTTs for Thailand has purpose to stimulate international investment.</p> <p>5.2.2) DTTs can aid international trade and investment by limiting taxation which might deter to FDI.</p> |

| | | | |
|----|-------------------|--|---|
| | | 5.3) DTTs create good corporation. | 5.3.1) Developing economic relationships between contracting countries are created by entering DTTs. |
| 6 | Law Firm | 6.1) Respondent agrees that DTTs encourage MNEs' FDI. 6.2) DTTs protect MNEs from international tax risks. 6.3.1) DTTs reserve MNEs' tax privileges. | 6.1.1) Entering into DTTs is aimed to attract FDI. 6.2.1) DTTs can solve the case of double taxation to attract MNEs as their tax burdens are reduced from the excess of taxation. 6.3.1) DTTs generate equitable tax treatment to MNEs. |
| 7 | Accounting Office | 7.1) Respondent agrees that DTTs encourage MNEs' FDI. 7.2) DTTs protect MNEs from international tax risks. 7.3) DTTs create good corporation. | 7.1.1) There are advantages for Thailand to conclude DTTs as it increases FDI. 7.2.1) DTTs reduce the obstacles on movements of capital, transfer of technology, and persons and the exchange of goods and services. 7.3.1) The limitation of the taxing rights under DTTs could effectively avoid arguments between contracting countries. |
| 8 | Accounting Office | 8.1) Respondent agrees that DTTs encourage MNEs' FDI. 8.2) DTTs protect MNEs from international tax risks. | 8.1.1) DTTs operate to help Thailand in achieving intended outcomes as FDI. 8.2.1) Aim of eliminating double taxation usually focuses on the DTTs to organise tax policies, mitigate the excessing of taxation and rise FDI. |
| 9 | Others | 9.1) Respondent agrees that DTTs encourage MNEs' FDI. 9.2) DTTs protect MNEs from international tax risk | 9.1.1) Thailand enters into DTTs for the reason that it needs to run its economy by stimulating capital flows from MNEs. 9.2.1) To reduce the fluctuation of tax rate, DTTs are applied for the purpose of growth of FDI. 9.2.2) International tax evasion can be reduced from both contracting countries as DTTs recover tax administration. |
| 10 | Others | 10.1) Respondent agrees that DTTs encourage MNEs' FDI. 10.2) DTTs reserve MNEs' tax privileges. | 10.1.1) To stimulate FDI, Thailand uses DTTs as a tool. 10.1.2) DTTs can offer confidence in tax incentives to MNEs for investment in Thailand. 10.2.1) DTTs are commonly proposed to reduce double taxation and moderate tax evasion by MNEs. Especially, for reducing tax evasion, the article of exchange of tax information between governments is carried out. |

Table 6.43.2 Interview Data Analysis Question 2

| Question 2 | 2. Do you think the methods of eliminating double taxation under DTTs help to attract FDI from bilateral countries into Thailand? | | |
|------------|---|---|--|
| Respondent | Place of Work | Category | Narrative |
| 1 | Revenue Department | 1.1) Respondent agrees that methods on eliminating double taxation attract FDI. 1.2) Suggestion of improving these methods | 1.1.1) These methods can influence cross-border capital movement by MNEs and relieve tax obstacle to increase FDI. 1.1.2) Exemption or Credit methods could be considered to help Thailand's tax incentive plan to encourage FDI. 1.2.1) Tax concessions using these methods attract FDI once Thailand provides potential tax benefits which are not available in other competitive countries with Thailand. 1.2.2) The great outcome from applying these methods is to not disturb the location of investment by MNEs. |
| 2 | Revenue Department | 2.1) Respondent agrees that methods on eliminating double taxation attract FDI. 2.2) Suggestion of improving these methods | 2.1.1) These methods attract MNEs to take in minimising tax liabilities. 2.1.2) These methods are to improve the ability of Thailand and bilateral countries to collect taxes effectively and fairly to encourage international investment activities. 2.2.1) Policy makers of Thailand and contacting countries must have slightly more openness to plan tax incentives in attracting FDI based on their own preferences. |
| 3 | Ministry of Finance | 3.1) Respondent agrees that methods on eliminating double taxation attract FDI. | 3.1.1) These methods protect tax transactions to be more clear which makes MNEs have more confidence to invest in Thailand. 3.1.2) These methods are intended to alleviate double taxation to promote the mitigation of tax burden for MNEs. |
| 4 | Ministry of Finance | 4.1) Respondent agrees that methods on eliminating double taxation attract FDI. | 4.1.1) As tax paid in Thailand can be alleviated tax liabilities in contracting countries by applying these methods which cause to encourage FDI. |
| 5 | Law Firm | 5.1) Respondent agrees that methods on eliminating double taxation attract FDI. | 5.1.1) These methods (exemption method and credit method) have regularly been applied to eliminate the international double taxation issue which creates a smooth way for MNEs to do direct investment in Thailand. |
| 6 | Law Firm | 6.1) Respondent agrees that methods on eliminating double taxation attract FDI. | 6.1.1) Offering these methods is frequently targeted by MNEs as they may be treated more favourably to home country than source country. 6.2.1) Tax credit is often chosen by developed countries to be tax regimes in helping to support export activities of them. |

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| | | 6.2) Applying tax credit method to increase FDI. | |
| 7 | Accounting Office | 7.1) Respondent agrees that methods on eliminating double taxation attract FDI. | 7.1.1) Under these methods, the advantages seem to drive to the intended receiver, the MNEs. |
| 8 | Accounting Office | 8.1) Respondent agrees that methods on eliminating double taxation attract FDI. | 8.1.1) Countries which demand the use of tax incentives to encourage FDI would favour capital exporting countries applying these methods. |
| 9 | Others | 9.1) Respondent agrees that methods on eliminating double taxation attract FDI. | 9.1.1) The countries which hesitate the understanding of using tax reductions to stimulate FDI, they might wish capital exporting countries to implement these methods. |
| 10 | Others | 10.1) Respondent agrees that methods on eliminating double taxation attract FDI. | 10.1.1) These methods are proposed to endorse the effectiveness of tax inducements for MNEs to consider investment in Thailand. |

Table 6.43.3 Interview Data Analysis Question 3

| Question 3 | Do you think that Thailand having a Double Tax Treaty with developing countries or developed countries or ASEAN countries, will be able to attract more Foreign Direct Investment into Thailand? Why? | | |
|------------|---|---|---|
| Respondent | Place of Work | Category | Narrative |
| 1 | Revenue Department | 1.1) Respondent agrees that DTTs between Thailand and developed countries will lead to more FDI to Thailand. | 1.1.1) Over the last few decades, more than 3000 DTTs have been signed, most of them have concluded between developing and developed countries for the purpose of FDI attraction. 1.1.2) Huge flows of FDI may be met in case of concluding DTTs between developed countries and Thailand as developed countries have high capital resource. |
| 2 | Revenue Department | 2.1) Respondent agrees that DTTs between Thailand and ASEAN countries will lead to more FDI to Thailand. | 2.1.1) Integration of taxation as DTTs between ASEAN countries and Thailand may have more benefits to member states such as many trade agreements are applied to support more effective with using together with DTTs. |
| 3 | Ministry of Finance | 3.1) Respondent agrees that DTTs between Thailand and developing countries will lead to more FDI to Thailand. | 3.1.1) Thailand has grown DTTs with developing countries. Likewise, many developing countries tend to follow OECD MTC instead of UN MTC which it recommends that there are small gaps in FDI between developing and developed countries which it expects that DTTs may be able to help in convergence the gaps. |

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| | | | 3.1.2) Developing countries often have huge source of resources which will make them more likely to conclude DTTs together for smooth international trade. |
| 4 | Ministry of Finance | 4.1) Respondent agrees that DTTs between Thailand and ASEAN countries will lead to more FDI to Thailand. | 4.1.1) Thailand's DTTs tend to have a higher protection of taxing rights to ASEAN member countries against developed countries. |
| 5 | Law Firm | 5.1) Respondent agrees that DTTs between Thailand and ASEAN countries will lead to more FDI to Thailand. | 5.1.1) Currently, Thailand receives international investment under the encouragement of DTTs which are set as likely more importing from ASEAN countries. |
| 6 | Law Firm | 6.1) Respondent agrees that DTTs between Thailand and developing countries will lead to more FDI to Thailand. | 6.1.1) At present, there is a significant increase of FDI either from developing countries or to developing countries which This may be met more in the near future. To achieve more FDI, Thailand and bilateral developing countries may have to put more effort in offering tax incentives. |
| 7 | Accounting Office | 7.1) Respondent agrees that DTTs between Thailand and developed countries will lead to more FDI to Thailand. | 7.1.1) Middle income countries like Thailand gain advantages from entering DTTs, especially from international trade and investment. |
| 8 | Accounting Office | 8.1) Respondent agrees that DTTs between Thailand and ASEAN countries will lead to more FDI to Thailand. | 8.1.1) Thailand would remain concluding DTTs for the reason of encouraging FDI or supporting export capacity. Besides, under economic integration as ASEAN might lead to be less complicated and foreseeable in solving double taxation for MNEs. |
| 9 | Others | 9.1) Respondent agrees that DTTs between Thailand and developed countries will lead to more FDI to Thailand. | 9.1.1) To attract FDI flows into Thailand from developed countries, Thailand has entered DTTs with developed countries rather than developing countries where Thailand expects that the DTTs will help to stimulate the MNEs of developed countries who have huge capital to invest in Thailand in the long term. |
| 10 | Others | 10.1) Respondent agrees that DTTs between Thailand and ASEAN countries will lead to more FDI to Thailand. | 10.1.1) As import and export between Thailand and ASEAN countries is faster than from other countries, Thailand attempts to trade with key associates, namely, ASEAN. |

Table 6.43.4 Interview Data Analysis Question 4

| Question 4 | Do you think Thailand should have the amendment on eliminating double taxation in the case of dividend under DTT? If have, how? | | |
|------------|---|--|--|
| Respondent | Place of Work | Category | Narrative |
| 1 | Revenue Department | 1.1) The respondent agrees to have concerning tax rates on dividend for adjustments. | 1.1.1) Even if the tax rates under DTTs in the case of dividend are sometimes set lower than internal law, before making the decision on applying methods in eliminating double taxation, Thailand should consider many factors to achieve long-term goals which will help to reduce investment risks such as putting more heavily in political factor which at the moment, should affect the Thai economy more to make sure that every tax relief which we put in the to solve double taxation in case of dividends will not make Thailand losing high tax revenue. |
| 2 | Revenue Department | 2.1) The respondent agrees to have concerning tax rates on dividend for adjustments. | 2.1.1) Under DTTs, the eliminating of double taxation systems may be concerning as they impact the amount of dividend pay-out of MNEs. Also, the different tax rates which Thailand provide to each of the contracting countries may affect the increase and decrease of dividends. So, a good understanding of the effect of placing tax rates in case of dividends is needed. |
| 3 | Ministry of Finance | 3.1) The respondent agrees to have concerning tax rates on dividend for adjustments. | 3.1.1) Tax schemes of Thailand can help in helping MNEs to get tax privilege. One of them is DTTs which significantly helps to reduce or eliminate lower pay-outs of tax liabilities. Without DTTs, MNEs may face paying higher tax. This means that DTTs are preferred for the case of dividends between Thailand and bilateral countries. |
| 4 | Ministry of Finance | 4.1) The respondent agrees to have concerning tax rates on dividend for adjustments. | 4.1.1) Nowadays, there is some need for adjusting levels of tax rate on dividends under DTTs which try to evade partial or double taxation. Sometimes, the lower tax rates DTTs provided may play an important role in losing tax revenue of Thailand. Therefore, reducing tax rates on dividends may be great enough to increase the tax revenue of Thailand. However, the new tax rate should not disturb the incentive investment of MNEs. |
| 5 | Law Firm | 5.1) The respondent agrees that Thailand has proper dividend tax rates with bilateral countries. | 5.1.1) As Thailand often provides tax rates on dividends under DTTs, lower than the internal law, if the MNEs are taxed in the case of dividend at a lower rate, the movement of investment in Thailand by them may increase with high amounts. |

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| 6 | Law Firm | 6.1) The respondent agrees that Thailand has proper dividend tax rates with bilateral countries. | 6.1.1) Tax profit under DTTs in the case of dividends, is subjected to alleviate double taxation level for investors which discourages capital movement and eventually reduces fluctuation of tax rates which can happen without DTTs protection of tax rates on dividends. At the moment, the dividend tax rates of Thailand with contracting countries are between 10%-25% which is almost less than internal tax law. |
| 7 | Accounting Office | 7.1) The respondent agrees that Thailand has proper dividend tax rates with bilateral countries. | 7.1.1) When the tax rates on dividends are offered to be considered as the high tax rates with contracting countries, the competitive countries of Thailand may be placed as interested target to be invested by MNEs. However, the Thai tax administration has conducted a major tax policy in providing the minimisation of the tax rates on dividends to attract the movement of capital from MNEs which many contracting countries of Thailand are offered only 10% tax rate on dividends under DTTs. |
| 8 | Accounting Office | 8.1) The respondent agrees that Thailand has proper dividend tax rates with bilateral countries. | 8.1.1) The eliminating of double tax on dividends is seen as having importance in economic decisions. However, the current tax rates on dividends are considered as proper tax rates. Because if Thailand is providing a lower tax rate, issues may be faced such as the tax bias to contracting countries which have higher tax rates than others. |
| 9 | Others | 9.1) The respondent agrees to have concerning tax rates on dividend for adjustments. | 9.1.1) The reduction of tax rate on dividends between Thailand and bilateral countries may help to deliver a boost to the Thai economy during the economic repossession as well as helping to solve corporate governance problems, and increasing FDI all of which can help to encourage long-term economic growth. |
| 10 | Others | 10.1) The respondent agrees that Thailand has proper dividend tax rates with bilateral countries. | 10.1.1) Indeed, FDI seems to have risen since DTTs have been concluded as DTTs have offer? lower dividend tax rates than domestic law. |

Table 6.43.5 Interview Data Analysis Question 5

| Question 5 | Do you have any recommendations for the issue of eliminating double taxation under DTT in the case of dividend? | | |
|------------|---|--|--|
| Respondent | Place of Work | Category | Narrative |
| 1 | Revenue Department | 2.1) Good understanding of having DTTs | 1.1.1) Thailand should firstly reinforce its tax scheme as well as develop its economy for receiving well-advising to adjust provision under DTTs only with important cautions such as changing the methods in eliminating double taxation in the case of dividend. |
| 2 | Revenue Department | 2.1) Good understanding of having DTTs | 2.1.1) Thailand has to be aware when entering DTTs because DTTs are able to create tax evasion. This issue will be a danger to both contracting countries and both governments should find a way to prevent this abuse. |
| 3 | Ministry of Finance | 3.1) Good understanding of having DTTs | 3.1.1) The exemption or credit method which is used to relief double taxation under DTTs may cause high tax evasion issues. Hence, the advantage of DTTs may be denied which will lead to a failure in erasing trade obstacles among countries. In the case of dividends, attention has to be paid regarding the arrangement of assigning suitable terms in applying tax incentives. |
| 4 | Ministry of Finance | 4.1) Tax administration capacity | 4.1.1) DTTs may be able to meet more effective obligations when the tax administration of both contracting states improve tax rules to guarantee the reliable use and interpretation of DTTs. Therefore, sometime tax administrators may need to refer to research papers to access upgraded and complicated tax information. |
| 5 | Law Firm | 5.1) Tax administration capacity | 5.1.1) Thailand should ensure that appropriate highly skilled staff are assigned work under the field of DTTs because DTTs often have complicated processes and some relate to the spending of resource undertaking. |
| 6 | Law Firm | 6.1) Political concerns | 6.1.1) Adjustment of tax norms may have to be reviewed by Thai government to help in improving the relationship with contracting countries which can motivate trade and the economy of Thailand. Provisions in case of dividends should be gone along with international obligations. |
| 7 | Accounting Office | 7.1) Good understanding of having DTTs | 7.1.1) Thailand and bilateral countries can gain advantages from DTTs. There are important costs which may be incurred during the process of tax collection. So, for |

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| | | | more understanding of the use of these tax privileges under DTTs, both contracting countries need to have well determination in whether the current methods which are used in case of dividends, are appropriate or not. |
| 8 | Accounting Office | 8.1) Tax administration capacity | 8.1.1) Tax fraud which is a powerful weapon, can be incurred by entering DTTs such as from administrative assistance providing an unreal exchange of information in the matter of income to be taxed. |
| 9 | Others | 9.1) Tax administration capacity | 9.1.1) Scarce resources of Thailand may have to be sacrificed for the negotiation of DTTs in the case of dividends, so this may require the high skills of the revenue authorities of Thailand to handle this issue as a significant tax main concern. |
| 10 | Others | 10.1) Good understanding of having DTTs | 10.1.1) Applying the method of eliminating double taxation under DTTs in the case of dividends, can aid Thailand to plan proper tax provisions under the article of eliminating double taxation on dividends that will help both Thailand and bilateral countries to achieve their desired results. |

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

Governments in developing and developed countries have recognised the importance of global trade and the free flow of investment to bring about a greater equality of opportunities and benefits from the greater flow of goods and services. However, legal, accounting and taxation policies are barriers to such free flow of capital. One factor that negatively impacts foreign direct investment, is the incidence of double taxation. Therefore, the literature review is carried out to identify the gap and then the researcher derived the testable hypothesis and to use qualitative and quantitative methods to investigate the relationship between DTTs, FDI and other associated variables. Thus, this thesis tried to investigate and understand the relationship between DTTs, FDIs and consider other motivating factors or barriers to the international flow of funds. Thus, this chapter aims to summarise the study by providing a detailed analysis of theory, practice and the conclusions emerging from qualitative and quantitative study. The conclusions and summary of the research are presented in this chapter, with suggestions made for future research.

7.2 Chapter Summary

This research, firstly carried out the literature review to examined the importance of Foreign Direct Investment (FDI) for Thailand and its bilateral countries. This research focused particularly on the use of double taxation treaties negotiated between states to eliminate the incidence of double taxation which then leads to an increased flow of investment across countries. FDI has gained importance as a flow of investment for developing countries such as Thailand to support the development of their economies through the creation of employment, infrastructure and source of tax revenue. Multinational Countries (MNCs) have a particular interest in investing overseas to take advantage of favourable markets, raw material and labour costs. The process of overseas investment by companies from developed countries, has increased over the last few decades with the liberalisation of international trade. There is extensive evidence within the literature that developing countries have benefited from foreign indirect investment (FDI). This foreign investment has enabled developing countries to acquire technological knowledge, create employment and raise tax revenues for the government, all that has enabled the stimulation of economic growth.

However, when Multinational Enterprises (MNEs) operate in many countries, they must comply with the respective countries' taxation laws and policies. To ensure companies repatriating funds are not taxed twice, once in the country of residence and secondly in the host country, countries negotiate treaties, known as Double Taxation Treaties (DTTs). Without DTTs in place, companies are discouraged to undertake FDI abroad as it affects their financial position.

Thailand being a developing nation relies extensively on FDI as it has negotiated DTTs to ensure that the incidence of double taxation does not negatively impact on their business environment. Therefore, it has DTTs in place for developed countries, developing countries and for the ASEAN region as well, to attract FDIs inflow. Thailand without raising finance

externally or saving sufficiently is unable to invest in the economy and Thai investors are unable to increase their investments. Thus, the literature suggests that FDI is the main reason for negotiating DTTs. However, there are other countries which compete for FDI with Thailand too, therefore Thailand requires an effective taxation policy to compete with rival countries (Dumiter, et al., 2016). For these reasons, this research is important in understanding the role of double taxation treaties and its limitations. Therefore, this research has practical implications for the topic and for the economy and policy makers.

Following the literature review, the research gap was identified that helped to synthesise the aim and objectives of the thesis. Chapter 1, of the thesis makes a case for this research and provides a general direction for this research. Chapter two of the thesis has provided an overview and an in-depth analysis of the literature that frames the research structure and questions. The main motive for this research is to promote economic growth and increase the flow of FDI - an essential tool - which is why awareness of FDI is ever-increasing in developing countries. From the perspective of MNEs, there is a need for reliable prediction methods before they invest in overseas markets and they need to see that double taxation will not negatively impact on their return. For this reason, MNEs need to have confidence that the host country, Thailand, will tax them fairly, as important part of the study. In this study, Thailand is the host country that needs to provide a fair treatment for MNEs to attract investment and ensure their rights under these arrangements are secure and they are appropriately supported. The double taxation treaties are used by Thailand eliminate the incidence of double taxation that promotes inward investment.

Countries worldwide, especially developing countries, are increasingly negotiating DTTs to make it easy for MNEs to invest in their countries. However, the literature suggested that each country's objectives and purposes differ. In addition, the methods negotiated also impact the effectiveness of DTTs in eliminating double taxation. Therefore, this research has

analysed the effects of implementing DTTs. The primary aim of DTTs is to protect the taxing rights of international investors within the host country and the home country.

The study found that conventionally, FDIs are from the developed to developing countries, however, this study is unique in that it reports that, Thailand not only received inward FDI from developed countries, but it also attracted funds from developing countries too, especially ASEAN members. This has proved that DTTs can be used as an instrument to guarantee MNEs that Thailand will provide tax relief on income earned and the basis of such taxation arrangements are stable, transparent and non-discrimination treaties that can instil them with greater confidence for investing in Thailand.

However, the research findings of this thesis suggest that the use of the DTT approach to eliminate the incidence of double taxation should be treated with care by the policy makers. Foreign direct investment decisions are not purely made on the basis of one element, such as taxation. Foreign investors' investment decisions are based on far more complex considerations, such as return, strategic location, marketing distribution costs and raw material decisions. Therefore, for Thailand to negotiate effective terms for DTTs, it needs to take wider issues into account and this approach requires due diligence and care to ensure that Thailand's interests are not negatively affected, either in the short or long term. Therefore, in addition to taking into account the wider consideration, the terms of double taxation agreements need careful scrutiny.

Furthermore, the analysis and relationships examined within the study, also suggest that DTT negotiations need to consider wider macro-economic considerations, such as the level of foreign debt, inflation and market size, to mention but a few. These factors will be considered by foreign states as negotiating tools to get the best deal for their country. Thus, it is important for policy makers to take note of these core issues when negotiating successive DTTs for the future. The DTTs are technical and complex, thus, they require the views of legal experts and

economists who can provide advice on the most suitable method to be employed - either the credit or the exemption method - for bilateral countries with Thailand. The analysis also suggests that with the advancement of technology and innovation within an ever-globalised world, financial tools and innovation make taxation regimes more complex. Thus, the DTT must be robust and at the same time flexible to make adjustments that take account of any major challenges that emerge when the DTTs are fully operational. This ensures legal agreements are negotiate to ensure tax costs and legal challenges are dealt with adequately.

The legal considerations are of critical importance for DTTs. The study has also considered the legal systems and their impact on DTTs. Negotiating DTTs involves complex political and legal considerations. Political, as the respective countries do not wish to relinquish their legal power to change the taxation as required. Therefore, the negotiating countries domestic law is of major essence. Therefore, it was considered important to explore how the domestic law operate to ensure any potential conflicts are managed and reduced any negative effects of DTTs and also that DTTs are not excessively protected either. However, given the limitation of the time and the aim of the thesis, the issues relating to internal law have not been researched in great depth. Therefore, the study merely touches on the potential issues that may arise from the domestic legal perspective.

To explore the complex and interconnected complex issues of DTTs which are often defined with the technical language, the study firstly employed the qualitative method to gain a deeper insight into such issues. For this purpose, semi-structured questionnaires were employed to seek the views of experts and policy makers at large. However, to gain an holistic over view this study employs both the qualitative and quantitative approach. This provides descriptive analyses of the responses capturing the knowledge and experiences of the respondents. The analysis of the questionnaires provided a mixed view of the use and understanding of the DTT methods for Thailand. There is a general understanding that to

eliminate the double taxation under DTT, the two main methods, the credit method and exemption method, are employed. However, there is a general appreciation of both the complexities and benefits of the methods, but the respondents tended to lack the in depth operation and analytical knowledge of the approaches. The analysis emerging from the literature review suggests that the principle of exemption and credit are the key methods to eliminate international double taxation under DTTs. There is wider acceptance and awareness of the principle of the exemption method as it enables certain sources or items of income which are earned from the source country to be excluded from the tax base in the country of residence. This method can help investors to minimise their tax liabilities, as there are fewer concerns or issues for investors when dealing with double tax issues at the source country as the principle of exemption can be applied either based on the distributive rule or based on double taxation relief article.

In contrast, the respondents in the interviews and in the literature suggest that the credit method is complicated when compared with the principle of exemption. The reason being that the principle of credit can be apportioned based on double taxation relief article. There is a process involved for computing worldwide income before the country of residence offers tax credit on the income of MNEs earned from the source country. Thereafter, the tax that has been paid to the source country is approved for granting credit to the resident country. Under the credit method, income from the taxation of the country of residence is related to the income which can be earned at the source country, and the tax law about imposing a tax on foreign income of that source country. This mean that if the source country increases tax on foreign income, it will affect the reduction of the tax revenue of the resident country. Under the credit method, the source country's taxes on income earned by the investors of the country of residence will be separated from imposing taxes on the domestic income of the resident country itself. The technicalities summarised here highlight the complexities inherent when negotiating

DTTs. This suggests there is a need for a technical expertise when developing strategies to attract FDI through using tax incentives.

The analysis above suggests that when exploring DTTs, the limitation of tax rates and the law should also be evaluated. This alternative has the potential to work in accordance with the credit and exemption method that have the potential to some extent, to mitigate the issue of international double taxation; it is described as the provision of the limitation of tax rates for some items or sources of income under DTTs such as dividends, interest and royalties. The maximum limit of tax rates under DTTs are to curtail excessive taxation within the source country and the fluctuation of tax rates under the source country's domestic law. The tax rate is set to compute with the gross income earned in the source country. After the tax rate of the source country is measured, the country of residence could use measures to address the issue of double taxation by granting credit to its taxpayers.

The taxation measures to reduce the tax burden have proved to be a challenge within the literature. However, there are countries, such as Sweden that employ the principle of exemption, where it has a DTT with Thailand. Sweden has also applied the principle of exemption as the main method with several other countries too but in the 1990s, it changed it to the credit method. The DTT between Sweden and Thailand was signed in the year 1989 and has been in force since 1990. However, there is literature that has considered the need for a change to the credit method; it suggests that the change was influenced by the outline of instructions in the matter of unilaterality of tax credit on foreign income. There is no provision of the subject of exemption of income in Thai domestic law, which is followed by the Thailand DTTs. The exemption of certain items of income in the case of Thailand is authorised under the DTTs as they are given a priority over its domestic law. Moreover, the relationship between a country's internal law can have statements in the internal law that shows whether excess tax charged should be refunded to the resident countries' investors or not via domestic law.

The literature and empirical findings of the study suggest that because of the countries' respective internal taxation laws, income is taxed more than once by each contracting state. Consequently, DTTs are designed to overcome the incidence of the double taxation. In order to mitigate the tax burden from international financial transactions, DTTs provide the basis of distributive rule and the basis of eliminating double taxation. If the country would like to eliminate double taxation completely, it must apply the distributive rule which will allow only one of the contracting countries to have the rights to impose taxes from the item or sources of income without the need to apply for the basis to eliminate double taxation article. Under both the UN and the OECD model, the basis of the distributive rule, the taxing right in several cases is assigned to the resident country rather than the source country. However, the literature suggests that the definition of a "source country" within the DTTs is omitted, this gives rise to further complications. To overcome this complication, several countries' internal laws have defined the 'source country', including Thailand too, under Thai Revenue Code No. 40 and No. 41.

The analysis is backed by the literature and the empirical findings for the study suggest that within the DTTs, the double taxation relief article provides an important limitation with regards to the issue of double taxation relief through providing details regarding the scope of the source country in taxing foreign income. This limitation is reserved for the source country under the DTT method; that is if the source country has an excess of collected tax from foreign income, the resident country will not be forced to grant the double taxation relief.

The analysis of the operating taxation system within the country and under the DTT arrangements lacks clarity in terms of their effectiveness and efficiency to address the issue of double taxation. However, it is evident that domestic tax laws are relaxed to enable DTTs to facilitate capital inflows. The strategy of providing tax relief under DTTs however, continues to show a level of conflict that persists despite the efforts to overcome the issue of attracting

overseas investment within the Thailand through tax incentives and at the same time the need to raise tax revenue. Therefore, this situation causes the resident country to ignore the benefits of double taxation relief to the source country as it collects tax in excess of the resident country which has been reserved for the source country. For the exemption method under DTTs, it is disregarded whether the income from the home country's investors is subjected to tax in the source country of income or not. This shows that the application of the principle of exemption can occasionally cause the issue of double non-taxation if the source country does not impose a tax on the item of income in question. To prevent the double non-taxation of income, the clause which is called "subject-to-tax" is added in the DTT. It acts like the relieving tool which aims to aid the home country in freeing it from the disadvantages of giving tax exemptions in the country.

The major issue this research examined is the limitation of the tax rate in relationship to the article of dividend payment. Dividends are taxed at source but under the DTT provision, they are deducted within the source country in line with the tax rate along with the application of the credit method by the residence country. This condition will lead either the residence country or the source country to provide reliefs on the basis of double taxation. However, the provision of DTT already sets up the limitation of the tax rate on dividends, even though the source country's right in imposing tax from both recipient and the taxpayer will be affected. When the taxpaying company decides to pay dividends, at this stage the dividends may already have been taxed within the source country unless the dividend adjustment is made at this stage, the same income may be taxed again. Notwithstanding, in the case of royalty and interest, the tax will normally be deducted from the taxpaying company and will not be deducted again, resulting in double economic taxation. Due to this we only consider the limitation of the tax rate in the case of dividends but this will not be sufficient to eliminate the problem of double taxation completely. As the dividends will be subjected to tax once the taxpaying company

earns profit from the operation and will be subjected to tax again when this profit is distributed to the paying company's shareholder in terms of dividend payments. Nevertheless, the measurement on the tax of the dividends of some countries may calculate tax from gross profits by ignoring the expenses which are incurred during the operation. This situation will increase the disparity between the tax base and will lead to having higher costs in generating income to investors.

The research evaluation and findings relating to taxation, suggest that the solution of double taxation can be effectively dealt with when the source country collects tax from foreign income at a tax rate which is lower than the resident country. At times, both the contracting states can agree on reducing the tax rate of the source country, which will reduce the taxpayer's tax burdens from international investment. To minimise the tax burdens for the taxpayer at a suitable point, both the contracting states may require to enter into an agreement so that the residence country grants the credit to its taxpayers on the same amount imposed by the source country - which may or may not follow the source country's tax legislation - regardless of whether the tax rate of the source country will be lower or higher than the tax rate of the resident country. The issue of dividend taxation treatment is a contentious one as different methods can lead to different conclusion as how best to eliminate double taxation and such approaches may have an impact on FDI.

This research has further explored the principle of credit in terms of tax neutrality. The principle was considered using the CEN criteria through which the residence country allows crediting tax collection at a rate exercised by the source country. In a situation when the foreign income is taxed over the tax rate limitation of the residence country for the source country, the residence country taxing right to its residents is normally unacceptable because it looks like the imposing tax from the income of the residence country must depend on the tax on foreign income of the source country. Under such scenarios the complication of calculation and

collection leads to conflict between the states. Thus, this serves as a disruption that disturbs the inflow of FDI and has a negative impact on the host country's strategy to attract foreign investment. Therefore, the residence country's tax on its residents' international investment normally limits the amount that can be credited at the residence country after its income is imposed by the source country at its tax legislation level, as well as under DTT. The foreign income negatively impacted by taxes, referred to as "foreign tax credit limitation" and this method under DTTs is known as the ordinary credit method.

This research also considered the mechanisms to reduce barriers to foreign investment in Thailand through examining the distributive rule. Under this rule, either the residence or the source country distributes income and expenses. The analysis suggests that distributive rules for developing countries such as Thailand are complemented with the internal law and these are also affected by the issue of double taxation in terms of distributing income as well as expenses to either the residence country or the source country. The analysis concluded that it is important to consider the processes used by the states to distribute income or expenses; the method used to carry out distribution has the potential to incur double taxation, thus care must be taken and more so, such issues need to be considered whilst negotiating DTTs and issues relating to the foreign tax credit. Where the foreign income is high, it can lead to high foreign tax credit whilst if the foreign income was low, it can lead to low foreign tax credit.

This empirical research reported within this thesis, suggests that there is a positive relationship between DTT and FDI for the sample selected and tested for the developed countries, developing countries and ASEAN countries as the home country and Thailand as the host country between 1970–2017. The results presented within the body of the thesis have proved that the DTTs have a significant positive effect on the FDI for ASEAN countries and Thailand; especially for developing countries that adopt an exemption method under DTT, for the FDI in Thailand. However, for ASEAN countries and other countries that have not adopted

DTTs with Thailand, these effects can be considered as marginally significant and the flow of FDI from such countries to Thailand is low. Furthermore, the empirical findings also suggest that for countries with DTTs which are applying the exemption method have a stronger positive impact in attracting FDI in comparison with the countries that have DTTs and are applying the credit method with Thailand. Moreover, developing countries with natural resources have strong and positive impacts in attracting FDI. However, the unemployment rate and exchange rates are negatively correlated with the final FDI inflows from bilateral countries to Thailand. All countries with DTTs' have a significant impact in attracting FDI.

These research findings suggest that the presence of DTTs is relevant for potential FDI in Thailand. The findings demonstrate that Thailand has been able to enhance investment from countries that are different in terms of development (developed or developing) to Thailand. The eventual presence of DTTs was statistically significant and the coefficient of this variable was relatively high.

This empirical study used both quantitative and qualitative methods to investigate the relationship between DTTs and FDI suggest that the study also has some limitations that must be considered when trying to conclude which is the best method or approach to be adopted between Thailand and the bilateral countries that may lead to greater FDI into the country. The first limitation is that the main findings of this research were exclusively based on the analysis of an individual country with others. To overcome this limitation, future research should try to examine more countries to analyse relationships. Also, future research should consider how and to what extent the presence of DTTs and other financial tools affected the FDI in the period when they were present or not present, rather than during the whole time period when there were sub-periods with and other without these financial tools. This approach can help to

understand the effectiveness and efficiency of these tools better since they can be analysed individually rather than altogether.

Finally, this study examines the current topics related to the DTTs, which are continuously changing to reflect the developments within international trade and considers their merits or otherwise. The findings of this research provide important recommendations and implications for DTTs, which can be used to solve recurring issues that correspond with DTTs. This study is not only useful for Thailand, but it has its practical usages for bilateral countries and also for other developing countries too. This research suggests that DTTs have shown a strong correlation with the inflow of FDIs from developed, developing and ASEAN economies. More significantly, the economic variables used to test the importance of the relationship support the hypothesis that DTTs positively impact on inwards investment that is often classified as the inflow of FDIs. The findings also show the positive impact of DTTs and methods for eliminating double taxation under DTTs and these lead to an increase in the amount and flow of FDI. In conclusion, the evidence indicates that the exemption method is able to increase FDI far more than the credit method, especially applying exemption method between Thailand and developing countries within ASEAN member. The findings make a strong case for Thailand to renegotiate DTTs with bilateral countries because DTTs lead to a positive impact on FDIs between Thailand and both developed countries and developing countries.

When considering all the factors that can encourage FDI, there are other factors which the Thai government should also consider. Some of these factors are fundamental economic factors such as infrastructure and inflation rates. These may be important factors that draw direct investment from MNEs rather than DTTs. There are already existing policies that have not helped the country to fully achieve its economic objectives. Thus, using policies such as

DTTs with the exemption and the credit methods, provide alternative mechanisms in the list of policies to attract FDI.

7.3 Research Conclusion

Several findings emerged from the review of the literature and the empirical analysis of the data relating to the reasons for encouraging inward investment into developing countries such as Thailand and the approaches used to achieve this objective. This empirical study also demonstrates that there are unintended consequences of using DTTs and other policies to attract FDI. The study used both secondary and primary data. The study participants contained a majority of highly skilled and knowledgeable people, they were able to provide a deeper insight into the issues of DTT negotiations and application. Most participants favourably commented on DTTs for eliminating the incidence of double taxation and suggested it helps to attract FDIs in countries such as Thailand. However, they were also of the opinion that there are other factors such as unemployment rate, exchange rate, natural resource and institution which are of equal importance when examining the relationship using statistical data.

This research has practical applications for the government of Thailand and its bilateral countries; these policies and factors need to be carefully evaluated prior to negotiating DTTs. In particular, when considering the treatment of dividend and taxation. Furthermore, the governments of developing countries such as Thailand must carefully evaluate all the variables and test their sensitivity before negotiating DTTs and selecting the methods to be used to eliminate double taxation, tax rates, tax promotion, and establishment of credible policies to attract foreign investment. This will be highly advantageous for DTTs and the provision of double taxation relief in the case of dividends from the developing countries such as Thailand to others who are interested in attracting FDI. Finally, policy makers also need to consider

additional advantages that can be gained in terms of employment creation, knowledge acquisition and creating conducive environment innovation should also be analysed. DTTs can be a principle for other legal treaties such as Bilateral Investment Treaties (BITs), International Investment Treaties (IIAs), or even the domestic laws of both home countries and host countries for future development or revision.

7.4 Direction for Future Research

The purpose of research is to identify a gap in the literature and build on the existing studies to progress the field forward. Therefore, all studies build on past studies as is the case for this study too. For the qualitative part of the study, given the resources and time the researcher would have liked to have recruited more participants from different states to gain an insight into the views of the host as well as the resident country's companies as to their reasons for investment. Furthermore, it would have been useful to also identify the experiences of the negotiators from the developing as well as the developed countries to gain a deeper insight into the decision-making process.

This study has used several variables to examine relationship between DTTs and FDIs, however, the relationship is much more complex. Therefore, the researcher would have liked to decompose such variables further to reach to the truth. For example, to seek the views of decision makers from MNEs as to what were the factors which they considered to be important to invest in Thailand. However, given access issues and resources and time such an approach was not possible. At the current time, there are very few empirical studies that have carried out research into this topic thus evidence is rather limited as to the impact of the methods and policies used to study the relationship between DTTs and FDIs. Thus, for future research, the researcher would recommend a more thorough and detailed analysis regarding the factors

other than DTTs, affecting FDI. All the DTTs that are agreed upon are not entirely similar, and the researcher would prefer to know which elements in the DTTs are important to remove obstacles and barriers that discourage FDI.

This research is based on recent approach to DTT matters. However, the field of DTTs and FDI is continuously evolving, therefore, it is important to use other proxy variables such as perceptions and trends in behaviours to examine how such factors influence the investment decisions of MNEs and investors over time. However, there are further explorations and studies that need to be conducted to capture additional results through implementing revisions relating to DTTs. The amendments will assist to carry out the changes necessary in DTTs.

This thesis is the only research that has studied Thailand and bilateral countries and their inter relationships with regards to the impact of DTTs and the methods of eliminating international double taxation under DTTs on FDIs. Therefore, further studies that build and expand this field of study will serve to deepen our understanding and provide policy and practical orientated advice for Thailand and the associated bodies to improve operations for DTTs to facilitate improved follow of investment between developing and developed world.

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APENDICES

APENDIX 1:

Samples of panel data used to run regression analysis of econometric model

Table A1.1. Developed country (Japan as sampling country) which invests FDI and has DTT with Thailand

| Years | Countries | lnFDI | DTT | UER | ER | NR | IST |
|-------|-----------|-------|-----|------|------|-------|------|
| 1970 | Japan | 1.15 | 0 | 1 | 0.06 | 13.23 | 0 |
| 1971 | Japan | 1.26 | 0 | 1 | 0.06 | 12.01 | 0 |
| 1972 | Japan | 1.58 | 0 | 1 | 0.07 | 9.97 | 0 |
| 1973 | Japan | 1.62 | 0 | 1 | 0.08 | 11.1 | 0 |
| 1974 | Japan | 1.4 | 0 | 1 | 0.07 | 8.45 | 0 |
| 1975 | Japan | 1.38 | 0 | 1 | 0.07 | 6.78 | 0 |
| 1976 | Japan | 1.65 | 0 | 1 | 0.07 | 6.86 | 0 |
| 1977 | Japan | 1.72 | 0 | 1 | 0.08 | 7.13 | 0 |
| 1978 | Japan | 1.62 | 0 | 0.9 | 0.1 | 7.88 | 0 |
| 1979 | Japan | 1.64 | 0 | 1 | 0.09 | 8.48 | 0 |
| 1980 | Japan | 1.81 | 0 | 0.9 | 0.09 | 8.3 | 0 |
| 1981 | Japan | 1.65 | 0 | 1.3 | 0.1 | 5.73 | 0 |
| 1982 | Japan | 2.03 | 0 | 3.6 | 0.09 | 4.95 | 0 |
| 1983 | Japan | 2.04 | 0 | 4.6 | 0.1 | 5.21 | 0 |
| 1984 | Japan | 1.75 | 0 | 4.4 | 0.1 | 4.76 | 5.5 |
| 1985 | Japan | 2.06 | 0 | 5 | 0.11 | 4.98 | 5.42 |
| 1986 | Japan | 2.11 | 0 | 5.6 | 0.16 | 3.73 | 4.63 |
| 1987 | Japan | 2.76 | 0 | 5.9 | 0.18 | 3.49 | 4.5 |
| 1988 | Japan | 2.86 | 0 | 4.3 | 0.2 | 1 | 5.13 |
| 1989 | Japan | 3.04 | 0 | 3.6 | 0.19 | 2.85 | 5.04 |
| 1990 | Japan | 2.79 | 0 | 2.2 | 0.18 | 2.32 | 5.79 |
| 1991 | Japan | 2.54 | 1 | 2.63 | 0.19 | 2.07 | 5.04 |
| 1992 | Japan | 2.49 | 1 | 1.35 | 0.2 | 2.02 | 5.21 |
| 1993 | Japan | 2.09 | 1 | 1.49 | 0.23 | 1.85 | 5.5 |
| 1994 | Japan | 2.75 | 1 | 1.35 | 0.25 | 1.96 | 5.5 |
| 1995 | Japan | 2.72 | 1 | 1.1 | 0.26 | 2.24 | 5.5 |
| 1996 | Japan | 3.13 | 1 | 1.07 | 0.23 | 2.56 | 5.83 |
| 1997 | Japan | 3.17 | 1 | 0.87 | 0.26 | 2.42 | 6.21 |
| 1998 | Japan | 2.69 | 1 | 3.4 | 0.32 | 1.98 | 5 |
| 1999 | Japan | 2.94 | 1 | 2.97 | 0.33 | 1.94 | 5.29 |
| 2000 | Japan | 3.14 | 1 | 2.39 | 0.37 | 2.48 | 6.83 |
| 2001 | Japan | 2.8 | 1 | 2.6 | 0.37 | 2.23 | 7.06 |
| 2002 | Japan | 2.91 | 1 | 1.82 | 0.34 | 2.41 | 6.75 |
| 2003 | Japan | 3.27 | 1 | 1.54 | 0.36 | 2.72 | 5.79 |
| 2004 | Japan | 3.48 | 1 | 1.51 | 0.37 | 3.04 | 5.88 |
| 2005 | Japan | 3.33 | 1 | 1.35 | 0.36 | 3.29 | 5.5 |
| 2006 | Japan | 3.55 | 1 | 1.22 | 0.33 | 3.82 | 5.5 |
| 2007 | Japan | 3.48 | 1 | 1.18 | 0.29 | 3.61 | 4.79 |
| 2008 | Japan | 3.19 | 1 | 1.18 | 0.32 | 4.18 | 4.98 |
| 2009 | Japan | 3.64 | 1 | 1.04 | 0.37 | 3.43 | 5 |
| 2010 | Japan | 0 | 1 | 0.62 | 0.36 | 3.81 | 5 |
| 2011 | Japan | 3.57 | 1 | 0.66 | 0.38 | 4.64 | 5.25 |
| 2012 | Japan | 4.04 | 1 | 0.58 | 0.39 | 4.15 | 5.5 |
| 2013 | Japan | 3.39 | 1 | 0.49 | 0.31 | 4 | 5.5 |
| 2014 | Japan | 3.48 | 1 | 0.58 | 0.31 | 3.32 | 5.19 |
| 2015 | Japan | 3.52 | 1 | 0.6 | 0.28 | 2.81 | 5 |
| 2016 | Japan | 3.51 | 1 | 0.69 | 0.32 | 2.62 | 5.1 |
| 2017 | Japan | 3.75 | 1 | 0.63 | 0.3 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD (2019), OECD (2019) and Revenue Department of Thailand (2019)

Table A1.2. Developing country (South Korea as sampling country) which invests FDI and has DTT with Thailand

| Years | Countries | lnFDI | DTT | UER | ER | NR | IST |
|-------|-------------|-------|-----|------|------|-------|------|
| 1970 | South Korea | 0 | 0 | 1 | 0.21 | 13.23 | 0 |
| 1971 | South Korea | 0 | 0 | 1 | 0.18 | 12.01 | 0 |
| 1972 | South Korea | 0 | 0 | 1 | 0.17 | 9.97 | 0 |
| 1973 | South Korea | 0 | 0 | 1 | 0.15 | 11.1 | 0 |
| 1974 | South Korea | 0 | 0 | 1 | 0.14 | 8.45 | 0 |
| 1975 | South Korea | 0 | 0 | 1 | 0.11 | 6.78 | 0 |
| 1976 | South Korea | 0 | 0 | 1 | 0.09 | 6.86 | 0 |
| 1977 | South Korea | 0 | 0 | 1 | 0.08 | 7.13 | 0 |
| 1978 | South Korea | 0 | 0 | 0.9 | 0.07 | 7.88 | 0 |
| 1979 | South Korea | 0 | 0 | 1 | 0.06 | 8.48 | 0 |
| 1980 | South Korea | 0 | 0 | 0.9 | 0.05 | 8.3 | 0 |
| 1981 | South Korea | 0 | 0 | 1.3 | 0.04 | 5.73 | 0 |
| 1982 | South Korea | 0 | 0 | 3.6 | 0.04 | 4.95 | 0 |
| 1983 | South Korea | 0 | 0 | 4.6 | 0.04 | 5.21 | 0 |
| 1984 | South Korea | 0 | 0 | 4.4 | 0.04 | 4.76 | 5.5 |
| 1985 | South Korea | 0 | 0 | 5 | 0.04 | 4.98 | 5.42 |
| 1986 | South Korea | 0 | 0 | 5.6 | 0.04 | 3.73 | 4.63 |
| 1987 | South Korea | 1.08 | 0 | 5.9 | 0.04 | 3.49 | 4.5 |
| 1988 | South Korea | 1 | 0 | 4.3 | 0.03 | 1 | 5.13 |
| 1989 | South Korea | 1.31 | 0 | 3.6 | 0.03 | 2.85 | 5.04 |
| 1990 | South Korea | 1.08 | 0 | 2.2 | 0.03 | 2.32 | 5.79 |
| 1991 | South Korea | 1.04 | 0 | 2.63 | 0.03 | 2.07 | 5.04 |
| 1992 | South Korea | 1.16 | 0 | 1.35 | 0.03 | 2.02 | 5.21 |
| 1993 | South Korea | 1.12 | 0 | 1.49 | 0.02 | 1.85 | 5.5 |
| 1994 | South Korea | 1.14 | 0 | 1.35 | 0.02 | 1.96 | 5.5 |
| 1995 | South Korea | 1.4 | 0 | 1.1 | 0.02 | 2.24 | 5.5 |
| 1996 | South Korea | 1.54 | 0 | 1.07 | 0.02 | 2.56 | 5.83 |
| 1997 | South Korea | 1.91 | 0 | 0.87 | 0.02 | 2.42 | 6.21 |
| 1998 | South Korea | 0.87 | 0 | 3.4 | 0.03 | 1.98 | 5 |
| 1999 | South Korea | 0.67 | 0 | 2.97 | 0.03 | 1.94 | 5.29 |
| 2000 | South Korea | 1.41 | 0 | 2.39 | 0.03 | 2.48 | 6.83 |
| 2001 | South Korea | 1.65 | 0 | 2.6 | 0.03 | 2.23 | 7.06 |
| 2002 | South Korea | 1.48 | 0 | 1.82 | 0.03 | 2.41 | 6.75 |
| 2003 | South Korea | 1.6 | 0 | 1.54 | 0.03 | 2.72 | 5.79 |
| 2004 | South Korea | 0 | 0 | 1.51 | 0.02 | 3.04 | 5.88 |
| 2005 | South Korea | 2 | 0 | 1.35 | 0.02 | 3.29 | 5.5 |
| 2006 | South Korea | 1.51 | 0 | 1.22 | 0.02 | 3.82 | 5.5 |
| 2007 | South Korea | 1.94 | 0 | 1.18 | 0.02 | 3.61 | 4.79 |
| 2008 | South Korea | 2.44 | 1 | 1.18 | 0.02 | 4.18 | 4.98 |
| 2009 | South Korea | 2.26 | 1 | 1.04 | 0.02 | 3.43 | 5 |
| 2010 | South Korea | 1.99 | 1 | 0.62 | 0.02 | 3.81 | 5 |
| 2011 | South Korea | 2.12 | 1 | 0.66 | 0.02 | 4.64 | 5.25 |
| 2012 | South Korea | 2.86 | 1 | 0.58 | 0.01 | 4.15 | 5.5 |
| 2013 | South Korea | 2.39 | 1 | 0.49 | 0.01 | 4 | 5.5 |
| 2014 | South Korea | 2.15 | 1 | 0.58 | 0.02 | 3.32 | 5.19 |
| 2015 | South Korea | 1.43 | 1 | 0.6 | 0.02 | 2.81 | 5 |
| 2016 | South Korea | 2.28 | 1 | 0.69 | 0.02 | 2.62 | 5.1 |
| 2017 | South Korea | 2.42 | 1 | 0.63 | 0.02 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD (2019), OECD (2019) and Revenue Department of Thailand (2019)

Table A1.3. Country (Cayman Islands as sampling country) which invests FDI and has no DTT with Thailand

| Years | Countries | InFDI | DTT | UER | ER | NR | IST |
|-------|----------------|-------|-----|------|-------|-------|------|
| 1970 | Cayman Islands | 0 | 0 | 1 | 20.8 | 13.23 | 0 |
| 1971 | Cayman Islands | 0 | 0 | 1 | 20.8 | 12.01 | 0 |
| 1972 | Cayman Islands | 0 | 0 | 1 | 20.8 | 9.97 | 0 |
| 1973 | Cayman Islands | 0 | 0 | 1 | 20.62 | 11.1 | 0 |
| 1974 | Cayman Islands | 0 | 0 | 1 | 20.38 | 8.45 | 0 |
| 1975 | Cayman Islands | 0 | 0 | 1 | 20.38 | 6.78 | 0 |
| 1976 | Cayman Islands | 0 | 0 | 1 | 20.4 | 6.86 | 0 |
| 1977 | Cayman Islands | 0 | 0 | 1 | 20.4 | 7.13 | 0 |
| 1978 | Cayman Islands | 0 | 0 | 0.9 | 20.34 | 7.88 | 0 |
| 1979 | Cayman Islands | 0 | 0 | 1 | 20.42 | 8.48 | 0 |
| 1980 | Cayman Islands | 0 | 0 | 0.9 | 20.48 | 8.3 | 0 |
| 1981 | Cayman Islands | 0 | 0 | 1.3 | 21.82 | 5.73 | 0 |
| 1982 | Cayman Islands | 0 | 0 | 3.6 | 23 | 4.95 | 0 |
| 1983 | Cayman Islands | 0 | 0 | 4.6 | 23 | 5.21 | 0 |
| 1984 | Cayman Islands | 0 | 0 | 4.4 | 23.64 | 4.76 | 5.5 |
| 1985 | Cayman Islands | 0 | 0 | 5 | 27.16 | 4.98 | 5.42 |
| 1986 | Cayman Islands | 0 | 0 | 5.6 | 26.3 | 3.73 | 4.63 |
| 1987 | Cayman Islands | 0 | 0 | 5.9 | 25.72 | 3.49 | 4.5 |
| 1988 | Cayman Islands | 0 | 0 | 4.3 | 25.29 | 1 | 5.13 |
| 1989 | Cayman Islands | 1.54 | 0 | 3.6 | 25.7 | 2.85 | 5.04 |
| 1990 | Cayman Islands | 0 | 0 | 2.2 | 25.59 | 2.32 | 5.79 |
| 1991 | Cayman Islands | 0.49 | 0 | 2.63 | 25.52 | 2.07 | 5.04 |
| 1992 | Cayman Islands | 2.36 | 0 | 1.35 | 25.4 | 2.02 | 5.21 |
| 1993 | Cayman Islands | 0 | 0 | 1.49 | 25.32 | 1.85 | 5.5 |
| 1994 | Cayman Islands | 0 | 0 | 1.35 | 25.15 | 1.96 | 5.5 |
| 1995 | Cayman Islands | 0 | 0 | 1.1 | 24.92 | 2.24 | 5.5 |
| 1996 | Cayman Islands | 0 | 0 | 1.07 | 25.34 | 2.56 | 5.83 |
| 1997 | Cayman Islands | 0 | 0 | 0.87 | 31.36 | 2.42 | 6.21 |
| 1998 | Cayman Islands | 1.02 | 0 | 3.4 | 41.36 | 1.98 | 5 |
| 1999 | Cayman Islands | 0 | 0 | 2.97 | 37.81 | 1.94 | 5.29 |
| 2000 | Cayman Islands | 0 | 0 | 2.39 | 40.11 | 2.48 | 6.83 |
| 2001 | Cayman Islands | 0.79 | 0 | 2.6 | 44.43 | 2.23 | 7.06 |
| 2002 | Cayman Islands | 0 | 0 | 1.82 | 42.96 | 2.41 | 6.75 |
| 2003 | Cayman Islands | 0 | 0 | 1.54 | 41.49 | 2.72 | 5.79 |
| 2004 | Cayman Islands | 0 | 0 | 1.51 | 40.22 | 3.04 | 5.88 |
| 2005 | Cayman Islands | 2.34 | 0 | 1.35 | 40.22 | 3.29 | 5.5 |
| 2006 | Cayman Islands | 2.81 | 0 | 1.22 | 37.88 | 3.82 | 5.5 |
| 2007 | Cayman Islands | 3.12 | 0 | 1.18 | 34.52 | 3.61 | 4.79 |
| 2008 | Cayman Islands | 2.11 | 0 | 1.18 | 33.31 | 4.18 | 4.98 |
| 2009 | Cayman Islands | 2.54 | 0 | 1.04 | 34.29 | 3.43 | 5 |
| 2010 | Cayman Islands | 2.79 | 0 | 0.62 | 31.69 | 3.81 | 5 |
| 2011 | Cayman Islands | 0 | 0 | 0.66 | 30.49 | 4.64 | 5.25 |
| 2012 | Cayman Islands | 2.48 | 0 | 0.58 | 31.08 | 4.15 | 5.5 |
| 2013 | Cayman Islands | 2.91 | 0 | 0.49 | 30.73 | 4 | 5.5 |
| 2014 | Cayman Islands | 1.84 | 0 | 0.58 | 32.48 | 3.32 | 5.19 |
| 2015 | Cayman Islands | 0 | 0 | 0.6 | 34.25 | 2.81 | 5 |
| 2016 | Cayman Islands | 2.37 | 0 | 0.69 | 35.3 | 2.62 | 5.1 |
| 2017 | Cayman Islands | 2.14 | 0 | 0.63 | 33.94 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD (2019), OECD (2019) and Revenue Department of Thailand (2019)

Table A1.4. ASEAN country (Philippines as sampling country) which invests FDI and has DTT with Thailand

| Years | Countries | lnFDI | DTT | UER | ER | NR | IST |
|-------|-------------|-------|-----|------|------|-------|------|
| 1970 | Philippines | 0 | 0 | 1 | 3.52 | 13.23 | 0 |
| 1971 | Philippines | 0 | 0 | 1 | 3.23 | 12.01 | 0 |
| 1972 | Philippines | 0 | 0 | 1 | 3.12 | 9.97 | 0 |
| 1973 | Philippines | 0 | 0 | 1 | 3.05 | 11.1 | 0 |
| 1974 | Philippines | 0 | 0 | 1 | 3 | 8.45 | 0 |
| 1975 | Philippines | 0 | 0 | 1 | 2.81 | 6.78 | 0 |
| 1976 | Philippines | 0 | 0 | 1 | 2.74 | 6.86 | 0 |
| 1977 | Philippines | 0 | 0 | 1 | 2.76 | 7.13 | 0 |
| 1978 | Philippines | 0 | 0 | 0.9 | 2.76 | 7.88 | 0 |
| 1979 | Philippines | 0.06 | 0 | 1 | 2.77 | 8.48 | 0 |
| 1980 | Philippines | 0 | 0 | 0.9 | 2.73 | 8.3 | 0 |
| 1981 | Philippines | 0 | 0 | 1.3 | 2.76 | 5.73 | 0 |
| 1982 | Philippines | 0 | 0 | 3.6 | 2.69 | 4.95 | 0 |
| 1983 | Philippines | 0 | 1 | 4.6 | 2.07 | 5.21 | 0 |
| 1984 | Philippines | 0 | 1 | 4.4 | 1.42 | 4.76 | 5.5 |
| 1985 | Philippines | 0 | 1 | 5 | 1.46 | 4.98 | 5.42 |
| 1986 | Philippines | 0 | 1 | 5.6 | 1.29 | 3.73 | 4.63 |
| 1987 | Philippines | 0 | 1 | 5.9 | 1.25 | 3.49 | 4.5 |
| 1988 | Philippines | 0 | 1 | 4.3 | 1.2 | 1 | 5.13 |
| 1989 | Philippines | 0 | 1 | 3.6 | 1.18 | 2.85 | 5.04 |
| 1990 | Philippines | 0 | 1 | 2.2 | 1.05 | 2.32 | 5.79 |
| 1991 | Philippines | 0.73 | 1 | 2.63 | 0.93 | 2.07 | 5.04 |
| 1992 | Philippines | 0 | 1 | 1.35 | 1 | 2.02 | 5.21 |
| 1993 | Philippines | 0.34 | 1 | 1.49 | 0.93 | 1.85 | 5.5 |
| 1994 | Philippines | 0 | 1 | 1.35 | 0.95 | 1.96 | 5.5 |
| 1995 | Philippines | 0.35 | 1 | 1.1 | 0.97 | 2.24 | 5.5 |
| 1996 | Philippines | 0.89 | 1 | 1.07 | 0.97 | 2.56 | 5.83 |
| 1997 | Philippines | 0.9 | 1 | 0.87 | 1.06 | 2.42 | 6.21 |
| 1998 | Philippines | 0.56 | 1 | 3.4 | 1.01 | 1.98 | 5 |
| 1999 | Philippines | 0 | 1 | 2.97 | 0.97 | 1.94 | 5.29 |
| 2000 | Philippines | 0.49 | 1 | 2.39 | 0.91 | 2.48 | 6.83 |
| 2001 | Philippines | 0 | 1 | 2.6 | 0.87 | 2.23 | 7.06 |
| 2002 | Philippines | 0.83 | 1 | 1.82 | 0.83 | 2.41 | 6.75 |
| 2003 | Philippines | 2.26 | 1 | 1.54 | 0.77 | 2.72 | 5.79 |
| 2004 | Philippines | 2 | 1 | 1.51 | 0.72 | 3.04 | 5.88 |
| 2005 | Philippines | 0 | 1 | 1.35 | 0.73 | 3.29 | 5.5 |
| 2006 | Philippines | 1.27 | 1 | 1.22 | 0.74 | 3.82 | 5.5 |
| 2007 | Philippines | 1.27 | 1 | 1.18 | 0.75 | 3.61 | 4.79 |
| 2008 | Philippines | 1.27 | 1 | 1.18 | 0.75 | 4.18 | 4.98 |
| 2009 | Philippines | 0.96 | 1 | 1.04 | 0.72 | 3.43 | 5 |
| 2010 | Philippines | 0 | 1 | 0.62 | 0.7 | 3.81 | 5 |
| 2011 | Philippines | 0.91 | 1 | 0.66 | 0.7 | 4.64 | 5.25 |
| 2012 | Philippines | 1.76 | 1 | 0.58 | 0.74 | 4.15 | 5.5 |
| 2013 | Philippines | 0 | 1 | 0.49 | 0.72 | 4 | 5.5 |
| 2014 | Philippines | 0.83 | 1 | 0.58 | 0.73 | 3.32 | 5.19 |
| 2015 | Philippines | 1.33 | 1 | 0.6 | 0.75 | 2.81 | 5 |
| 2016 | Philippines | 0 | 1 | 0.69 | 0.74 | 2.62 | 5.1 |
| 2017 | Philippines | 0 | 1 | 0.63 | 0.67 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD (2019), OECD (2019) and Revenue Department of Thailand (2019)

Table A1.5. ASEAN country (Brunei as sampling country) which invests FDI and has no DTT with Thailand

| Years | Countries | lnFDI | DTT | UER | ER | NR | IST |
|-------|-----------|-------|-----|------|-------|-------|------|
| 1970 | Brunei | 0 | 0 | 1 | 6.8 | 13.23 | 0 |
| 1971 | Brunei | 0 | 0 | 1 | 6.82 | 12.01 | 0 |
| 1972 | Brunei | 0 | 0 | 1 | 7.38 | 9.97 | 0 |
| 1973 | Brunei | 0 | 0 | 1 | 8.38 | 11.1 | 0 |
| 1974 | Brunei | 0 | 0 | 1 | 8.35 | 8.45 | 0 |
| 1975 | Brunei | 0 | 0 | 1 | 8.6 | 6.78 | 0 |
| 1976 | Brunei | 0 | 0 | 1 | 8.26 | 6.86 | 0 |
| 1977 | Brunei | 0 | 0 | 1 | 8.36 | 7.13 | 0 |
| 1978 | Brunei | 0 | 0 | 0.9 | 8.96 | 7.88 | 0 |
| 1979 | Brunei | 0 | 0 | 1 | 9.41 | 8.48 | 0 |
| 1980 | Brunei | 0 | 0 | 0.9 | 9.57 | 8.3 | 0 |
| 1981 | Brunei | 0 | 0 | 1.3 | 10.34 | 5.73 | 0 |
| 1982 | Brunei | 0 | 0 | 3.6 | 10.75 | 4.95 | 0 |
| 1983 | Brunei | 0 | 0 | 4.6 | 10.9 | 5.21 | 0 |
| 1984 | Brunei | 0 | 0 | 4.4 | 11.1 | 4.76 | 5.5 |
| 1985 | Brunei | 0 | 0 | 5 | 12.35 | 4.98 | 5.42 |
| 1986 | Brunei | 0 | 0 | 5.6 | 12.06 | 3.73 | 4.63 |
| 1987 | Brunei | 0 | 0 | 5.9 | 12.19 | 3.49 | 4.5 |
| 1988 | Brunei | 0 | 0 | 4.3 | 12.58 | 1 | 5.13 |
| 1989 | Brunei | 0 | 0 | 3.6 | 13.18 | 2.85 | 5.04 |
| 1990 | Brunei | 0 | 0 | 2.2 | 14.14 | 2.32 | 5.79 |
| 1991 | Brunei | 0.49 | 0 | 2.63 | 14.75 | 2.07 | 5.04 |
| 1992 | Brunei | 2.36 | 0 | 1.35 | 15.58 | 2.02 | 5.21 |
| 1993 | Brunei | 0 | 0 | 1.49 | 15.63 | 1.85 | 5.5 |
| 1994 | Brunei | 0.11 | 0 | 1.35 | 16.44 | 1.96 | 5.5 |
| 1995 | Brunei | 0.15 | 0 | 1.1 | 17.55 | 2.24 | 5.5 |
| 1996 | Brunei | 0.18 | 0 | 1.07 | 17.97 | 2.56 | 5.83 |
| 1997 | Brunei | 0 | 0 | 0.87 | 21.19 | 2.42 | 6.21 |
| 1998 | Brunei | 0 | 0 | 3.4 | 24.77 | 1.98 | 5 |
| 1999 | Brunei | 0 | 0 | 2.97 | 22.38 | 1.94 | 5.29 |
| 2000 | Brunei | 0 | 0 | 2.39 | 23.32 | 2.48 | 6.83 |
| 2001 | Brunei | 0 | 0 | 2.6 | 24.82 | 2.23 | 7.06 |
| 2002 | Brunei | 0 | 0 | 1.82 | 24 | 2.41 | 6.75 |
| 2003 | Brunei | 0.32 | 0 | 1.54 | 23.84 | 2.72 | 5.79 |
| 2004 | Brunei | 0.67 | 0 | 1.51 | 23.8 | 3.04 | 5.88 |
| 2005 | Brunei | 0.16 | 0 | 1.35 | 24.23 | 3.29 | 5.5 |
| 2006 | Brunei | 0 | 0 | 1.22 | 23.83 | 3.82 | 5.5 |
| 2007 | Brunei | 0.44 | 0 | 1.18 | 22.86 | 3.61 | 4.79 |
| 2008 | Brunei | 0 | 0 | 1.18 | 23.46 | 4.18 | 4.98 |
| 2009 | Brunei | 0.06 | 0 | 1.04 | 23.65 | 3.43 | 5 |
| 2010 | Brunei | 0.1 | 0 | 0.62 | 23.3 | 3.81 | 5 |
| 2011 | Brunei | 0.01 | 0 | 0.66 | 24.2 | 4.64 | 5.25 |
| 2012 | Brunei | 0.2 | 0 | 0.58 | 24.87 | 4.15 | 5.5 |
| 2013 | Brunei | 0.76 | 0 | 0.49 | 24.58 | 4 | 5.5 |
| 2014 | Brunei | 0.36 | 0 | 0.58 | 25.57 | 3.32 | 5.19 |
| 2015 | Brunei | 0.42 | 0 | 0.6 | 25 | 2.81 | 5 |
| 2016 | Brunei | 0.16 | 0 | 0.69 | 25.58 | 2.62 | 5.1 |
| 2017 | Brunei | 0.43 | 0 | 0.63 | 25.14 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD (2019), OECD (2019) and Revenue Department of Thailand (2019)

Table A1.6. Developing country (Singapore as sampling country) which applies credit method with Thailand

| Years | Countries | lnFDI | DTT | UER | ER | NR | IST |
|-------|-----------|-------|-----|------|-------|-------|------|
| 1970 | Singapore | 1.61 | 0 | 1 | 6.79 | 13.23 | 0 |
| 1971 | Singapore | 1.61 | 0 | 1 | 6.82 | 12.01 | 0 |
| 1972 | Singapore | 1.61 | 0 | 1 | 7.4 | 9.97 | 0 |
| 1973 | Singapore | 1.61 | 0 | 1 | 8.39 | 11.1 | 0 |
| 1974 | Singapore | 1.61 | 0 | 1 | 8.36 | 8.45 | 0 |
| 1975 | Singapore | 1.61 | 0 | 1 | 8.59 | 6.78 | 0 |
| 1976 | Singapore | 1.61 | 1 | 1 | 8.26 | 6.86 | 0 |
| 1977 | Singapore | 1.61 | 1 | 1 | 8.36 | 7.13 | 0 |
| 1978 | Singapore | 1.61 | 1 | 0.9 | 8.94 | 7.88 | 0 |
| 1979 | Singapore | 2.26 | 1 | 1 | 9.39 | 8.48 | 0 |
| 1980 | Singapore | 2.06 | 1 | 0.9 | 9.56 | 8.3 | 0 |
| 1981 | Singapore | 2.07 | 1 | 1.3 | 10.33 | 5.73 | 0 |
| 1982 | Singapore | 2.19 | 1 | 3.6 | 10.75 | 4.95 | 0 |
| 1983 | Singapore | 2.18 | 1 | 4.6 | 10.89 | 5.21 | 0 |
| 1984 | Singapore | 1.61 | 1 | 4.4 | 11.08 | 4.76 | 5.5 |
| 1985 | Singapore | 1.63 | 1 | 5 | 12.34 | 4.98 | 5.42 |
| 1986 | Singapore | 1.63 | 1 | 5.6 | 12.08 | 3.73 | 4.63 |
| 1987 | Singapore | 2.02 | 1 | 5.9 | 12.21 | 3.49 | 4.5 |
| 1988 | Singapore | 2.21 | 1 | 4.3 | 12.57 | 1 | 5.13 |
| 1989 | Singapore | 2.66 | 1 | 3.6 | 13.18 | 2.85 | 5.04 |
| 1990 | Singapore | 3.12 | 1 | 2.2 | 14.12 | 2.32 | 5.79 |
| 1991 | Singapore | 3.31 | 1 | 2.63 | 14.77 | 2.07 | 5.04 |
| 1992 | Singapore | 2.17 | 1 | 1.35 | 15.59 | 2.02 | 5.21 |
| 1993 | Singapore | 2.49 | 1 | 1.49 | 15.67 | 1.85 | 5.5 |
| 1994 | Singapore | 2.54 | 1 | 1.35 | 16.47 | 1.96 | 5.5 |
| 1995 | Singapore | 2.92 | 1 | 1.1 | 17.58 | 2.24 | 5.5 |
| 1996 | Singapore | 2.96 | 1 | 1.07 | 17.97 | 2.56 | 5.83 |
| 1997 | Singapore | 2.99 | 1 | 0.87 | 21.12 | 2.42 | 6.21 |
| 1998 | Singapore | 3.07 | 1 | 3.4 | 24.71 | 1.98 | 5 |
| 1999 | Singapore | 3.18 | 1 | 2.97 | 22.31 | 1.94 | 5.29 |
| 2000 | Singapore | 3.55 | 1 | 2.39 | 23.27 | 2.48 | 6.83 |
| 2001 | Singapore | 3.6 | 1 | 2.6 | 24.8 | 2.23 | 7.06 |
| 2002 | Singapore | 3.59 | 1 | 1.82 | 23.99 | 2.41 | 6.75 |
| 2003 | Singapore | 3.49 | 1 | 1.54 | 23.81 | 2.72 | 5.79 |
| 2004 | Singapore | 3.26 | 1 | 1.51 | 23.8 | 3.04 | 5.88 |
| 2005 | Singapore | 3.41 | 1 | 1.35 | 24.16 | 3.29 | 5.5 |
| 2006 | Singapore | 3.28 | 1 | 1.22 | 23.84 | 3.82 | 5.5 |
| 2007 | Singapore | 1.31 | 1 | 1.18 | 22.9 | 3.61 | 4.79 |
| 2008 | Singapore | 3.26 | 1 | 1.18 | 23.54 | 4.18 | 4.98 |
| 2009 | Singapore | 3.27 | 1 | 1.04 | 23.57 | 3.43 | 5 |
| 2010 | Singapore | 3.01 | 1 | 0.62 | 23.24 | 3.81 | 5 |
| 2011 | Singapore | 0 | 1 | 0.66 | 24.24 | 4.64 | 5.25 |
| 2012 | Singapore | 0 | 1 | 0.58 | 24.87 | 4.15 | 5.5 |
| 2013 | Singapore | 0 | 1 | 0.49 | 24.56 | 4 | 5.5 |
| 2014 | Singapore | 2.67 | 1 | 0.58 | 25.63 | 3.32 | 5.19 |
| 2015 | Singapore | 3.28 | 1 | 0.6 | 24.91 | 2.81 | 5 |
| 2016 | Singapore | 3.24 | 1 | 0.69 | 25.55 | 2.62 | 5.1 |
| 2017 | Singapore | 3.24 | 1 | 0.63 | 24.58 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD (2019), OECD (2019) and Revenue Department of Thailand (2019)

Table A1.7. Developed country (Great Britain as sampling country) which applies credit method with Thailand

| Years | Countries | lnFDI | DTT | UER | ER | NR | IST |
|-------|---------------|-------|-----|------|-------|-------|------|
| 1970 | Great Britain | 0.85 | 0 | 1 | 49.92 | 13.23 | 0 |
| 1971 | Great Britain | 0.85 | 0 | 1 | 50.62 | 12.01 | 0 |
| 1972 | Great Britain | 0.85 | 0 | 1 | 51.95 | 9.97 | 0 |
| 1973 | Great Britain | 0.85 | 0 | 1 | 50.52 | 11.1 | 0 |
| 1974 | Great Britain | 0.85 | 0 | 1 | 47.63 | 8.45 | 0 |
| 1975 | Great Britain | 0.85 | 0 | 1 | 45.08 | 6.78 | 0 |
| 1976 | Great Britain | 0.85 | 0 | 1 | 36.66 | 6.86 | 0 |
| 1977 | Great Britain | 0.85 | 0 | 1 | 35.59 | 7.13 | 0 |
| 1978 | Great Britain | 0.85 | 0 | 0.9 | 39 | 7.88 | 0 |
| 1979 | Great Britain | 0.85 | 0 | 1 | 43.24 | 8.48 | 0 |
| 1980 | Great Britain | 0.72 | 0 | 0.9 | 47.59 | 8.3 | 0 |
| 1981 | Great Britain | 1.28 | 1 | 1.3 | 43.85 | 5.73 | 0 |
| 1982 | Great Britain | 0.91 | 1 | 3.6 | 40.18 | 4.95 | 0 |
| 1983 | Great Britain | 1.55 | 1 | 4.6 | 34.86 | 5.21 | 0 |
| 1984 | Great Britain | 1.17 | 1 | 4.4 | 31.44 | 4.76 | 5.5 |
| 1985 | Great Britain | 0.67 | 1 | 5 | 34.85 | 4.98 | 5.42 |
| 1986 | Great Britain | 1.04 | 1 | 5.6 | 38.55 | 3.73 | 4.63 |
| 1987 | Great Britain | 1.11 | 1 | 5.9 | 42.04 | 3.49 | 4.5 |
| 1988 | Great Britain | 1.56 | 1 | 4.3 | 44.99 | 1 | 5.13 |
| 1989 | Great Britain | 1.57 | 1 | 3.6 | 42.05 | 2.85 | 5.04 |
| 1990 | Great Britain | 1.89 | 1 | 2.2 | 45.43 | 2.32 | 5.79 |
| 1991 | Great Britain | 1.59 | 1 | 2.63 | 45 | 2.07 | 5.04 |
| 1992 | Great Britain | 2.17 | 1 | 1.35 | 44.58 | 2.02 | 5.21 |
| 1993 | Great Britain | 2.21 | 1 | 1.49 | 37.97 | 1.85 | 5.5 |
| 1994 | Great Britain | 1.78 | 1 | 1.35 | 38.49 | 1.96 | 5.5 |
| 1995 | Great Britain | 1.8 | 1 | 1.1 | 39.32 | 2.24 | 5.5 |
| 1996 | Great Britain | 2.04 | 1 | 1.07 | 39.54 | 2.56 | 5.83 |
| 1997 | Great Britain | 2.32 | 1 | 0.87 | 51.35 | 2.42 | 6.21 |
| 1998 | Great Britain | 2.43 | 1 | 3.4 | 68.5 | 1.98 | 5 |
| 1999 | Great Britain | 2.31 | 1 | 2.97 | 61.18 | 1.94 | 5.29 |
| 2000 | Great Britain | 2.64 | 1 | 2.39 | 60.69 | 2.48 | 6.83 |
| 2001 | Great Britain | 2.64 | 1 | 2.6 | 63.96 | 2.23 | 7.06 |
| 2002 | Great Britain | 2.49 | 1 | 1.82 | 64.39 | 2.41 | 6.75 |
| 2003 | Great Britain | 2.24 | 1 | 1.54 | 67.73 | 2.72 | 5.79 |
| 2004 | Great Britain | 2.54 | 1 | 1.51 | 73.64 | 3.04 | 5.88 |
| 2005 | Great Britain | 2.63 | 1 | 1.35 | 73.13 | 3.29 | 5.5 |
| 2006 | Great Britain | 2.65 | 1 | 1.22 | 69.7 | 3.82 | 5.5 |
| 2007 | Great Britain | 2.93 | 1 | 1.18 | 69.07 | 3.61 | 4.79 |
| 2008 | Great Britain | 2.74 | 1 | 1.18 | 61.24 | 4.18 | 4.98 |
| 2009 | Great Britain | 2.14 | 1 | 1.04 | 53.41 | 3.43 | 5 |
| 2010 | Great Britain | 0 | 1 | 0.62 | 48.96 | 3.81 | 5 |
| 2011 | Great Britain | 0 | 1 | 0.66 | 48.85 | 4.64 | 5.25 |
| 2012 | Great Britain | 1.23 | 1 | 0.58 | 49.1 | 4.15 | 5.5 |
| 2013 | Great Britain | 2.8 | 1 | 0.49 | 48.03 | 4 | 5.5 |
| 2014 | Great Britain | 1.32 | 1 | 0.58 | 53.44 | 3.32 | 5.19 |
| 2015 | Great Britain | 1.94 | 1 | 0.6 | 52.32 | 2.81 | 5 |
| 2016 | Great Britain | 0 | 1 | 0.69 | 47.66 | 2.62 | 5.1 |
| 2017 | Great Britain | 2.41 | 1 | 0.63 | 43.68 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD (2019), OECD (2019) and Revenue Department of Thailand (2019)

Table A1.8. Developing country (Taiwan as sampling country) which applies exemption method with Thailand

| Years | Countries | lnFDI | DTT | UER | ER | NR | IST |
|-------|-----------|-------|-----|------|------|-------|------|
| 1970 | Taiwan | 1.61 | 0 | 1 | 0.52 | 13.23 | 0 |
| 1971 | Taiwan | 1.61 | 0 | 1 | 0.52 | 12.01 | 0 |
| 1972 | Taiwan | 1.61 | 0 | 1 | 0.52 | 9.97 | 0 |
| 1973 | Taiwan | 1.61 | 0 | 1 | 0.54 | 11.1 | 0 |
| 1974 | Taiwan | 1.61 | 0 | 1 | 0.54 | 8.45 | 0 |
| 1975 | Taiwan | 1.61 | 0 | 1 | 0.54 | 6.78 | 0 |
| 1976 | Taiwan | 1.61 | 0 | 1 | 0.54 | 6.86 | 0 |
| 1977 | Taiwan | 1.61 | 0 | 1 | 0.54 | 7.13 | 0 |
| 1978 | Taiwan | 1.61 | 0 | 0.9 | 0.55 | 7.88 | 0 |
| 1979 | Taiwan | 1.61 | 0 | 1 | 0.57 | 8.48 | 0 |
| 1980 | Taiwan | 1.61 | 0 | 0.9 | 0.57 | 8.3 | 0 |
| 1981 | Taiwan | 1.61 | 0 | 1.3 | 0.59 | 5.73 | 0 |
| 1982 | Taiwan | 1.61 | 0 | 3.6 | 0.59 | 4.95 | 0 |
| 1983 | Taiwan | 1.61 | 0 | 4.6 | 0.57 | 5.21 | 0 |
| 1984 | Taiwan | 1.61 | 0 | 4.4 | 0.6 | 4.76 | 5.5 |
| 1985 | Taiwan | 1.61 | 0 | 5 | 0.68 | 4.98 | 5.42 |
| 1986 | Taiwan | 1.61 | 0 | 5.6 | 0.69 | 3.73 | 4.63 |
| 1987 | Taiwan | 1.61 | 0 | 5.9 | 0.81 | 3.49 | 4.5 |
| 1988 | Taiwan | 1.61 | 0 | 4.3 | 0.88 | 1 | 5.13 |
| 1989 | Taiwan | 1.61 | 0 | 3.6 | 0.97 | 2.85 | 5.04 |
| 1990 | Taiwan | 1.61 | 0 | 2.2 | 0.95 | 2.32 | 5.79 |
| 1991 | Taiwan | 1.61 | 0 | 2.63 | 0.95 | 2.07 | 5.04 |
| 1992 | Taiwan | 1.61 | 0 | 1.35 | 1.01 | 2.02 | 5.21 |
| 1993 | Taiwan | 1.61 | 0 | 1.49 | 0.96 | 1.85 | 5.5 |
| 1994 | Taiwan | 1.61 | 0 | 1.35 | 0.95 | 1.96 | 5.5 |
| 1995 | Taiwan | 2.14 | 0 | 1.1 | 0.94 | 2.24 | 5.5 |
| 1996 | Taiwan | 2.12 | 0 | 1.07 | 0.92 | 2.56 | 5.83 |
| 1997 | Taiwan | 2.03 | 0 | 0.87 | 1.09 | 2.42 | 6.21 |
| 1998 | Taiwan | 2.09 | 0 | 3.4 | 1.24 | 1.98 | 5 |
| 1999 | Taiwan | 2.2 | 0 | 2.97 | 1.17 | 1.94 | 5.29 |
| 2000 | Taiwan | 1.76 | 0 | 2.39 | 1.28 | 2.48 | 6.83 |
| 2001 | Taiwan | 1.86 | 0 | 2.6 | 1.31 | 2.23 | 7.06 |
| 2002 | Taiwan | 1.9 | 0 | 1.82 | 1.24 | 2.41 | 6.75 |
| 2003 | Taiwan | 2.06 | 0 | 1.54 | 1.21 | 2.72 | 5.79 |
| 2004 | Taiwan | 1.55 | 0 | 1.51 | 1.2 | 3.04 | 5.88 |
| 2005 | Taiwan | 0 | 0 | 1.35 | 1.25 | 3.29 | 5.5 |
| 2006 | Taiwan | 0 | 0 | 1.22 | 1.16 | 3.82 | 5.5 |
| 2007 | Taiwan | 0 | 0 | 1.18 | 1.05 | 3.61 | 4.79 |
| 2008 | Taiwan | 2.55 | 0 | 1.18 | 1.06 | 4.18 | 4.98 |
| 2009 | Taiwan | 1.97 | 0 | 1.04 | 1.04 | 3.43 | 5 |
| 2010 | Taiwan | 0 | 0 | 0.62 | 1 | 3.81 | 5 |
| 2011 | Taiwan | 2.19 | 0 | 0.66 | 1.04 | 4.64 | 5.25 |
| 2012 | Taiwan | 2.3 | 1 | 0.58 | 1.05 | 4.15 | 5.5 |
| 2013 | Taiwan | 0 | 1 | 0.49 | 1.04 | 4 | 5.5 |
| 2014 | Taiwan | 2.07 | 1 | 0.58 | 1.07 | 3.32 | 5.19 |
| 2015 | Taiwan | 2.27 | 1 | 0.6 | 1.08 | 2.81 | 5 |
| 2016 | Taiwan | 2.86 | 1 | 0.69 | 1.09 | 2.62 | 5.1 |
| 2017 | Taiwan | 2.1 | 1 | 0.63 | 1.12 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD (2019), OECD (2019) and Revenue Department of Thailand (2019)

Table A1.9. Developed country (Sweden as sampling country) which applies exemption method with Thailand

| Years | Countries | lnFDI | DTT | UER | ER | NR | IST |
|-------|-----------|-------|-----|------|------|-------|------|
| 1970 | Sweden | 0 | 0 | 1 | 4.02 | 13.23 | 0 |
| 1971 | Sweden | 0 | 0 | 1 | 4.06 | 12.01 | 0 |
| 1972 | Sweden | 0 | 0 | 1 | 4.37 | 9.97 | 0 |
| 1973 | Sweden | 0 | 0 | 1 | 4.72 | 11.1 | 0 |
| 1974 | Sweden | 0 | 0 | 1 | 4.59 | 8.45 | 0 |
| 1975 | Sweden | 0 | 0 | 1 | 4.91 | 6.78 | 0 |
| 1976 | Sweden | 0 | 0 | 1 | 4.68 | 6.86 | 0 |
| 1977 | Sweden | 0 | 0 | 1 | 4.55 | 7.13 | 0 |
| 1978 | Sweden | 0 | 0 | 0.9 | 4.5 | 7.88 | 0 |
| 1979 | Sweden | 0.16 | 0 | 1 | 4.76 | 8.48 | 0 |
| 1980 | Sweden | 0 | 0 | 0.9 | 4.84 | 8.3 | 0 |
| 1981 | Sweden | 0.39 | 0 | 1.3 | 4.31 | 5.73 | 0 |
| 1982 | Sweden | 0 | 0 | 3.6 | 3.66 | 4.95 | 0 |
| 1983 | Sweden | 0.54 | 0 | 4.6 | 3 | 5.21 | 0 |
| 1984 | Sweden | 0.38 | 0 | 4.4 | 2.86 | 4.76 | 5.5 |
| 1985 | Sweden | 0.5 | 0 | 5 | 3.16 | 4.98 | 5.42 |
| 1986 | Sweden | 0.36 | 0 | 5.6 | 3.69 | 3.73 | 4.63 |
| 1987 | Sweden | 0.15 | 0 | 5.9 | 4.06 | 3.49 | 4.5 |
| 1988 | Sweden | 0.95 | 0 | 4.3 | 4.13 | 1 | 5.13 |
| 1989 | Sweden | 0.56 | 0 | 3.6 | 3.99 | 2.85 | 5.04 |
| 1990 | Sweden | 0.89 | 1 | 2.2 | 4.32 | 2.32 | 5.79 |
| 1991 | Sweden | 1.16 | 1 | 2.63 | 4.22 | 2.07 | 5.04 |
| 1992 | Sweden | 0.47 | 1 | 1.35 | 4.36 | 2.02 | 5.21 |
| 1993 | Sweden | 0.76 | 1 | 1.49 | 3.25 | 1.85 | 5.5 |
| 1994 | Sweden | 1.29 | 1 | 1.35 | 3.26 | 1.96 | 5.5 |
| 1995 | Sweden | 1.01 | 1 | 1.1 | 3.49 | 2.24 | 5.5 |
| 1996 | Sweden | 1.47 | 1 | 1.07 | 3.78 | 2.56 | 5.83 |
| 1997 | Sweden | 1.21 | 1 | 0.87 | 4.11 | 2.42 | 6.21 |
| 1998 | Sweden | 0.98 | 1 | 3.4 | 5.2 | 1.98 | 5 |
| 1999 | Sweden | 1.79 | 1 | 2.97 | 4.58 | 1.94 | 5.29 |
| 2000 | Sweden | 2.03 | 1 | 2.39 | 4.38 | 2.48 | 6.83 |
| 2001 | Sweden | 1.44 | 1 | 2.6 | 4.3 | 2.23 | 7.06 |
| 2002 | Sweden | 1.61 | 1 | 1.82 | 4.41 | 2.41 | 6.75 |
| 2003 | Sweden | 1.75 | 1 | 1.54 | 5.13 | 2.72 | 5.79 |
| 2004 | Sweden | 0.94 | 1 | 1.51 | 5.47 | 3.04 | 5.88 |
| 2005 | Sweden | 1.78 | 1 | 1.35 | 5.38 | 3.29 | 5.5 |
| 2006 | Sweden | 1.94 | 1 | 1.22 | 5.13 | 3.82 | 5.5 |
| 2007 | Sweden | 1.87 | 1 | 1.18 | 5.11 | 3.61 | 4.79 |
| 2008 | Sweden | 1.93 | 1 | 1.18 | 5.05 | 4.18 | 4.98 |
| 2009 | Sweden | 1.61 | 1 | 1.04 | 4.48 | 3.43 | 5 |
| 2010 | Sweden | 1.94 | 1 | 0.62 | 4.4 | 3.81 | 5 |
| 2011 | Sweden | 1.23 | 1 | 0.66 | 4.7 | 4.64 | 5.25 |
| 2012 | Sweden | 0 | 1 | 0.58 | 4.59 | 4.15 | 5.5 |
| 2013 | Sweden | 1.91 | 1 | 0.49 | 4.72 | 4 | 5.5 |
| 2014 | Sweden | 0 | 1 | 0.58 | 4.73 | 3.32 | 5.19 |
| 2015 | Sweden | 0 | 1 | 0.6 | 4.06 | 2.81 | 5 |
| 2016 | Sweden | 1.85 | 1 | 0.69 | 4.12 | 2.62 | 5.1 |
| 2017 | Sweden | 2.14 | 1 | 0.63 | 3.97 | 1 | 5.15 |

Source: World Development Indicators (2019), Bank of Thailand (2019), UNCTAD

(2019), OECD (2019) and Revenue Department of Thailand (201

APPENDIX 2:

Research Questionnaire Questions

Questionnaire for Research

Research Topic: Eliminate double taxation and develop double taxation treaties between Thailand and bilateral countries

By: Miss Natcha Saramas, Ph.D. Candidate in Accounting, Finance and Operations Management, Anglia Ruskin University, United Kingdom

Contact: Natcha.saramas@pgr.anglia.ac.uk, +66945937968, +447473562065

Objectives of the Research

- To study the effect of DTTs on the inflows of FDI from bilateral countries to Thailand
- To define the methods of mitigating international double taxation under DTTs in the case of dividend payment under the Credit Method and Exemption Method and study the effect of these methods in mitigating international double taxation that may affect the inflows of FDI from bilateral countries to Thailand
- To evaluate the different methods concluded using the DTTs from, (a) South to South, (b) North to South and (c) ASEAN countries to Thailand, given the different impacts on the inflows of FDI to Thailand
- To investigate existing DTTs and the clauses, which are a deterrent for MNEs who may bring FDI into Thailand and to make recommendations on TIRS to the Revenue Department of Thailand to amend the relevant provisions in DTTs, especially, in the section on dividend payments under the article of Double Taxation Relief

The questionnaire is divided into 3 section as following;

Part 1 General information regarding to the status of the respondents

Part 2 Opinions about the impacts from international tax issues

Part 3 Trends of research results

Part 1

General information about the status of respondents (Please mark ✓)

What is the type of your organisation?

___ Revenue Department/Provincial Revenue

___ Ministry of Finance/Provincial Treasury Office

___ Law Firm

___ Accounting Office

___ Others: _____

Where is place of your work base? (name of country) _____

Name:

First name: _____

Surname: _____

Position in Organisation Please specify:

Gender

___ Male

___ Female

___ Others

Age

___ 20-25 years

___ 26-30 years

___ 31-35 years

___ 36-40 years

___ over 40 years

Education Level

____ Under Bachelor degree ____ Bachelor degree

____ Master degree ____ Doctoral Degree

Level of understanding how Double Taxation Treaty (DTT) work

____ Excellent ____ Good ____ Fair ____ Poor

Length of working experience

____ Less than 5 years ____ 5-10 years ____ Over 10 years

Part 2

Opinions about the impact of international double taxation and Double Taxation

Treaties (Please mark√, only one per answer)

1= I strongly disagree, 2=I somewhat disagree, 3=Normal, 4=I somewhat agree

5=I strongly agree

| Subject Matter | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 1.Double taxation is a barrier to international business transactions | | | | | |
| 2. Double Taxation may cause delay to investment in Thailand | | | | | |
| 3. Double taxation makes FDI inflow into Thailand less attractive | | | | | |
| 4. Double taxation makes Thailand less competitive than rival countries | | | | | |
| 5. Double taxation can undermine Thailand's long-term economic growth | | | | | |
| 6. Having DTT can help foreign direct investors to predict the status of the economic condition of Thailand so if there is an investment, the investment will be fair to these investors. | | | | | |
| 7. DTT provides protect for foreign investors in the matter of double tax relief in the case of dividends | | | | | |
| 8. DTT between Thailand and developing countries attracts direct investment to Thailand, rather than concluding DTT between Thailand and developed countries | | | | | |
| 9. If improvements are made to increase efficiency of DTT, it will help in attracting more MNEs to make investments in Thailand | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| 10. The agreement on concluding DTT with bilateral countries of Thailand is worthwhile, although the cost is relatively high. | | | | | |
| 11. Countries with DTT will be able to attract more FDI than countries without DTT | | | | | |
| 12. Increasing DTTs between Thailand and other countries will encourage FDI flows into Thailand | | | | | |
| 13. The ineffectiveness of DTT will be an obstacle to FDI | | | | | |
| 14. DTTs between Thailand and the bilateral countries are fair and transparent | | | | | |
| 15. DTTs between Thailand and the bilateral countries give the taxpayer appropriate rights | | | | | |
| 16. DTT has greatly helped to alleviate double taxation problems in Thailand | | | | | |
| 17. The tax rates in the case of dividends under the DTTs of Thailand made with the bilateral countries are at an appropriate price. (Current tax rate is 10%-25%) | | | | | |
| 18. The tax rates applied to dividends under DTTs have an impact on FDI | | | | | |

Part 3

Trends of research results (Please mark√, only one per answer)

| Subject Matter |
|---|
| 19. In your opinion, what are the main reasons for having DTT? |
| <input type="checkbox"/> Attracting FDI |
| <input type="checkbox"/> Preventing tax evasion |
| <input type="checkbox"/> International exchange of information |
| <input type="checkbox"/> Eliminating Double Taxation |
| 20. In your opinion, can DTT lead to an increase in FDI? |
| <input type="checkbox"/> Positive effect |
| <input type="checkbox"/> Negative effect |
| <input type="checkbox"/> No effect |
| 21. In your opinion, do DTT methods help to eliminate double taxation and positively affect FDI inflows to Thailand? |
| <input type="checkbox"/> Positive effect |
| <input type="checkbox"/> Negative effect |
| <input type="checkbox"/> No effect |
| 22. Which of the following methods do you think is the best to encourage FDI inflows to Thailand? |
| <input type="checkbox"/> Credit method |
| <input type="checkbox"/> Exemption method |
| <input type="checkbox"/> Both method are equal |
| 23. Which of the following methods used under DTT will have a greater influence on FDI inflows into Thailand? |
| <input type="checkbox"/> Developing Countries |
| <input type="checkbox"/> Developed Countries |
| <input type="checkbox"/> ASEAN |
| <input type="checkbox"/> Others, please specify; |

If you have opinions and other suggestions regarding to the double tax issue, the double tax treaty and how to eliminate double taxation, please specify;

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APENDIX 3:

Interview Questions

1. Do you think DTTs can help to increase FDI flows into Thailand?

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2. Do you think the methods of eliminating double taxation under DTTs help to attract FDI from bilateral countries into Thailand?

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3. Do you think that Thailand having a Double Tax Treaty with developing countries or developed countries or ASEAN countries, will be able to attract more Foreign Direct Investment into Thailand? Why?

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4. Do you think Thailand should have the amendment on eliminating double taxation in the case of dividend under DTT? If have, how?

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5. Do you have any recommendations for the issue of eliminating double taxation under DTT in the case of dividend?

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Thank you for your cooperation in answering the questions