

Bilateral Tax Treaty and Taiwan's FDI Activity

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Preliminary Draft

Abstract

Bilateral tax treaties, an important method of international tax cooperation, have recently drawn more attentions. Recent literature began to study the impact of tax treaty on FDI. Most theoretical work has begun to assume the tax treaty promotes FDI. However, previous empirical studies provide little evidence to support that bilateral tax treaties increase FDI activity in USA and other developed countries. Unlike most countries in the world, signing bilateral tax treaty is also a possible way of increasing international recognitions for Taiwan. Unfortunately, Taiwan has not successfully signed tax treaties with major economies in the world. This paper discusses the pattern of Taiwan's tax treaty formation. We find that the Taiwan was not pursuing a strategy of having tax treaties with countries that had the largest FDI activity with the Taiwan. In addition, by simply observing the FDI records, we do not find strong evidence for that bilateral tax treaty promotes FDI activity in Taiwan. An econometric analysis will be done in order to correctly measure the impact of tax treaty on Taiwan's FDI later.

Keywords: Bilateral Tax Treaty, Double Taxation, Tax Evasion, FDI

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1. Introduction

Bilateral tax treaties¹, an important method of international tax cooperation, have recently drawn more attentions. The primary goals of a tax treaty are to reduce problems of both double taxation and tax evasion. Moreover, tax treaties can be used to coordinate tax definitions and jurisdictions across countries (Davies, 2004). In general, most tax treaties follow the recommendations of OECD model² or UN model³ tax agreements. The earliest version of the UN model created in 1980 to a large extent followed the 1977's OECD model, but both still have significant variations in tax definitions⁴. The variation led the UN to revise its model treaty in order to be closer to OECD's model treaty, which has become the most popular model agreement for both members and non-members such as Taiwan.

There currently exist thousands bilateral tax treaties worldwide. The number of treaties has been steadily rising. Table 1 summarizes the numbers of treaties major economies of the world have already signed up to the year 2007. Both France and United Kingdom are top two countries following by Germany, Canada, Belgium, Switzerland, and Netherlands. Nordic European countries such as Sweden, Norway, and Denmark have also concluded a significant number of tax treaties. Surprisingly, two biggest economies in the world, USA and Japan, do not sign as many treaties as what we expected. The U.S. started its earliest tax treaties in the 1930s and has so far signed treaties with 64 countries.⁵ Similarly, Japan has only concluded 46 income tax treaties.⁶ Asian NIEs including Korea, Singapore and Hong Kong have relatively smaller numbers of treaties. For instance, Korea only concluded 26 income tax

¹ Davies (2004) mention these tax treaties go by several names including double taxation agreements, capital tax treaties, and treaties covering the taxation of investment and income.

² OECD published the 1977 "Model Double Taxation Convention on Income and on Capital" by revising its 1963's draft. The model has been revised in 1992, 1994, 1995, and 1997.

³ OECD model was more appropriate for negotiations between developed countries, but less suitable for developing countries. In 1968, the Ad Hoc Group of Experts on Tax Treaties between developed and developing countries were created by the UN Secretary-General. The Expert Group published its first UN "Model Double Taxation Convention between Developed and Developing Countries" in 1980.

⁴ For instance, regarding the definition of "permanent establishment", the OECD model treaty suggests a 12-month duration criterion whereas the UN model treaty recommended a 6-month guideline.

⁵ The U.S. has experienced three major waves of tax treaty negotiations. The first wave of post-WWII saw the U.S. complete treaties with its major economic partners such as western European countries, Japan, and Canada. The second wave of the 1980s focused on a group of developing countries including both China and India. The recent wave, beginning in the early 90s, added many of the former Soviet Union. (Blonigen and Davies, 2004)

⁶ Japan has mainly signed treaties with Asia Pacific countries and European countries. Asia Pacific countries include: Australia, Bangladesh, Canada, China, Fiji, India, Indonesia, Korea, Malaysia, Mexico, New Zealand, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam, Russia, and United States. European countries have Austria, Belgium, Brazil, Bulgaria, Czech, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Romania, Slovak, Spain, Sweden, Switzerland, Turkey, and United Kingdom. The rest of treaties include: Israel, Egypt, South Africa, and Zambia.

treaties⁷, whereas Singapore has 54 treaties. Moreover, Hong Kong has only signed three treaties with China, Belgium, and Thailand. In contrast to little Asian tigers, those big states including China, India, and Russia began their treaty negotiations relatively late, but they have quickly caught up with other major economies. For instance, China began to negotiate its first bilateral tax treaty with Japan in 1981, but it has quickly signed bilateral tax treaties with more than 80 countries⁸ for avoiding double taxation and preventing tax evasion. India and Russia also have 75 and 69 treaties respectively.

Based on the observations from the previous paragraph, we find the tax treaty seems more popular in Western and Nordic Europe than in the rest of the world. Moreover, large-size countries in the developing world tend to sign more tax treaties. Several remarks from Hines and Willard (1992) can be possibly used to explain this phenomenon. By analyzing the pattern of tax treaty formation, they find a country's history matters on the formation of tax treaty because the large number of treaties sharing colonial ties. This may explain why France, UK, Netherlands, and Spain have relatively more tax treaties. Moreover, they conclude the country size has a positive impact on the number of treaties a country has. This can be evidenced by the numbers of treaties those big developing countries such as China and India have had. Lastly, they addressed that government policies play important roles on signing bilateral tax treaties. A country with low inflation and high tax policies tend to have more treaties. This argument is consistent to our findings that Western and Nordic European countries with high taxes have signed more treaties.

Compared to major economies in the world, the diplomatically isolated island state Taiwan had not been successful in signing bilateral tax treaties with major partners. Taiwan signed its first ever tax treaty with Singapore in 1981. Unfortunately, it took another 14 years to sign the second treaty with Indonesia in 1995. According to the Taiwan's Ministry of Finance, by the year 2005, Taiwan has effectively concluded 16 comprehensive income tax treaties and 12 international transportation income tax

⁷ Asia Pacific countries include: Australia, Brazil, Canada, Chile, Japan, Kazakhstan, Malaysia, Malta, Mexico, Myanmar, Nepal, New Zealand, Philippines, Singapore, Sri Lanka, Thailand, and United States. Others include: Belgium, Croatia, Egypt, France, Germany, Ireland, Israel, Morocco, Norway, Sweden, Switzerland, and Turkey.

⁸ They are Armenia, Austria, Australia, Belarus, Belgium, Brazil, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, India, Israel, Italy, Jamaica, Japan, Korea, Kuwait, Latvia, Lithuania, Luxembourg, Macedonia, Malaysia, Malta, Mauritius, Mongolia, Netherlands, New Zealand, Norway, Pakistan, Papua New Guinea, Poland, Romania, Russia, Singapore, Slovenia, Spain, Sudan, Sweden, Switzerland, Thailand, Turkey, Ukraine, United Arab Emirates, UK, USA, Uzbekistan, Vietnam, former Yugoslavia, etc.

agreements⁹. Taiwan has signed international transportation income tax agreements with major trading and investment partners such as USA, Japan, EU, and Canada, but it is still required a lot of efforts to seek the opportunities of signing comprehensive income tax treaties with these major economies. Moreover, due to political reasons, Taiwan is almost impossible to sign a formal tax treaty with China, which has close trade and investment relationships with Taiwan.

Some believe that tax treaty not only can avoid the double taxation and tax evasion problems, but also can promote the foreign direct investment (FDI) through a lower effective tax rate. They believe the reduction on maximum allowable withholding taxes on remitted income based on the tax treaty would lead to a lower effective tax rate. A large empirical literature summarized by Gordon and Hines (2002) and de Mooij and Ederveen (2003) links lower effective taxes to greater FDI.

As a matter of fact, the dramatic increase in foreign direct investment (FDI) has been a global trend. According to both EIU and CII (Columbia Program on International Investment), the global FDI increased by 22% between 2005 and 2006. The top ten countries in the global ranking of FDI in the next five years (2006-2010) are as follows: USA, UK, China, France, Netherlands, Germany, Canada, Belgium, Hong Kong, and Spain. Other major Asian countries are ranked as follows: Singapore (13), India (19), Korea (25), Japan (27), and Taiwan (40). Taiwan is not a major FDI country in Asia, but she has also followed this global trend. Both inbound and outbound FDIs have been increasing. For instance, according to the data provided by Ministry of Economic Affairs, we find the Taiwan's outbound FDI to the rest of the world excluding China went up by 14.43%, whereas the outbound FDI to China went up by 35.81% between 2006 and 2007.

Previous studies have mainly focused on the effects of various factors such as bilateral investment treaties (e.g. Hallward-Dreimeier, 2003) and taxation (e.g. de Mooij and Ederveen, 2003) on foreign direct investment. However, there is relatively little literature exploring the impacts of bilateral tax treaties governing the taxation of FDI activity. Most theory work has begun with the assumption that treaties encourage FDI (Davies, 2004). The empirical literatures, however, find little evidence that bilateral tax treaties increase FDI activity (Blonigen and Davies, 2000; Blonigen and Davies, 2004; Davis, 2003). In addition, some studies (e.g. Blonigen and Davies, 2004) even find the old treaty has a positive effect on FDI, while the new treaty has a negative impact on FDI.

⁹ See Table 2 and Table 3.

There are several possible arguments for this insignificant effect of treaty. First, the problem of double taxation can be alleviated unilaterally just as well as through bilateral treaty, so the actual intent of treaty is to reduce tax evasion. Therefore, treaties may reduce the incentives of FDI (Dagan, 2000). Second, the primary goal of tax treaty is toward reducing tax evasion rather than promoting FDI (Gravelle, 1988). Third, reducing withholding taxes does not necessarily translate into lower effective taxes (Hartman, 1985). Based on these arguments, therefore, tax treaty does not necessarily promote FDI.

Unlike most countries in the world, Taiwan is a diplomatically isolated country that has a political tension with Asia's rising power China. For Taiwan, signing tax treaties is not only for purposes of avoiding double taxation and tax evasion, but also for international recognitions. Therefore, Taiwan has not been pursuing a strategy of signing treaties only with those countries that have large trade and FDI with Taiwan. They also sign treaties with countries that have diplomatic relationships with Taiwan. Though it may not be the only reason, but it is widely suspected that Taiwan could not have successfully signed treaties with major economies mostly because of China factor. Due to the same reason, Taiwan does not have treaties with both China and Hong Kong, either. Though there are no treaties between these three places, Taiwan's outbound FDI to China and Hong Kong (SAR) has been constantly rising. As a matter of fact, Taiwan can avoid the double taxation on incomes derived in China and Hong Kong unilaterally according to the Statue of Cross-Strait People Relation. In other words, Taiwan's investment in China is no longer subject to double taxation problem. However, Taiwan still cannot solve the tax evasion problem under the circumstance of having no tax treaties between two sides. Since Taiwan is so unique and different from other countries in terms of signing treaties, we were wondering if the causal relationship between tax treaty and Taiwan's FDI activities would be similar to the one in other countries. Therefore, the goals of this paper are to investigate the pattern of Taiwan's bilateral tax treaty formation and to analyze the relationship between tax treaties and Taiwan's FDI activities. This paper is organized as follows. In Section 2, we give an overview of bilateral tax treaty including its principles, model tax treaties, primary functions, and benefits and costs. Section 3 discusses Taiwan tax treaties comprising of its history, urgently needed treaties, withholding taxes on remitted incomes, and practical cases of application. In Section 4, we present the data of Taiwan FDI activities. Section 5 analyzes the causal relationship between tax treaty and FDI activities. Finally, Section 6 concludes.

2. Bilateral Tax Treaty

2.1. Principles of Tax Treaty

There are two principles of international tax treaty: source principle and residence principle. Under the source principle, a State can claim to levy a tax on income because of its relationship to that income. However, the source of income is sometimes ambiguous as some of assets and activities generating income are located in more than one State. Under residence principle, a State can claim to levy a tax on income because of its relationship to the person (party) deriving the income. Ideally a State can levy a tax on the worldwide income of its residents based on the residence principle. However, this is practically difficult to do unless it has reliable information about the amount of income they have earned abroad. If an income is derived within its territorial boundaries, a State can claim to levy a tax on the income earned by a resident based on both source and residence principles, but can only claim to levy a tax on the income earned by a non-resident based on source principle. On the other hand, a State can only apply residence principle to levy a tax on income derived by a resident who conducts activities outside its territorial boundaries. Generally speaking, a territorial system (source principle only) often fails to tax foreign source income. This failure undermines the fairness of tax system and provides residents with tax incentives of investing abroad. Therefore, the number of States using a territorial system¹⁰ has diminished.

2.2. OECD and UN Models

There are two basic models for tax treaties: OECD model and UN model. OECD's fiscal committee published a report entitled "Draft Double Taxation Convention on Income and on Capital" in 1963. The revision of the 1963 draft had led to the "Model Double Taxation Convention on Income and on Capital" published in 1977. This 1977 model became the worldwide standard for tax treaty negotiations. As a matter of fact, the OECD model was designed to match needs of developed countries, but was less suitable for developing countries. Therefore, UN launched its first tax treaty model named "Model Double Taxation Convention between Developed and Developing Countries" in 1980. Both OECD and UN models are to a large extent similar, but there still exist several significant differences. For instance, there exist differences on the definitions of permanent establishment, taxable profits, and withholding taxes on remitted incomes. The OECD model requires the duration of 12

¹⁰ States continuing to use the territorial system include Bolivia, Costa Rico, El Salvador, Guatemala, Hong Kong, Kenya, Malaysia, Nicaragua, Panama, Paraguay, Singapore, and Uruguay.

months, while the UN model requires the period of six months before permanent establishment is considered to present. The OECD model states that only profits attributable to the permanent establishment may be taxed in a state where the permanent establishment is situated. However, the UN model addresses that all profits including profits directly attributable to Permanent Establishment, and profits from sales and business activities through Permanent Establishment, are taxable. Unlike OECD model, the UN model does not specify rates of withholding taxes on dividends, interest and royalties. These rates are supposed to be determined through bilateral negotiations. The OECD model defines that the royalties only comprises of industrial royalties, and cultural royalties. In addition to the OECD definition, the UN model also includes leasing income in the category of royalties. The UN model authorizes the source state a limited taxation right on the royalty payments, while the OECD model only grants the residence state of royalty recipient the exclusive taxation right.

2.3. Primary Functions of Tax Treaty

A primary goal of a tax treaty is to remove the obstacles that double taxation presents [OECD, 1997]. Blonigen and Davies (2004) summarized four primary functions of a tax treaty. The first function is “standardizing tax definitions and solidifying the tax jurisdictions of treaty partners”. All modern tax treaties use permanent establishment¹¹ as the main instrument to establish taxing jurisdiction over a foreigner’s income in the host country. If countries differ in definitions of permanent establishment, the problem of double taxation arises. Therefore, it is necessary to standardize tax definitions and jurisdictions to reduce the double taxation. The second function for tax treaty is to reduce transfer pricing and various forms of tax avoidance. Tax treaty promotes the exchange of tax information between treaty partners. The third goal of tax treaties is to prevent treaty shopping¹². Recent treaties have primarily focused on this problem of treaty shopping (Ault and Bradford, 1990). This also promotes some countries to renegotiate its older treaties. The final function of tax treaties is to affect the actual taxation of multi-national enterprises (MNEs). They can affect the actual taxation of MNEs through rules affecting double taxation relief and withholding taxes. For instance, following OECD model treaty, tax treaties specify that both countries must offer either foreign tax credits or exempt foreign-earned profits from domestic taxation. In addition, the tax treaties often reduce maximum allowable withholding

¹¹ The OECD model treaty sets forth the general definition of a permanent establishment as a fixed place of business through which the business of an enterprise is wholly or partly carried on. The term of permanent establishment includes a place of management, a branch, an office and a factory.

¹² Although there are many variations in the regulations regarding treaty shopping, the most common rules restrict treaty benefits if more than 50% of a corporation’s stock is held by a third, non-treaty country’s residents (Doernberg, 1997)

taxes on dividend, interest, and royalty payments.

2.4. Benefits and Costs of Entering Into a Tax Treaty

Blonigen and Davies (2004) summarize the benefits and costs of entering into a tax treaty. One of benefits is that more overseas incomes are repatriated to the home nation, since a tax treaty can reduce the overseas taxes. The lower overseas taxes can then promote a more efficient allocation of global investments. At the same time, costs of entering into a tax treaty incur because tax treaty reduces the tax rate on inbound investment and then reduces tax revenues for the home nation. Another benefit of entering into a tax treaty is that treaty can promote investment by reducing uncertainty about the overseas tax environment. On the other hand, however, a treaty which reduces the ability to transfer price and encourages the exchange of tax information lowers the incentive to invest. Therefore, tax treaties may reduce FDI activity if some firms engage in FDI simply to minimize taxes.

3. Taiwan's Tax Treaties

3.1. Historical Background

In addition to avoiding double taxation and tax evasion problems, another function of signing tax treaties with other countries is to help Taiwan, a diplomatically isolated island state, pursue its international identity. Taiwan signed its first tax treaty with Singapore in 1981. After the Taiwan/Singapore treaty, Taiwan faced difficulties in completing tax treaty negotiations with other countries. It took another 14 years for Taiwan to successfully sign the second tax treaty with Indonesia. However, it was a milestone to Taiwan. Since then, Taiwan has signed comprehensive income tax treaties with another 17 countries (see Table 2). Besides Singapore and Indonesia, Taiwan has also signed treaties with other three ASEAN countries including Vietnam, Thailand, and Philippines. Though Thailand and Philippines treaties were signed in 1999 and 2002 respectively, they have not been effective yet. In order to gain international recognitions, Taiwan signed tax treaties with several countries such as Gambia, Swaziland, Macedonia, Senegal, and Paraguay because they were Taiwan's allies at that time, but not major trading or investment partners. As a matter of fact, these treaties have never been applied to real cases.

Unfortunately, only few industrialized countries including United Kingdom,

Netherlands, Belgium, Sweden, and Denmark in European Union, and Australia, New Zealand in Pacific Rim have signed treaties with Taiwan. Taiwan's other major trading partners such as USA, Canada, Japan, and Germany (or EU) alternatively signed double taxation agreements on international transportation incomes with Taiwan instead of signing a comprehensive income tax treaty (See Table 3). The urgently big goals of Taiwan's Ministry of Finance are to eventually sign comprehensive income treaties with these major partners. Moreover, Taiwan urgently needs to sign the bilateral tax treaty with China and Hong Kong in order to solve the serious problem of tax evasion.

3.2. Taiwan's Urgently Needed Treaties

USA and Canada

The Ministry of Finance recently claimed that Taiwan is expected to sign tax treaty with the USA in one or two years following a recent call from the Director of American Institute in Taiwan. There are two major reasons for both sides to speed up signing tax treaty. First, Taiwan recently began taxing foreign stockbrokers on their commission incomes received from Taiwanese enterprises and foreign film suppliers on their royalty incomes. Second, based on so-called "alternative minimum tax", the Ministry of Finance in Taiwan will begin to impose a 20% tax on overseas incomes earned by Taiwanese residents that exceed US\$30,000. These new tax policies urgently need both countries to exchange information regarding overseas Taiwanese incomes derived in USA and American incomes derived in Taiwan through tax treaty. These reasons are also applicable to the Canadian case. Taiwanese government began talks with Canadian government over signing tax treaty about 10 years ago. However, the biggest obstacle for signing tax treaties with both USA and Canada has been from a significant number of overseas Taiwanese living in North America. Their main argument is the treaty would force them to expose the details of their wealth and assets. According to the Ministry of Finance, Taiwanese government has kept making efforts to convince overseas Taiwanese to accept the tax treaty policy.

European Union

Historically EU was not a major trading/investment partner of Taiwan. This could probably explain why Taiwan has only signed tax treaties with 5 European Union member countries. All of these treaties were signed after 2000. Netherlands and Sweden signed treaties with Taiwan in 2001 following by United Kingdom (2002),

Belgium (2004), and Demark (2005). After joining WTO, Taiwan has made efforts on improving her relationships with EU countries. All of other 21 EU members, especially Germany, France, and Spain are most wanted by Taiwanese government.

Japan and Korea

In Asia-Pacific region, Taiwan has successfully signed treaties with major partners in Southeast Asia and both Australia and New Zealand, but she faces tremendous difficulties for signing treaties with her important neighbors: Japan and Korea. There are many possible reasons, but it is widely believed that the China factor is also a major obstacle for Taiwan to sign treaties with both Japan and Korea. As a matter of fact, mutual economic activities between Taiwan and these two Asian economic giants are numerous. A significant number of Japanese and Korean are deriving incomes in Taiwan. It is supposed to be important for these countries to find effective ways to reduce opportunities of double taxation and tax evasion. Japan has signed tax treaties with all major Asian countries except Taiwan, and so does Korea. To my knowledge, both Japan and Korea have not started to negotiate with Taiwan regarding the treaty yet. Taiwan has to make more efforts on completing this difficult task.

China and Hong Kong

Due to political issues, Taiwan is very difficult to sign official tax treaty with China and Hong Kong, but there actually exists a mechanism preventing Taiwanese income derived in China and Hong Kong from double taxation problem. According to the statue of Cross-Strait People Relation, incomes and profits derived in China can be tax deductible in Taiwan if they can provide documentations indicating their tax payments in China. Moreover, individual incomes derived in Hong Kong is not subject to Taiwan's income tax and business profits derived in Hong Kong can be tax deductible according to the statue of Hong Kong/Macau Relation. The double taxation problem is no longer a big issue, but the tax evasion problem still cannot be avoided due to being lack of tax treaty between Taiwan and these places. Up to now, Taiwan has not officially opened her door to Chinese investors, so signature of tax treaty between two sides is not really an urgent task for Chinese government. However, these investment restrictions are expected to be lifted in the future. Once Chinese businesses invest more and more in Taiwan, signing a tax treaty or quasi-type of tax treaty between two sides will become necessary if both double taxation and tax evasion problems would like to be avoided.

If Taiwan will possibly sign the quasi tax treaty with China or Hong Kong in the future, it may optionally follow the model treaty between China and Hong Kong. Hong Kong and China originally signed a memorandum for avoidance of double taxation in 1998, and then officially signed an agreement on the arrangement for avoidance of double taxation and tax evasion between Mainland China and Hong Kong SAR” in 2006. They basically follow the OECD model tax treaty. Most treaties between two formal countries cover both regular incomes/profits and dividend/interest, but the China/Hong Kong memorandum originally only covered regular incomes/profits and did not form the information exchange mechanism. The new agreement had covered dividend and interest and formed the information exchange mechanism. They used the word “arrangement” instead of “treaty” in order to distinguish from other formal treaties between two countries. In addition to this arrangement, they also signed transportation income treaty.

3.3. Withholding Taxes on Remitted Incomes

Most treaties typically reduce maximum allowable withholding taxes on three types of remitted incomes: dividend, interest, and royalty. In most existing treaties of the world, the maximum allowable withholding taxes for treaty partners are ranged between 0 and 15%. In the China/Hong Kong treaty, both sides provide different policies on withholding taxes. Hong Kong’s maximum allowable withholding taxes on dividend, interest, and royalty paid by Hong Kong companies to Chinese residents are 10%, 7%, and 7% respectively. However, China does not specify the maximum allowable withholding taxes on dividend, interest, and royalty paid by Chinese companies to Hong Kong SAR residents. Table 4 summarizes the maximum allowable withholding tax rates on dividends, interests, and royalties paid by Taiwanese companies to non-residents under Taiwan’s various tax treaties. In general, for non-treaty countries, Taiwan’s maximum allowable withholding tax rates on dividends, interests, and royalties are all 20%¹³. Taiwan/Singapore treaty deserves particularly to be mentioned. It was the Taiwan’s oldest treaty, but its conditions on withholding taxes were the strictest ones. For instance, there are no reductions in maximum allowable withholding taxes on dividend and interest incomes under the Taiwan/Singapore treaty.¹⁴ The only reduction in maximum allowable withholding taxes under Taiwan/Singapore treaty is on royalty incomes. The maximum allowable withholding tax rate on royalty is 15%. Unlike Singapore, the maximum allowable

¹³ For investments that are not approved officially, the withholding rate on dividend is 30% for non-resident individuals and 25% for non-resident enterprises.

¹⁴ The aggregate of dividend withholding tax and corporate income tax on profits cannot exceed 40% of the taxable income from which the dividends are declared.

withholding tax rates can be reduced by 5~15% for other treaty countries. The common reduction rate in most of these countries is 10%.

3.4. Practical Cases of Tax Treaty

Lien (2005) analyzed 49 randomly selected application cases from foreigners that were filed to Taipei National Tax Administration in both years of 2003 and 2004. 60% of these foreign services providers (profit/income receivers) are from Singapore that is Taiwan's first tax treaty country. Others include: 18% from UK, 12% from Netherlands, 8% from Australia, and 2% from New Zealand. Services provided in the financial industry takes up about 30% of total applications, following by consulting supports 20% and information technology 14%. Most of these service providers (say 68%) appointed CPA firms to apply for tax treaty on their behalf. Others appointed either law firms or service recipients to do so. More than half of service providers did not send representatives from overseas to Taiwan. They mainly perform services through internet and other methods. Among those providers (totally 17 cases) dispatching representatives, there were 11 cases whose representatives stayed for less than a required length of duration for Permanent Establishment. There are 41% of total applications that have two parties of contracts (service providers and service recipients) belonging to the same conglomerate (multinational enterprise). The global conglomerate may use the tax treaty to reduce total taxation burden. For instance, assume a service provider in a treaty country such as Singapore provides services to a Taiwan enterprise, and both service provider and receiver belong to the same global conglomerate. Moreover, the permanent establishment is not detected and the income is classified as business profit. After the application case is approved by Taiwan's tax bureau, this claimed business profit is not subject to the taxation in Taiwan, but only to the taxation in Singapore. This provides a mechanism for the global conglomerate to save tax payments.

After the screening test done by tax authority, the overall approval rate is approximately 74% of total applications. It means claimed profits in the rest 26% of total applications should be still taxed in Taiwan. The approval rate varies across countries. Take both Singapore and UK as examples, 22 out of 29 Singapore cases were approved, while 6 out of 9 UK cases were approved. As mentioned earlier, a global conglomerate may take advantage of tax treaty for reducing its tax burden, so the tax bureau may pay more attentions to these types of case. Therefore, almost half of cases with both service providers and recipients in the same conglomerate were denied.

4. Taiwan's Foreign Direct Investment

Taiwan used to be a country, which had more inward FDI than outward FDI, between 1950s and 1990s. It attracted net capital inflow during that period. Since the late 1990s, it has gradually become a country with net capital outflows (see Table 5). It is now one of major source countries of FDI in several Southeast Asian countries¹⁵ and China. Approximately 70% of the total approved outbound FDI flew to China in 2007. Taiwan is ranked among top ten foreign countries investing in China.¹⁶ It is widely believed that the officially approved amount of outward FDI from Taiwan to China is significantly lower than the actual amount. As a matter of fact, it is very difficult to observe the actual amount of Taiwan's outward FDI to China. The official numbers indicate that Taiwan's approved outward FDI to China was almost double of her approved outward FDI to the rest of the world in 2007, but the actual difference should be much bigger.

Besides China, Caribbean islands, USA, Singapore, and Hong Kong are among top destinations of Taiwan's outward FDI by the year 2007 (see Table 6). Caribbean islands have received the largest amount of Taiwan's outward FDI, whereas USA has received the most cases of Taiwan's outward FDI during the period of 1952-2007. The possible explanation for the large amount of Taiwan FDI flowing to Caribbean countries is that a lot of Taiwanese businesses take advantage of low tax or tax free policy in Caribbean islands and use them as intermediary to invest in China. Hong Kong is considered as another suspicious gateway for Taiwan's outward FDI to China.

According to either official or unofficial estimates, China has recently become the major destination of Taiwan's outward FDI. By the year 2007, the top five provinces that have attracted most of Taiwan's FDI are Jiang-Xu province, Guang-Dong province, Shanghai, Fu-Jian province, and Je-Jiang province (see Table 7). Guang-Dong province has received the most cases of investment from Taiwan, while Jiang-Xu province has accumulated the largest amount of Taiwan FDI in the past five decades.

¹⁵ Taiwan is the third largest source country of FDI in Thailand following top two countries: Japan and USA. It is also the third largest investor in both Malaysia and Vietnam.

¹⁶ Taiwan is one of major source countries of China inward FDI. According to the data of first 11 months of 2007, Taiwan's direct investment in China is US\$1.434 billion. The top 10 source countries during these months are Hong Kong, Virgin Island, Korea, Japan, Singapore, USA, Cayman Islands, Samoa, Taiwan, and Mauritius. The details of Taiwan's approved direct investment in China are summarized in Table 5. It is widely believed that Taiwan's direct investment in China is much higher than the official number. Many investments have been through those tax-free countries such as Hong Kong, Virgin Island, Cayman Island, and Mauritius.

Regarding Taiwan's inward FDI, USA, Japan, and Caribbean islands have been top three investors following by Netherlands, Singapore, United Kingdom, and Hong Kong. As shown in Table 8, in the past five decades, USA has accumulated the largest amounts of foreign direct investment, while Japan has accumulated the most cases of foreign direct investment in Taiwan. At the moment, China's capital is not allowed to invest in Taiwan officially, but it is believed that its capital has been indirectly flowed into Taiwan through Hong Kong and Caribbean islands.

5. The Relationship Between Bilateral Tax Treaty and Taiwan's FDI Activity

5.1. Endogeneity problem

Bilateral Tax treaty and FDI may be endogenously related. A country may tend to sign the tax treaties with other countries that had large FDI activities. On the other hand, bilateral tax treaty may promote FDI activity. It seems the endogeneity problem is not significant in some countries such as USA. Blonigen and Davies (2004) find the U.S. was not pursuing a strategy of signing tax treaties with countries that had the largest FDI activity with the United States. They also find the old treaty has a positive effect on FDI, while the new treaty has a negative impact on FDI. Does this endogeneity problem arise in Taiwan? We would like to answer this question by firstly examining whether the Taiwan negotiate tax treaties only with the countries that had large and increasing amounts of FDI activity. Table 9 lists all of Taiwan's treaty countries for where they rank in terms of FDI Stock (outward or inward) with the Taiwan relative to other countries, and how many countries that were ranked ahead of the country did not have a bilateral tax treaty with the Taiwan. This table does not show that the Taiwan was obviously pursuing a strategy of having tax treaties with only those countries that had large FDI stock with the Taiwan. For instance, several treaty countries of the Taiwan had none or very little FDI with the Taiwan. The Taiwan signed treaties with these countries simply because of diplomatic relationships. However, the Taiwan also signed treaties with few countries that had significant FDI activities with the Taiwan. Take the Taiwan's first treaty country Singapore as the example. By the end of the year 2007, Singapore became the 4th country for Taiwan's outbound FDI and the 5th country for Taiwan's inbound FDI. Moreover, UK and Netherlands are top countries that had large amount of inbound investments in Taiwan. Taiwan has also signed treaties with other ASEAN countries because many overseas Chinese from Southeast Asia invested in Taiwan and these countries such as Indonesia, Malaysia, and Vietnam became major destinations of Taiwan's FDI to Southeast Asia.

Table 10 lists several representative treaty countries of Taiwan and historical records of Taiwan's outbound FDI to these countries over time. By simply observing these numbers, we find tax treaty seems only has a positive impact on Taiwan's outbound FDI to Singapore which is the Taiwan's oldest treaty country. The effects of tax treaty on other treaty countries are not very obvious. Though we have observed the trend of Taiwan's FDI activity before and after effective date of tax treaties in these treaty countries, but it is difficult to conclude the real impact of tax treaties on FDI. We know the FDI is affected by many factors. In order to estimate the impacts of bilateral tax treaty on Taiwan's FDI activity correctly, we also have to control for these co-founding factors of FDI such as country size, geographic location, taxation, bilateral investment agreement, economic indicators and so on. In the next section, we will estimate the effect of tax treaty by using the econometric specification that follows the CMM (Carr, Markusen and Maskus, 2001) specification adding treaty variables. This econometric section will be completed after the Hitotsubashi seminar.

6. Concluding Remark

Bilateral tax treaties, an important method of international tax cooperation, have recently drawn more attentions. Recent literature began to study the impact of tax treaty on FDI. Most theoretical work has begun to assume the tax treaty promotes FDI. However, previous empirical studies provide little evidence to support that bilateral tax treaties increase FDI activity in USA and other developed countries. Unlike most countries in the world, signing bilateral tax treaty is also a possible way of increasing international recognitions for Taiwan. Unfortunately, Taiwan has not successfully signed tax treaties with major economies in the world. Up to date, Taiwan has only concluded 16 tax treaties. The main goals of this paper are to introduce the pattern of Taiwan's tax treaty formation and to examine whether there is the endogenous relationship between tax treaty and FDI in Taiwan. We find that the Taiwan was not pursuing a strategy of having tax treaties with countries that had the largest FDI activity with the Taiwan. In addition, by simply observing the historical FDI records, we don't find strong evidence for that bilateral tax treaty promotes FDI activity in Taiwan. An econometric analysis will be required for estimating the impacts of tax treaty on FDI correctly. We will continue this analysis in the future.

References

Ault, H.J. and Bradford, D.F. (1990), *Taxing International Income: An Analysis of the U.S. system and Its Economic Premises*, Taxation in the Global Economy, University of Chicago Press.

Blonigen, B.A. and Davies, R.B. (2000), *The Effects of Bilateral Tax Treaties on U.S. FDI Activity*, NBER Working Paper No. 7929.

Blonigen, B.A. and Davies, R.B.(2004), *The Effects of Bilateral Tax Treaties on U.S. FDI Activity*, *International Tax and Public Finance*, 11, 601-622.

Carr, D., Markusen, J.R., and Maskus, K.E. (2001), *Examining the Knowledge-Capital Model of the Multinational Enterprise*, *American Economic Review*, 91, 693-708.

Dagan, T. (2000), *The Tax treaties Myth*, *Journal of International Law and Politics*, Summer, 939-996.

Davies, R.B. (2003), *Tax Treaties, Renegotiations and Foreign Direct Investment*, *Economic Analysis and Policy*, 33, 251-273.

Davies, R.B. (2004), *Tax Treaties and Foreign Direct Investment: Potential versus Performance*, *International Tax and Public Finance*, 11, 775-802.

De Mooij, R.A., and Ederveen, S. (2003), *Taxation and Foreign Direct Investment: A Synthesis of Empirical Research*, *International Taxation and Public Finance*, 10, 673-693.

Doernberg, R. (1997), *International Taxation in a Nutshell*, 3rd edition. St. Paul:West Publishing.

Lien, Y.P. (2005), *A Study on Taiwan's Tax treaty*, Master Thesis, IMBA, National Chengchi University.

Gordon, R. and Hines, J.R. (2002), *International Taxation*, *Handbook of Public Economics*, volume 4, Elsevier.

Gravelle, P. (1988), Tax treaties: Concepts, Objectives, and Types, International Bureau of Fiscal Documentation Bulletin No. 522, 522-526.

Global Individual Tax Handbook 2007, Published by IBFD.

Hallward-Dreimeier, M. (2003), Do Bilateral Investment Treaties Attract Foreign Direct Investment?, World Bank Working Paper No. 3121.

Hartman, D. (1985), Tax Policy and Foreign Direct Investment, Journal of Public Economics, 26, 107-121.

Hines, J.R. and Willard, K.L. (1992), Trick and Treaty? Bargains and Surprises in International Tax Agreements, mimeo, University of Michigan.

Table 1: Number of Tax Treaties in the World's Major Economies

Country	Number of Treaty	Country	Number of Treaty
Argentina	18	Netherlands	84
Australia	42	New Zealand	32
Austria	75	Norway	81
Belgium	86	Poland	79
Brazil	28	Portugal	47
Canada	86	Russia	69
Czech	71	Singapore	54
Chile	16	South Africa	61
China	83	Spain	70
Demark	76	Sweden	81
Egypt	55	Switzerland	86
Finland	66	Turkey	64
France	118	UK	112
Germany	88	USA	64
Greece	43	Taiwan	16
Hong Kong	3		
Hungary	64		
Iceland	29		
India	75		
Indonesia	56		
Ireland	44		
Israel	41		
Italy	80		
Japan	46		
Korea	29		
Luxembourg	50		
Malaysia	60		
Mexico	32		

Source: Global Individual Tax Handbook 2007

Table 2: Taiwan's Comprehensive Income Tax Treaties

Country	Diplomatic relation	Signing date	Effective date
Singapore		December 1981	January 1982
Indonesia		March 1995	January 1996
South Africa		February 1994	September 1996
Australia		May 1996	October 1996
New Zealand		November 1996	December 1997
Vietnam		April 1998	May 1998
Gambia	Yes	July 1998	November 1998
Swaziland	Yes	September 1998	February 1999
Malaysia		July 1996	February 1999
Macedonia	Yes/No	June 1999	June 1999
Netherlands		February 2001	May 2001
United Kingdom		April 2002	December 2002
Senegal	Yes	January 2000	September 2004
Sweden		June 2001	November 2004
Paraguay	Yes	April 1994	***
Thailand		July 1999	***
Philippines		May 2002	***
Belgium		October 2004	December 2005
Demark		August 2005	December 2005

Source: Ministry of Finance, Taiwan

Table 3: Taiwan's Tax Treaties on International Transportation Incomes

Country	Shipping/Air	Signing date	Effective date
Canada	Air	July 1995	July 1995
EU	Shipping	August 1990	August 1990
Germany	Shipping	August 1988	August 1988
Israel	Shipping	June 1998	June 1998
Japan	Shipping & Air	September 1990	September 1990
Korea	Shipping & Air	December 1991	December 1991
Luxembourg	Air	March 1985	March 1985
Macau	Air	December 1998	February 1999
Netherlands	Shipping	June 1989	January 1988
Netherlands	Air	May 1984	April 1983
Norway	Shipping	June 1991	June 1991
Thailand	Air	June 1984	June 1984
USA	Shipping & Air	May 1988	May 1988

Source: Ministry of Finance, Taiwan

Table 4: Taiwan's Withholding Tax Rates on Dividends, Interests, and Royalties

	Dividends	Interests	Royalties
Without treaty	20/25/30	20	20
With treaty			
Australia	10/15	10	12.5
Gambia	10	10	10
Indonesia	10	10	10
Macedonia	10	10	10
Malaysia	12.5	10	10
New Zealand	15	10	10
Netherlands	10	10	10
Senegal	10	15	12.5
Singapore	40	40	15
South Africa	5/15	10	10
Sweden	10	10	10
Swaziland	10	10	10
UK	10	10	10
Vietnam	15	10	15
Belgium	10	10	10
Demark	10	10	10

Source: Ministry of Finance, Taiwan

Table 5: Taiwan's Inward and Outward FDI (US\$ 1000)

	Approved Inward FDI	Approved Outward FDI to Non-China	Approved Outward FDI to China
1952-1996	24,721,779	12,420,173	
1991-1996			6,873,724
1997	4,266,629	2,893,826	1,614,542 (2,719,771)
1998	3,294,714	3,296,302	1,519,209 (515,412)
1999	4,185,403	3,269,013	1,252,780
2000	7,607,755	5,077,062	2,607,142
2001	5,128,517	4,391,654	2,784,147
2002	3,271,749	3,370,046	3,858,757 (2,864,301)
2003	3,575,673	3,968,588	4,594,985 (3,103,799)
2004	3,952,147	3,382,022	6,940,663
2005	4,228,067	2,447,449	6,006,953
2006	13,969,247	4,315,426	7,642,335
2006(1~10)	11,228,914		
2006(1~8)		2,432,293	4,592,758
2007(1~10)	12,932,685		
2007(1~8)		2,783,350	6,237,611

Source: Investment Commission, Ministry of Economic Affairs, Taiwan

Table 6. Taiwan Approved Outbound FDI by Area (Jan. 1952-Aug. 2007)

Area (Rank)	Percent of All Cases	Percent of Total Amount
Caribbean	15.89%	37.50%
USA	41.14%	17.69%
Singapore	3.73%	7.46%
Hong Kong	8.07%	5.14%
Bermuda	0.82%	4.78%
Thailand	3.22%	3.74%
Malaysia	2.56%	3.20%
Vietnam	2.93%	2.75%
Panama	0.56%	2.32%
Japan	3.76%	2.16%
Samoa	2.45%	1.64%
Netherland	1.15%	1.63%
Philippine	1.45%	1.45%
Indonesia	1.67%	1.20%
UK	1.31%	0.98%
Canada	0.56%	0.69%
Korea	1.13%	0.48%
Australia	0.47%	0.31%
Germany	1.19%	0.29%
Nicaragua	0.23%	0.25%
Czech Republic	0.19%	0.18%
Brazil	0.11%	0.12%
El Salvador	0.20%	0.10%
India	0.24%	0.05%
France	0.33%	0.05%
New Zealand	0.06%	0.01%
	Other Areas	
Other European Countries	0.83%	0.88%
Africa	1.24%	0.79%
Other Latin America	1.10%	0.69%
Other Oceanian Countries	0.23%	0.62%
Other Asian Countries	1.12%	0.60%

Source: Investment Commission, Ministry of Economic Affairs, Taiwan

Table 7. Taiwan Approved Outbound FDI to China by Provinces
(Jan. 1952-Aug. 2007)

Province	Percent of All Cases	Percent of Total Amount
Jiang-Xu	15.29%	31.77%
Guang-Dong	32.55%	25.86%
Shanghai	13.79%	15.14%
Fu-Jian	14.31%	7.63%
Je-Jiang	5.21%	6.88%
Beijing	2.99%	1.82%
Tien-Jing	2.38%	1.81%
Shan-Dong	2.46%	1.80%
Hu-Bei	1.40%	1.01%
Chung-Ching	0.50%	0.97%
Xi-Chuan	1.00%	0.82%
Liao-Ling	1.39%	0.80%
Jiang-Xi	0.55%	0.53%
Guang-Xi	0.61%	0.50%
He-Bei	0.81%	0.48%
Hu-Nan	0.81%	0.36%
An-Huai	0.51%	0.35%
Shan-Xi	0.15%	0.34%
Hai-Nan	0.94%	0.26%
Xi-Bei area	0.55%	0.20%
He-Nan	0.64%	0.17%
Hei-Rong-Jiang	0.30%	0.11%
Yun-Nan	0.29%	0.10%
Ji-Ling	0.22%	0.09%
Nei-Meng	0.06%	0.05%
Guei-Jou	0.22%	0.05%
Others	0.06%	0.11%

Source: Investment Commission, Ministry of Economic Affairs, Taiwan

Table 8. Taiwan Approved Inward FDI by Area (Jan. 1952-Oct. 2007)

Area	Percent of All Cases	Percent of Total Amount
USA	16.27%	19.55%
Japan	25.05%	16.58%
Caribbean	13.87%	16.09%
Netherlands	1.61%	15.47%
Singapore	5.08%	6.07%
UK	2.15%	5.15%
Hong Kong	12.99%	4.79%
Bermuda	0.47%	2.13%
Germany	1.83%	1.90%
Malaysia	3.17%	1.77%
Samoa	2.40%	1.26%
Philippines	1.11%	1.25%
Africa	0.93%	1.20%
Australia	0.87%	1.10%
Panama	0.27%	0.86%
Korea	1.99%	0.79%
France	0.83%	0.55%
Canada	1.35%	0.47%
Indonesia	0.61%	0.11%
Thailand	0.66%	0.08%
India	0.58%	0.05%
New Zealand	0.14%	0.03%
Brazil	0.12%	0.02%
Vietnam	0.19%	0.01%
	Other Areas	
Other European Countries	2.92%	2.01%
Other Latin America	0.78%	0.43%
Other Asian Countries	1.65%	0.16%
Other Oceanian Countries	0.10%	0.11%

Source: Investment Commission, Ministry of Economic Affairs, Taiwan

Table 9. Relative Rank of Taiwan Bilateral Tax treaty Countries in Taiwan Outward and Inward FDI Positions

Country	Rank of Country in Terms of Taiwan Outward FDI Stock	Rank of Country in Terms of Taiwan Inward FDI Stock
Singapore	4th (3)	5th
Indonesia	15 th (8)	18th
South Africa	N.A.	N.A.
Australia	19 th	13th
New Zealand	27th	21th
Vietnam	9th	23th
Gambia	N.A.	N.A.
Swaziland	N.A.	N.A.
Malaysia	8th	10th
Macedonia	N.A.	N.A.
Netherlands	13th	4th
United Kingdom	16th	6th
Senegal	N.A.	N.A.
Sweden	N.A.	N.A.
Paraguay	N.A.	N.A.
Thailand	7th	19th
Philippines	14th	12th
Belgium	N.A.	N.A.
Demark	N.A.	N.A.

Source: Investment Commission, Ministry of Economic Affairs, Taiwan

Table 10. Taiwan's Approved Outbound Investment by Treaty Countries

(unit: US\$1000)

	Singapore	Indonesia	Malaysia	Vietnam	UK	Netherlands	Australia
~1979	4302	8835	3083	1437	110	*	896
1980	2794	120	*	*	*	*	*
1981	736	1960	*	*	2231	*	*
1982	96	8960	*	*	*	*	*
1983	909	*	3000	*	*	*	144
1984	209	4900	1216	*	*	*	134
1985	253	1000	*	*	891	*	7
1986	434	1780	*	*	*	194	217
1987	1301	950	5831	*	*	*	*
1988	6433	1923	2708	*	858	25	6134
1989	5209	311	158646	*	25	1440	*
1990	47622	61871	184885	*	11405	5893	1397
1991	12540	160341	442011	17139	14572	6679	2440
1992	8790	39930	155727	20167	4435	9690	5426
1993	69473	25531	64542	158396	237918	10383	63
1994	100732	20571	101127	108378	16952	271	23598
1995	31649	32067	67302	108146	8215	20410	314
1996	164978	82612	93534	100479	6128	217	14792
1997	230310	55861	85088	85414	13412	11113	23200
1998	158176	19541	19736	110078	9724	8574	2292
1999	324524	7321	13700	34567	10263	17800	21004
2000	219531	33711	19406	54046	31250	3245	10429
2001	378301	6124	45516	30911	29217	5797	2064
2002	25760	9163	31956	55192	43028	56421	6327
2003	121469	583	154671	6	33756	274817	15407
2004	204179	311	113048	389	193684	324288	15397

Source: Investment Commission, Ministry of Economic Affairs, Taiwan