

## *Working paper Series 2013*

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**No.13-148**

### **Explaining Utilization of Free Trade Agreements by Sectoral Interests and Binding of Unilateral Concessions**

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**Published: September 2013**

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# **Explaining Utilization of Free Trade Agreements by Sectoral Interests and Binding of Unilateral Concessions**

Utilization of Free Trade Agreements and unilateral liberalization schemes in Thailand and Malaysia <sup>1</sup>

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## **Abstract**

Much of the literature on East Asian regionalism downplays the economic rationale of recent free trade agreements (FTAs) that, accordingly, have been barely used by the private sector in the region. However, evidence published for Japan and reported elsewhere by the Author for Thailand and Malaysia indicate that some business groups in these countries actively pushed governments in support of FTA liberalization. To solve this apparent paradox, this paper contends that analysis of FTA utilization needs to be conducted at the sectoral level and put into the context of both the political economies that originally set FTAs in place and existing unilateral liberalization schemes. Analysis of highly disaggregated preferential trade records in Thailand and Malaysia—the two most FTA-active developing countries in East Asia—revealed that overall utilization of most bilateral FTAs has been indeed low but hid significant sectoral variability. Sectors that used FTA preferences to the greatest extent included those that successfully lobbied for FTA liberalization during negotiations. It was also found that utilization of Thai and Malaysian FTAs displayed stronger correlation with the previous use of unilateral liberalization schemes (e.g., Generalized System of Preferences and duty drawback programs) than with the preferential tariff margin afforded by FTAs. FTAs should be therefore evaluated not only for their capacity to create new trade flows but also for legally binding tariffs that were unbound (or bound with large overhangs) at the multilateral level and/or were previously offered unilaterally and therefore subject to removal at the discretion of the granting country.

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<sup>1</sup> This working paper was originally written in August-September 2012 and was updated in early 2013 with preferential trade data for Malaysia for the period ending in December 2012. The author wishes to acknowledge critical review of several drafts by Professor K. Shadlen. All remaining errors are solely the responsibility of the author.

**Abbreviations:**

APEC: Asia-Pacific Economic Cooperation

ASEAN: Association of Southeast Asian Nations

DDE: duty drawback or exemption

FDI: foreign direct investment

FTA: free trade agreement

GSP: generalized system of preferences

JTEPA: Japan-Thailand Economic Partnership Agreement

MFN: Most-favored-nation

MJEPA: Malaysia-Japan Economic Partnership Agreement

PCO: Preferential certificate of origin

ROO: Rules of origin

TAFTA: Thailand-Australia FTA

UR: utilization rate

WTO: World Trade Organization

## 1. Introduction

Until the turn of the century, and with the single exception of the ASEAN (Association of Southeast Asian Nations) bloc, East Asia was the only region untouched by the worldwide proliferation of free trade agreements (FTAs) that started in the mid-1990s.<sup>2</sup> However, East Asian countries are now among the most active embracing FTAs, with close to 60 already implemented since 2002, most of them as bilateral treaties.<sup>3</sup>

Most scholarly works on East Asian FTAs have pointed to their lack of economic relevance and emphasized instead political, strategic, and/or security rationales as primary motivations (e.g., Desker, 2004; Aggarwal and Koo, 2006; Dent 2006; Sally, 2006; Dieter, 2007; Aggarwal and Koo, 2008; Ravenhill, 2008b; Ravenhill, 2010; Lee, 2013). These narratives portray East Asian FTAs as emerging from political elites in strong states and without significant participation by interest groups (Aggarwal and Koo, 2006; Lee, 2006; Sally, 2006; Terada, 2009; Ravenhill, 2010). The only exception to this pattern of top-down FTA formulation seems to have been Japan, where the private sector has played an important role in the evolution of FTA policy (Solis, 2003; Manger, 2005; Yoshimatsu, 2005; Yoshimatsu, 2006b; Solis and Urata, 2007; Manger, 2009; Katada and Solis 2010; Solis 2010; Manger, 2012).<sup>4</sup> Field research by the Author found evidence that the private sector in Thailand and Malaysia has not only participated in FTA formulation but that in FTAs with significant sectoral economic impacts it actually took the initiative and pushed governments

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<sup>2</sup> Although the ASEAN FTA (AFTA) was signed in 1992, it did not achieve much liberalization until recently. In addition to long tariff phase-out periods, its implementation was poor as many countries moved their sensitive items to exclusion lists (Yoshimatsu, 2006a; Ravenhill, 2008a; Ravenhill, 2009). It was not until 2003 that tariffs were eventually reduced to 0-5% (with the exception of the Malaysian automotive sector) and fully eliminated in 2010. The less developed countries of Cambodia, Myanmar, Laos and Vietnam are allowed longer implementation periods.

<sup>3</sup> As of August 11, 2013, East Asian countries have already signed 56 FTAs with partners inside and outside the region (Databases from ADB-ARIC, undated and WTO-RTAIS, undated).

<sup>4</sup> Some authors in the first camp have downplayed the driving role of business groups in Japanese FTAs and considered them as reactive to earlier initiatives by the Japanese government (Ravenhill, 2010).

to start negotiations.<sup>5</sup> On the other hand, whenever the *ex-ante* economic rationale of Thai and Malaysian FTAs, even if only narrowly sectoral, was missing or unclear, negotiations dragged on for years or suspended altogether.

In addition to question the *ex-ante* economic rationale and engagement of the private sector in the formulation of East Asian FTAs, a majority of academic works in the subject emphasize the *ex-post* indifference by businesses and low *overall* utilization of ASEAN and bilateral FTAs already in place (Sally, 2006; Sally, 2007; Baldwin, 2008; Manchin and Pelkmans, 2008; Ravenhill, 2008a; Ravenhill, 2010). The utilization of ASEAN FTA (AFTA) preferences has been estimated at 5% (Haddad et al., 2007; Baldwin, 2008) and, in a 2007 survey among Japanese subsidiaries in East Asia, only 13.3% of exporters used or planned to use existing FTAs in the region (JETRO, 2007).<sup>6</sup>

Low levels of FTA utilization by businesses in East Asia have been reasoned on several accounts (Sally, 2006; Baldwin, 2008; Ravenhill, 2008b; Ravenhill, 2010). First, the geographical inconsistency between region-wide production networks and mostly bilateral FTAs. Secondly, the fact that a large share of intra-East Asian trade is comprised by parts and components—29.4% of total exports in 2011 (RIETI-TID database)—, that tend to attract low applied multilateral tariffs, making unnecessary the use of FTAs. Lastly, low utilization of FTA preferences has been charged to strict and inconsistent rules of origin (ROOs) across FTAs.<sup>7</sup> As countries sign into multiple FTAs, exporters must adapt their production process to diverging ROOs and the costs imposed by them could reduce (or even

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<sup>5</sup> See working paper by this Author (also in this LSE's International Development Working Paper series) entitled: "Formulation of East Asian Free Trade Agreements: Top-down, bottom-up and across Borders. Government-Private Sector Consultations and Business Lobbying in the Policymaking of Thai and Malaysian Bilateral Free Trade Agreements"

<sup>6</sup> Although successive firm level surveys by the Japan External Trade Organization (JETRO) have reported an increase in the use (or intention to use) of East Asian FTAs, utilization remained low at 37.7% in 2012, despite this figure also includes FTAs with partners outside the region (e.g., India, Mexico, Chile, Switzerland) (JETRO, 2013).

<sup>7</sup> ROOs determine whether a product has undergone a minimum level of transformation within the FTA bloc. ROOs also apply to other preferential tariff arrangements such as GSP. ROOs are included in FTAs and GSP to avoid trans-shipment across countries with lower external tariffs or that benefit from unilateral preferential treatment, respectively.

cancel out) the preferential margin granted by an FTA and, consequently its appeal (Estevadeordal et al, 2004).<sup>8</sup>

However, research by this Author found evidence that counter the three arguments above. First, bilateral FTAs provide specific benefits to firms involved in regional production networks.<sup>9</sup> Secondly, tariffs on a large share of parts and components have indeed been reduced, much of this liberalization has been unilaterally through unilateral preferential arrangements such as duty exemptions and drawback schemes (DES/DDS), often linked to export and investment promotion strategies (see below). Most developing economies in the region also benefit from reduced tariffs on some of their exports to developed countries through the Generalized System of Preferences (GSP) programs. But unilateral nature of DES/DDS and GSP makes them potentially removable at the discretion of the granting country. And third, as quantitative and qualitative research for this project found, ROOs in East Asian FTAs may not have the highly restrictive effect on FTA utilization anticipated by some studies (see below).

In addition, accounts of low FTA utilization in most studies are grounded on estimates of unspecified methodology or on firm-level surveys that, besides the limitations inherent to any survey, do not weight the share of surveyed firms in trade flows (JETRO, 2007; Hiratsuka, 2008; JETRO, 2009; Kawai and Wignaraja, 2009; Wignaraja et al., 2010; Wignaraja et al., 2011). Proper calculation of FTA utilization requires gathering of official administrative records, so-called *Preferential Certificates of Origin* (PCOs), administrative records certifying that the product to be exported complies with the ROOs established by the

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<sup>8</sup> This process is often referred as the spaghetti or noodle bowl effect (Bhagwati, 1995; Baldwin, 2008). In addition to the restructuring costs involved in adapting production structure to ROOs, exporters often must submit an application for the use of FTA preferences (preferential certificates of origin, see below), which involves additional fee and logistic costs, sometimes outside the possibilities of smaller firms.

<sup>9</sup> See working paper by this Author (also in this LSE's International Development Working Paper series) entitled: "Creation and Shifting of Rents within Bilateral Free Trade Agreement Blocs. Firms, States and the Redistribution of Power within Production Networks under Regionalism".

FTA, or Customs records for preferential treatment of imports at the point of entry. In East Asia, these administrative records are only collected and/or accessible in Thailand and Malaysia and reported publicly only for exports and at the aggregate level.<sup>10</sup>

It is contended here that collection and analysis of FTA utilization data need to be put into a sectoral context. As East Asian countries have progressively liberalized their tariffs multilaterally, high tariffs and tariff peaks on final products but also on some parts and components have become increasingly concentrated on a reduced number of sensitive sectors. Therefore, only highly disaggregated data on preferential trade and a sectoral analysis of FTA utilization could evaluate the impact and economic relevance of FTAs. To the best of my knowledge, only two publications have made use of disaggregated preferential trade records for Thai bilateral FTAs (Kohpaiboon, 2010; Athukorala and Kohpaiboon, 2011), but none for Malaysian FTAs.<sup>11</sup> Both works conclude that supply factors are more important than tariff savings in FTA utilization. Kohpaiboon (2010) conducts an econometric analysis of variables affecting use of Thai FTAs (see below).

This working paper will analyze the utilization of FTAs in Thailand and Malaysia, the two most FTA-active developing countries in East Asia, in the context of other preferential trade schemes. As indicated above, Thailand and Malaysia are the only countries in the region that collect administrative records for trade flows under FTAs, GSP and DES/DDS. Of note, Thailand and Malaysia rank among the largest users of the Japanese GSP program for the period immediately before negotiations for JTEPA and MJEPAs started (Komuro,

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<sup>10</sup> In most East Asian countries, exporters could self-report compliance with ROOs so PCOs are not issued or collected. In countries where PCOs are issued, they are granted by government authorities in the exporting country, usually the trade ministry or a surrogate (e.g., a peak business association). Thailand and Malaysia publish overall FTA utilization rates for exports, never for imports. In the case of Malaysia, public data on overall FTA utilization for exports covers only a few years. Disaggregated data on exports and imports under preferential regimes (PCOs and Custom records, respectively), as used in this paper, are only rarely made available (see below).

<sup>11</sup> In his study of Thai FTAs, Chirathivat (2007) draws only on overall utilization rates and shortly after implementation (2005-2007) when many tariffs have not been reduced yet.

2009). The main aims and arguments of this working paper are two. First, to analyze data on utilization of selected Thai and Malaysian FTAs at a high level of disaggregation and confront them with qualitative data on the domestic and international political economies of their formulation described by this Author elsewhere.<sup>12</sup> It will be posited that economic sectors that lobbied for FTA liberalization and saw their preferences embodied in the final FTA treaties, should make high use of FTA preferences. Secondly, sectoral utilization of FTAs will be examined in relation to utilization of GSP and DES/DDS preferences. The possibility of unilateral removal of GSP and DES/DDS preferences by the granting country creates uncertainty for firms using these schemes. In this line, it has been found that, other things equal, the greater the political trade dependence of a developing country on the United States and European GSP schemes, the higher the likelihood that the developing country enters an FTA with its Northern partners (Shadlen, 2008; Manger and Shadlen, 2013).<sup>13</sup> Consequently, this working paper will argue that goods covered by unilateral tariff reduction schemes are more likely to be included in FTAs and to be liberalized faster, and that producers that benefit from GSP or DES/DDS are also more likely to use FTAs preferential tariffs later.

Despite some sectoral differences between Thailand and Malaysia and among FTAs, analysis of official preferential trade records in both countries rendered similar findings and conclusions. It was found that overall utilization of Thai and Malaysian FTAs is higher than the projected by estimates and surveys, although in most cases still low by the standards of well-established FTAs in other regions. However, low overall FTA utilization rates hide

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<sup>12</sup> See working paper by this Author (also in this LSE's International Development Working Paper series) entitled: "Formulation of East Asian Free Trade Agreements: Top-down, bottom-up and across Borders. Government-Private Sector Consultations and Business Lobbying in the Policymaking of Thai and Malaysian Bilateral Free Trade Agreements".

<sup>13</sup> Most of these North-South bilateral FTAs are highly asymmetrical with developing countries surrendering policy space in exchange for securing market access provided by the GSP (Shadlen, 2005; Shadlen 2008).



significant sectoral variability and sectors that lobbied for FTA liberalization and/or use GSP and DES/DDS have made higher utilization of Thai and Malaysian FTAs.

The rest of the paper is organized as follows. Next two sections will briefly outline the Thai and Malaysian FTAs object of the study. Section four develops the theoretical framework and hypotheses that would be confronted with empirical evidence presented in sections five and six. Section seven discusses findings and concludes.

## **2. Thai preferential trade regimes with Australia and Japan**

In addition of being party to WTO, Thailand is founding member of AFTA. In East Asia, Thailand was only second to Singapore to jump into the FTA bandwagon although its initial rush for FTAs has slowed down since 2006. As of August 2013, Thailand has implemented five bilateral trade agreements plus, as member of ASEAN, five regional ASEAN+1 FTAs.<sup>14</sup> Of these, the most relevant bilateral FTAs for Thailand in terms of trade value are those with Australia and Japan.

Australia has historically ranked among the main trading partners for Thailand. Trade flows with Australia are highly concentrated, dominated by petroleum and mineral resources in the import side, and by automobiles and jewelry among exports (Trade Map database). Thailand is eligible to preferential tariffs under the Australian GSP program but there is no information on its utilization as Thai exporters are not required to file PCOs (see footnote 10). The Thailand-Australia FTA (TAFTA) was the first comprehensive FTA signed by Thailand with a developed country. Businesses potentially affected by the accord tried to influence its formulation (see working paper of footnote 12). Thai textiles and garments

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<sup>14</sup> See Table 1 in the working paper by this Author referred in footnote 12. ASEAN+1 refer to FTAs anchored around ASEAN. ASEAN has FTAs with China, Japan, Korea, Australia/New Zealand and India and tend to be less comprehensive and provide for slower liberalization than their respective bilateral agreements.

producers, facing at the time strong competition in the Australian market from other developing countries, proactively lobbied for the agreement.<sup>15</sup> Field research also found strong support for the TAFTA among the jewelry and food processing sectors. Conversely, Thai dairy producers and small-scale farmers, expected to lose from TAFTA, opposed it. But the key sponsors of TAFTA were automotive firms. Since the late 1990s, Thailand has become the Southeast Asian hub for international carmakers and the Thai government has protected the automotive industry, dominated by Japanese firms, behind high import tariffs (reviewed in Natsuda and Thoburn, 2013). Carmakers based in Thailand supported liberalization of the sector within ASEAN as to rationalize procurement and production strategies but they have always opposed any liberalization by Thailand outside ASEAN. However, being Australia the single largest market for Thailand-made vehicles and having presence in both countries, Japanese and American carmakers lobbied both governments for reciprocal liberalization of vehicles and automotive parts in TAFTA. The final TAFTA treaty, which entered into effect in 2005, established the progressive but full opening of the automotive sector in both countries, granted improved access in Australia to Thai textiles and garments and provided the Thai dairy sector with up to twenty years to fully liberalize (DFAT, undated).

For Thailand, Japan has traditionally been not only its main investor and source of imports but also a major export market.<sup>16</sup> Although some key Thai exports are not covered by the Japanese GSP (e.g., many agricultural products, some sensitive textiles and garments, footwear) and others receive only partial tariff reduction (e.g., processed food) (UNCTAD, 2006; UNCTAD, 2011; Japanese Customs, undated), around 10% of all Thai exports to

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<sup>15</sup> Least-developed countries enjoyed lower tariffs from the Australian GSP program.

<sup>16</sup> Japan is the second export destination for Thailand, behind the United States until 2009 and China since then (Trade Map database).

Japan in 2005 took place under this scheme (data provided by the Thai Ministry of Commerce: Japan Customs, undated; see below).<sup>17</sup>

Through the Japan-Thailand Economic Partnership Agreement (JTEPA), Thailand hoped to improve access in Japan for its agricultural and processed food products, textiles and garments and jewelry items as well as attract further investment (see working paper of footnote 12). JTEPA was also sought by Japanese businesses looking to reduce high tariffs prevailing in the Thai automotive and steel industries, to integrate the textile and garment industries at the ASEAN level and to extract concessions from Thailand in investment and services (MOFA, 2003). Consequently, Japanese textile and food producers and their trading companies favored the agreement. But, as in TAFTA, it was the automotive sector where business efforts to influence JTEPA were more intense (see working paper of footnote 12). Japanese carmakers produce in Thailand a wide range of automobiles and dominate local sales and exports but, at the time of negotiations, they still imported from Japan higher-engine luxury cars, 30% of all automotive parts and 80% of the flat rolled steel used by the industry. The Thai government did not want that JTEPA could make redundant existing or future investment by international carmakers. Therefore, in the final agreement, implemented in November 2007, Thailand accepted the progressive liberalization of automotive parts and steel but only a reduction from 80% to 60% in the tariffs on luxury vehicles and left unchanged those on smaller-engine cars. In turn, Japan eliminated tariffs on Thai garments and textiles, footwear, jewelry, plastics, processed food and established within quota tariff reductions on some agricultural products (METI-JTEPA, undated).

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<sup>17</sup> Between 2000 and 2005, Thailand accounted for 8-10% of all Japanese imports under GSP preferences and was second only to China as beneficiary of the program (Komuro, 2006).

### 3. Malaysian preferential trade regimes with Japan

As Thailand, Malaysia is also founding member of WTO and AFTA. Although initially reluctant to enter into bilateral FTAs, fear of exclusion from those signed by competing countries prompted Malaysia to initiate FTA negotiations with some of its key trade partners. In addition to AFTA and the five regional ASEAN+1 FTAs, as of August 2013 Malaysia has six bilateral FTAs in force (see Table 2 of working paper in footnote 12). However, only for the oldest, the Malaysia-Japan economic partnership Agreement (MJEPA), implemented in 2006, there is disaggregated historical data on PCOs for exports.<sup>18</sup>

Historically, Japan has been the main source of imports for Malaysia and a major export market.<sup>19</sup> Around 12% of Malaysian exports to Japan during the mid-2000s benefited of the Japanese GSP, being these highly concentrated in palm oil, wood and furniture and plastics and chemicals that receive full exemption or highly reduced tariffs (data provided by the Malaysian Ministry of International Trade and Industry; Japan Customs, undated; see below).<sup>20</sup> Support for MJEPA among Malaysian businesses was centered among producers of palm oil, textiles and garments, chemicals and plastics that faced high tariffs and non-tariff barriers in Japan (see also working paper of footnote 12). On its part, Japan sought the elimination of all type of trade barriers on the highly protected automotive sector as well as those existing on steel and electrical machinery.<sup>21</sup> As in Thailand, negotiations stumbled around the automotive sector, as the Malaysia government sought to protect its national car manufacturers from Japanese imports. By the final text, which entered into effect in June

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<sup>18</sup> When field research for this project started in July 2006, Malaysian only had bilateral FTAs with Japan and Pakistan, the latter just implemented and with a small trading volumes. On recent years, Malaysia has signed bilateral FTAs with New Zealand (August 2010), India (July 2011), Chile (February 2012) and Australia (January 2013).

<sup>19</sup> Only since 2008 has Japan been surpassed by China and, more recently, by Singapore as largest source of imports. On the export side, Japan has been only behind Singapore, and since 2009 also to China, as the main destination (Trade Map database).

<sup>20</sup> During 2000-2005, Malaysia was either third or fourth largest user of the Japanese GSP program, capturing 6.6-7.2% of Japanese imports under the scheme (Komuro, 2006).

<sup>21</sup> Malaysian producers of iron and steel also active during MJEPA negotiations but not so much as to expand their market in Japan as to avoid sudden liberalization of sensitive items as it had occurred in previous FTAs. See working paper by this Author referred in footnote 12.

2006, MJEPa established the full opening of the Malaysian automotive and steel sectors by 2015 while Japan eliminated tariffs on palm oil, chemicals, plastics and textiles and garments (METI-MJEPa, undated; MITI, undated; working paper of footnote 12).

#### **4. Analytical framework: Linking FTA utilization to sectoral business interests and binding of unilateral preferential tariff schemes**

A number of studies have questioned the economic relevance of recent East Asia FTAs (e.g., Sally, 2006; Ravenhill, 2008b; Ravenhill, 2010). This paper started off from the obvious proposition that FTAs are selectively used by those exporters that benefit from them. Consequently, overall FTA utilization rates provide little information about the relevance of an FTA to a given economic sector and that could only be assessed through analysis of disaggregated utilization data.

During the course of this project, that started in late 2006, two studies analyzing disaggregated data on the utilization of East Asia FTAs have been published, both for Thai FTAs (Kohpaiboon, 2010; Athukorala and Kohpaiboon, 2011). The former examines the utilization of AFTA, TAFTA and JTEPA by Thai exporters in 2008 and finds that utilization was concentrated in highly traded items. Through an econometric analysis, it also shows that FTA utilization positively correlates with the tariff savings provided by the FTA and inversely with ROOs (see below). The study estimates that ROOs in these FTAs amount to an excess tariff between 2% and 10%.<sup>22</sup> Athukorala and Kohpaiboon (2011) examines the top ten most traded items under TAFTA and compares their share in total trade flows before and after implementation of the agreement. Interestingly, these authors found that TAFTA has

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<sup>22</sup> The restricting effect of ROOs in the utilization of Thai FTAs in Kohpaiboon (2010) was corroborated by other econometric studies (Intaravittak et al., 2011) and is in line with the excess tariff equivalent of ROOs in other FTAs (Estevadeordal et al., 2004). A more detailed discussion of the variables specified in Kohpaiboon's (2010) model is described below.

not significantly altered previous bilateral trade patterns except for an increase in the share of cars exported by Thailand (see below). The study downplays the trade creating effects of FTAs and concludes that the largest users of FTAs are already established exporters and that supply factors and ROOs may be more important than tariff savings in FTA utilization.

While these studies are illuminating, several issues are worth discussing here. First, the trade creation effect of an FTA may be difficult to ascertain when trade flows are very concentrated on a small number of goods, as occurs for many countries. Second, FTAs should be valued not only for their trade creation effects but also for establishing a legal commitment to bind preferential tariffs at or below the multilateral applied tariff level (see below). Third, utilization of a particular FTA should be related to evolving dynamics in general and preferential trade flows over time. Fourth, as important as what sectors are the main overall users of an FTA is to investigate what sectors use FTA preferences to the fullest extent, independently of trade value, placing FTA utilization into context with the political economies at the origin of that FTA. Lastly, and related to the first point, FTAs should also be considered for their capacity to replace existing unilateral preferential tariff schemes. I will now take these arguments in turn.

As advanced in the Introduction, much of the liberalization in East Asia over the last two decades has taken place through *unilateral* reductions in applied tariffs, often linked to export promotion strategies (e.g., DES/DDS). East Asian unilateral liberalization has been put forward as an argument for the dispensability of ongoing FTAs (Ravenhill, 2010). However, in addition to the uncertainty about their potential removal by the granting country inherent to any unilateral preferential scheme, pockets of high tariffs and tariff peaks on both finished good and parts and components still exist in many East Asian countries. A

substantial share of tariffs are either not bound or bound at a higher level than the applied tariff, creating a binding overhang.<sup>23</sup> Independently of how low applied tariffs in East Asia may have gone over time, FTAs create legal commitments that bind tariffs below the bound tariff level at WTO, thus increasing predictability in trade exchanges. An illustration of the value that developing countries attach to their control over binding overhangs is found in the concession schedules offered by Thailand and Malaysia in their FTAs. This research found that for a small share of tariff lines, the initial tariff granted by the FTA is above the applied most-favored-nation (MFN) tariff (DFAT; METI-JTEPA; METI-MJEPA) (see below).

Article XXIV of the General Agreement on Tariffs and Trade establishes that FTAs should fully liberalize a significant share of trade within a reasonable period. While these requirements are most often interpreted as 90% of existing trade and 10 years, respectively, sensitive items in some FTAs are liberalized over longer periods or excluded altogether. When negotiating FTA concessions on sensitive items—which tariffs are either not bound under WTO or bound with large overhangs—it would be expected that a motivated government, one that attaches value to its control over binding overhangs, would strategically use FTA flexibilities regarding coverage and sequencing.

**Hypothesis 1:** *A motivated government would strategically negotiate its FTAs to ensure that sensitive goods—with unbound tariffs or large binding overhangs at the multilateral level—are excluded or receive FTA duties that are initially above applied tariffs and/or phased out over long periods.*

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<sup>23</sup> Tariff binding refers to a country's commitment under WTO rules not to increase the duty on a given item over the specified rate once it has been bound. In 2006, at the time when the FTAs examined in this paper were negotiated, the average MFN tariff on non-agricultural products applied in Thailand was 3.1 times higher (25.5% versus 8.2%) than the average bound tariff, 1.8 times in the case of Malaysia (14.9% versus 7.9%) (WTO, 2006). Some developed countries also have significant tariff overhang. For instance, for the same year, the average applied tariff on non-agricultural goods in Australia tripled the average bound tariff (11.0% versus 3.9%) (WTO, 2006).

Most FTAs establish several tracks for liberalization. An initial group of tariff codes, mostly products that attract low multilateral tariffs—or as found in this research, items that benefit from unilateral preferential treatment (see below)—receive immediate, often complete, liberalization. For the bulk of goods, tariffs are reduced progressively, frequently with a lag time before any liberalization occurs, until they reach certain level or are completely eliminated. Finally, in some FTAs, a small set of highly sensitive products is excluded from any tariff liberalization. It could be therefore expected that: a) FTA utilization should increase over time, often with a lag and in successive waves, and b) as more items are progressively liberalized, concentration in FTA utilization should decline. A force in the opposite direction could potentially counter the last proposition. Empirical evidence indicates that FTA liberalization prompts members of the bloc to reduce their external MFN tariffs (Ornelas, 2005a; Ornelas, 2005b; Calvo-Pardo et al., 2011). In that regard, FTAs could be considered as a mere accelerated track with respect to multilateral liberalization. As the members of an FTA bind their external MFN tariffs at the level previously established by the FTA, the preferential tariff margin granted by the FTA is progressively eroded and, consequently incentives for FTA utilization decrease while concentration of its use increases.<sup>24</sup>

**Hypothesis 2:** *Sequencing of liberalization in FTAs should translate into low but concentrated FTA utilization at initial stages of implementation. As tariffs are phased out, FTA utilization should increase and concentration of its use*

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<sup>24</sup> In an FTA and for a given good code and point in time, preferential tariff margin refers to the difference between the MFN applied tariff and the preferential tariff granted by the FTA (same applies for GSP or DES/DDS preferences, see below). These opposing trends make falsifiability of the hypothesis more difficult and highlight the need for analyses on FTAs utilization to consider how the preferential tariff margin for any given good evolves over time.



*decline. On the other hand, a subsequent multilateralization of FTA preferences should reduce incentives for FTA utilization and increase concentration of its use.*

Although numerous studies question the participation of the private sector in the formulation of East Asian FTAs (e.g., Ravenhill, 2010 and references therein; working paper of footnote 12), other works, including research for this project, have argued for the important role played by business groups in the initiation and policymaking of many FTAs in the region (Solis, 2003; Manger, 2005; Yoshimatsu, 2005; working paper of footnote 12). Empirical evidence in these latter studies indicates that selected sectors (and firms) pressured governments in support or against specific policy choices (e.g., tariffs, ROOs) in FTAs and that, in many instances, these preferences were eventually reflected in FTA treaties.<sup>25</sup>

It could be argued that sectors and firms that saw their *ex-ante* interests embodied in FTAs, should make high utilization of FTAs once these are implemented.<sup>26</sup> However, two considerations are in order here. First, the fact that a sector accounts for a high absolute share in the utilization of an FTA does not necessarily mean that that sector uses FTA preferences to the full extent. Conversely, sectors accounting for small volumes of trade under an FTA could potentially use its preferences for all their exports. Even if FTA utilization by these sectors is not revealed by a ranking of top overall users (Kohpaiboon, 2010; Athukorala and Kohpaiboon, 2011), the FTA could be even more relevant for these lower-volume exporters

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<sup>25</sup> Finding evidence of lobbying by a given sector (or firm) for specific policy choices does not necessarily mean that it gets translated into the final FTA text as preferences and lobbying pressures could be modulated (or cancelled out) by the opposing preferences and pressures of other actors as well as by cross-sectoral concessions. In this research, actors' preferences, evidence of lobbying and success in affecting FTA policy have been assessed and cross-validated through extensive semi-structured interviews of a wide range of elite actors (see also working paper by this Author referred in footnote 12).

<sup>26</sup> Accordingly, one would expect high utilization of TAFTA among automotive firms or of JTEPA by Thai exporters of processed food, textiles and garments and jewelry. Likewise, it could be projected a high use of MJEPA by exporters of palm oil, plastics, chemicals and garments.

that may have also lobbied for it. Therefore, political economy analyses of FTA utilization should pay attention to sectors beyond the largest absolute users and trace back utilization of an FTA to the economic actors that participated in its formulation, independently of overall trade volumes. Second, official records gained for this research provide data on preferential trade flows for each tariff code but does not identify which firms used FTA (or GSP and DES/DDS) preferences, precluding us from a firm-level analysis of FTA utilization.<sup>27</sup> This is relevant because, as it will be argued elsewhere by this Author (see working paper of footnote 12), FTAs could grant selective rents to specific firms within a sector and an FTA area.

**Hypothesis 3:** *Independently of trade volumes, business sectors that succeeded in affecting FTA formulation toward greater or faster liberalization should make high use of FTA preferences.*

In addition to regional trade agreements, breach of WTO's principle of non-discrimination is also allowed for GSP and related schemes by which developed countries grant unreciprocated preferential tariffs to selected items originating from developing countries. To benefit from GSP preferential tariffs, that range from zero to just below MFN applied tariffs, products must comply with established ROOs. Most GSP programs also incorporate product- and/or country-specific export ceilings, above which preferential tariffs no longer apply (UNCTAD, 2006; UNCTAD, 2011). Beneficiary countries could also be delisted (graduated) once they reached a certain development status.

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<sup>27</sup> Although contained in PCO applications, Thai and Malaysian trade authorities did not make this information available to us alleging that would violate confidentiality regarding firms' procurement patterns.

Although very different in their nature and purpose, DES/DDS represent another widely used unilateral tariff exemption scheme. They grant full rebate of import duties on specified capital goods and/or on intermediate inputs that are later incorporated into final goods destined to exports. DES/DDS are often offered as part of export- and investment-promotion strategies.<sup>28</sup> Some DES/DDS, particularly those linked to investment in a specific economic activity or geographical area, are subject to expiration.

In addition to ceilings and expiration in their use, GSP and DES/DDS are subject to removal at the discretion of the granting country. FTAs offer the possibility to make GSP and DES/DDS tariff reductions permanent and non-removable. For the GSP programs offered by the United States and the European Union, it has been demonstrated that the larger is the share of exports that developing country trades under GSP preferences, and therefore its political dependence on them, the higher the likelihood of that country signing an FTA with the United States or the European Union (Shadlen, 2008; Manger and Shadlen, 2013).

It is well accepted that economic actors are more likely to mobilize to avoid losses from liberalization than to secure gains from it (Baldwin, 1995). It is therefore posited here that business sectors in Thailand and Malaysia that benefit from GSP and DES/DDS will support FTA liberalization, especially if suffering from product- or country-specific ceilings and/or as the deadline for graduation approaches. Once the FTA is implemented, those sectors would be expected to be among the first to use its preferences and to use them to a high degree.

It could also be argued that when the country granting GSP preferences negotiates an FTA with one of the beneficiaries, products covered by the GSP program will be liberalized

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<sup>28</sup> DES/DDS are part of the policy toolkit of many countries around the world but they have been particularly prevalent in East Asia.

deeper and faster.<sup>29</sup> Nevertheless, because of the argument in Hypothesis 1, FTA liberalization of these products could still take some time to reach the preferential rate granted under GSP, particularly for items subject to product- and country-specific GSP ceilings. In any case, as FTA liberalization progresses, utilization of GSP and DES/DDS schemes would be expected to decline and their use to concentrate on fewer items.

**Hypothesis 4:** *Specific sectors that benefit from unilateral tariff reduction schemes would be expected to support FTA liberalization ex-ante and, once FTAs are implemented, to make early and high use of their preferences. Utilization of GSP and DES/DDS programs by these sectors would decline as FTA liberalization progresses.*

To test these hypotheses, I analyzed data on trade flows using the preferences provided by selected Thai and Malaysian FTAs and related them to: a) variables potentially affecting FTA utilization, including trade under GSP and DES/DDS programs, and b) qualitative information on the policymaking of these FTAs obtained in the course of semi-structured interviews with government officials and private sector representatives in both countries.<sup>30</sup> Although results in both case studies follow a similar pattern, they will be taken in turn for simplicity of exposition.

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<sup>29</sup> This is less likely to occur in the case of DES/DDS given the more limited nature of these programs.

<sup>30</sup> In addition to preferential trade records (see below), primary research involved 212 in-depth semi-structured interviews with government officials, private sector representatives, academics and civil society in Thailand and Malaysia during two independent trips in 2008 and 2009 (see working paper by this Author referred in footnote 12 for further details).

## 5. Political economy and variables affecting utilization of Thai FTAs

As advanced earlier, Kohpaiboon (2010) found that utilization of AFTA, TAFTA and JTEPA by Thai exporters in 2008 is directly correlated with the preferential tariff margin and inversely with ROOs. The study also found positive correlation between utilization of these FTAs and factors that lower administrative costs in the application of PCOs. Thus, factors increasing economies of scale in processing PCOs (e.g., trade volume before the FTA) or variables associated with higher administrative expertise (e.g., foreign presence as output share and share of conglomerate firms in a sector) correlate with higher FTA utilization. In contrast, by hindering compliance with ROOs, a high share of trade in parts and components in a sector has a negative impact on FTA utilization (Kohpaiboon, 2010).

### 5.1 Source of data and methodology

The following primary data were obtained for this research:

- a) *Value of bilateral trade flows between Thailand and either Australia or Japan.*

Data was retrieved from the Trade Map database (Trade Map, undated), mostly at four-digit level of specification (HS4, around 1,300 lines per year and for each trade direction) in the Harmonized Commodity Description and Coding System, although some analyses were also performed at six-digit level (HS6, around 5,700 lines per year and for each trade direction).<sup>31</sup>

Data collected covered from January 2004 to up to July 2013.<sup>32</sup>

- b) *Trade values for Thai exports under TAFTA and JTEPA.* Data on PCOs was provided by the Thai Ministry of Commerce at the HS6 level of specification. All the trade

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<sup>31</sup> The Harmonized Commodity Description and Coding System is a tariff nomenclature established by World Customs Organization ([www.coomd.org](http://www.coomd.org)). It classifies products in 99 chapters (2-digits, HS2, 96 general chapters plus three special chapters), which are subclassified in headings (4-digits, HS4) and subheadings (6-digit, HS6). All countries must use the same nomenclature for HS2 through HS6 but could also adopt additional subdivisions at higher level of specification (8- and 10-digit). The nomenclature is periodically revised, the latest in 2012. Throughout this research project, the 2007 version was used as all data provided by trade authorities were in that version.

<sup>32</sup> Although preferential trade data for Thai imports and exports were only available until October 2009 and December 2011, respectively (see below), overall trade flows have been examined up to July 2013.

data provided by Thai authorities was in 2007 version of the Harmonized System. Data was then collapsed into HS4 level to simplify calculations, compare with DES/DDS data (provided at HS4 level) and homogenize product categorization with respect to Malaysian FTAs (provided at HS4 level). For both FTAs, PCOs covered from their implementation date (January 2005 for TAFTA and November 2007 for JTEPA) up to December 2011.

c) *Trade values for Thai exports under Japanese GSP.* Data was provided by the Thai Ministry of Commerce at the HS6 level and collapsed HS4. PCOs for exports under Japanese GSP covered from January 2004 until December 2011. Of note, although for a very small number of tariff lines, Japanese GSP preferences were still used during 2011. No information is available regarding the use of the Australian GSP scheme as compliance with ROOs involves automatic self-reporting.

d) *Trade values for Thai imports under TAFTA and JTEPA.* Data was provided by the Thai Customs Department (Ministry of Finance) at the HS4 level. Records covered from January 2005 to October 2009 for TAFTA, and from November 2007 to October 2009 for JTEPA.

e) *Trade values for Thai imports from either Australia or Japan under DES/DDS.* Data was provided by the Thai Customs Department at the HS4 level. Records included imports under the two main unilateral tariff exemption schemes, namely, the privileges granted by the Board of Investment and the Customs Department.<sup>33</sup> Despite their different nature, for simplification of analysis, data on imports under both schemes were combined.

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<sup>33</sup> The Board of Investment provides incentives to firms, foreign or Thai, investing in the country in selected activities and regions. Incentives include exemption of import duties on capital equipment and parts and components and varying widely depending on the sector and geographical location. These privileges are given for a limited period post-establishment and although could be reactivated by further investment in the same productive location, as time passes, they tend to phase out. Section 19bis of the Thai Customs Act (1939) establishes the refund of duties paid on imported goods that are used in the production, mixing, assembling or packing of goods destined for export. In contrast to Board of Investment privileges, tariff reductions under Section 19bis have no deadline although they are susceptible to restrictions or cancellation by the Thai government without breaking WTO rules.

Records covered from January 2004 to October 2009 for imports from Australia and from January 2007 to October 2009 for imports from Japan.

f) *Applied and bound multilateral tariffs in Thailand, Japan and Australia*. Data was retrieved from the WTO's Integrated Data Base (WTO-IDB, undated) at HS6 level (around 5,500 lines per year) and aggregated down to HS4 level (around 1,300 lines per year). Tariff data was collected for the period between January 2004 and December 2011.

g) *Tariff schedules under TAFTA and JTEPA*. Data was retrieved from the respective FTA treaties, available from government websites (DFAT, undated; METI-JTEPA, undated). Tariff schedules in these texts are included at HS8 and HS6, respectively, and were aggregated down to HS4. Tariff schedules in both FTAs were collected from their implementation date (January 2005 for TAFTA and November 2007 for JTEPA) up to December 2011.

g) *Preferential tariffs under Japanese GSP*. Data was retrieved from the website of Japan's Customs and Tariff Bureau (Ministry of Finance) (Japan Customs, undated) for the period between January 2004 and December 2011. Tariff data at HS8 level was aggregated down to HS4 for every year analyzed.

h) *Rules of origin in TAFTA and JTEPA*. Data was retrieved from the respective FTA treaties, available from government websites (DFAT, undated; METI-JTEPA, undated).

To analyze utilization of FTAs—as well as GSP and DES/DDS—and the variables affecting it, primary data were computed to construct and calculate the following variables:

a) *Preferential trade value*: value of trade under the preferences granted by TAFTA, JTEPA, Japanese GSP or DES/DDS using PCOs and Customs records.

b) *Utilization rate (UR)*: Ratio, expressed as a percentage, between the value of exports and/or imports under TAFTA, JTEPA, Japanese GSP, or DES/DDS and the value of total exports or imports flows for overall trade for a given sector or good code up to HS4 or HS6 level.<sup>34</sup>

Two methodological considerations should be noted here. First, a significant share of the tariffs applied by countries, especially developed ones, is set at zero. For instance, in 2008—a middle year for the period of this study—Japan and Australia applied no tariff to 53.7% and 48.8% of lines, respectively. The same year Thailand and Malaysia applied a tariff of zero to 18.3% and 57.3% of their lines (WTO, 2009). It could be therefore argued that, in fairness, the UR of an FTA should be calculated only for lines where the FTA offers a preferential margin above zero with respect to applied tariffs. In fact, recent reports by the Thai Commerce on overall UR have shifted to this methodology. However, and unless indicated otherwise, FTA URs in this paper are referred with respect to values for total trade flows. Second, as noted by Kohpaiboon (2010), UR calculated out of PCOs could sometimes exceed 100%. This occurs because PCOs are requested before the good is actually traded and exporters could request PCOs for a volume of trade slightly higher than final actual trade. Whenever this occurred UR was adjusted to 100%.

c) *UR rank*. Ranking of good codes at HS4 (or when appropriate, also at HS6) in descending order of their UR.

d) *UR rank in reverse order*: As the UR rank but codes are ranked in ascending order of UR.

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<sup>34</sup> In strict sense, applying this methodology would require estimating, for each tariff code, the minimum preferential tariff margin that exceeds the cost of complying with ROOs.



e) *Utilization share*: Share, expressed as percentage, of the trade value for a given code and year (or period) under a preferential regimes (TAFTA, JTEPA, GSP, DES/DDS) with respect to the total value of goods traded under that regime during that year (or period).

f) *Utilization share rank*: Ranking of codes at HS4 (or when appropriate, also at HS6) in descending order of their utilization share.

g) *Utilization share in reverse order*: As the utilization share rank but the ranking of codes is run in ascending order of utilization share.

h) *Preferential tariff margin*: As defined earlier, preferential tariff margin refers to the difference between the MFN applied tariff and the preferential tariff granted by the FTA, GSP or DES/DDS for a given good code and year.

i) *ROO restrictiveness index*. ROOs were obtained from the official FTA treaties and aggregated from H6 to HS4 level, always maintaining the highest level of restriction. ROO restrictiveness was then codified in a 1 to 7 scale as per Cadot et al. (2006).<sup>35</sup>

## **5.2. Utilization of TAFTA and JTEPA**

Since its implementation in January 2005, Thai exporters have made a high overall use of TAFTA preferences, most often exceeding 60% (Table 1). Considering that at the time Australia had bound as duty-free 20.9% of its lines and applied zero tariffs to 49.8%, TAFTA UR could be considered virtually complete. In contrast, utilization of TAFTA for imports of Australian products has been much lower and, at least for the period for which data are available, has shown a declining trend (Table 1).<sup>36</sup>

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<sup>35</sup> Many analyses of the impact of ROOs in American or European FTAs (Productivity Commission, 2004; Cadot et al., 2006; Portugal-Perez, 2009) code ROO restrictiveness into an ordinal index, often derived from the one originally constructed by Estevadeordal (2000).

<sup>36</sup> Of note, whereas TAFTA URs for Thai exports in Athukorala and Kohpaiboon (2011) correspond with those calculated for this paper, these authors reported lower values for TAFTA URs for imports. The reason for this discrepancy is unknown. In any case, Athukorala and Kohpaiboon (2011) also found declining URs of TAFTA for Thai imports.

**Table 1: Utilization rates (%) of preferential trade regimes in Thai exports and imports to/from Australia**

Regime*	Trade Direction	2004	2005	2006	2007	2008	2009	2010	2011
TAFTA (Jan 2005)	EXPORTS		67.11	63.00	70.76	62.50	50.29	59.90	62.94
TAFTA (Jan 2005)	IMPORTS		21.94	33.84	22.82	11.19	8.36**	N/A	N/A
DES/DDS Australia	IMPORTS	15.92	17.25	20.56	17.84	14.71	6.48**	N/A	N/A

Source: Calculations by the Author using data from official records

\* Date in parenthesis refers to the date of implementation of TAFTA

\*\* Only for the period January-October 2009

As in Athukorala and Kohpaiboon (2011), I found that utilization of TAFTA, for both exports and imports, is highly concentrated as the top 20 items at HS4 level—which comprises around 1,300 items—accounted for around 80% of all trade under TAFTA (Table 2). Concentration was even higher among the top 20 imported items from Japan that used DES/DDS (see below). However, it is important to note that overall bilateral trade is equally concentrated (Table 2), even after petroleum products, one of the main Thai imports from Australia, are excluded (see also below). Although still early to conclude, in line with Hypothesis 2, there has been a slight decline in the concentration of TAFTA utilization for imports over the period studied, despite an opposite trend in overall imports from Australia (Table 2).

**Table 2: Share of Top 20 items in Thai exports and imports to Australia (total and preferential trade flows) \***

Regime	2004	2005	2006	2007	2008	2009	2010	2011
Top 20 overall exports (% total exports)	64.13	64.36	70.39	70.77	74.15	78.79	74.78	
Top 20 exports under TAFTA (% total exports under TAFTA)		85.56	80.14	83.34	80.70	80.55	81.34	N/A
Top 20 overall imports (% total imports)	81.95	86.08	84.09	84.79	85.34	84.39	88.16	87.32
Top 20 imports under TAFTA (% total imports under TAFTA)		88.92	88.08	81.66	74.69	78.03**	N/A	N/A
Top 20 imports under DES/DDS (% total imports under DES/DDS)	94.20	90.31	92.74	92.04	91.67	86.73**	N/A	N/A

Source: Calculations by the Author using data from official records

• Top 20 items at HS4 level

\*\* Only for January-October 2009

Although Japan has bound 100% of its tariffs and binding overhangs are small, average bound and applied tariffs in the agriculture sector in 2006 were 28.4% and 24.3%, respectively. In line with Hypothesis 1 and reflecting its historical protectionist stand on agricultural items, Japan excluded rice and sugar from its concessions to Thailand in JTEPA, two products that do not receive tariff reductions in the GSP program. In turn, Japan provided full elimination of tariffs within five years of fruits and vegetables, fresh and processed seafood and processed chicken, all key Thai exports that already benefited from GSP preferential treatment.

In the case of Thailand, and also confirming Hypothesis 1, I found that for some goods with unbound tariffs or with significant binding overhang, Thailand initially offered in JTEPA preferential tariffs that were above the applied MFN tariff. For instance, of the top 20 items at HS6 that Thailand imported from Japan in 2005 (before JTEPA implementation), sixteen were either unbound or bound at two to six times the applied tariff. Interestingly, Thai concessions in JTEPA for seven of these sixteen items initially exceeded by 25-100% the applied tariff and only reached the applied tariff level several years after implementation.

Utilization rates of JTEPA for exports and imports have been significantly lower than for TAFTA, about a third in both directions (Table 3). Once again, UR is much higher when taking into account that in 2006, a year before JTEPA entered into force, Japan had 55.1% of its tariffs bound as duty-free. When UR is calculated only for items for which JTEPA offers a preferential tariff margin greater than zero, the UR of JTEPA by Thai exporters in 2011 amounted to 71.2%.

In the import side, I only obtained information of JTEPA utilization for the first 23 months (Table 3). Despite surveys indicating the eagerness of Japanese subsidiaries in

Thailand for an FTA that liberalize imports of parts and components (JETRO, 2007), utilization of JTEPA preferences for import of Japanese products was very low during this period. This could be explained on the fact that Thailand liberalization schedules take longer than Japanese ones to provide significant preferential tariff margins as well as on the higher use of DES/DDS (Table 3 and see below).

**Table 3: Utilization rates (%) of preferential regimes in Thai exports and imports to/from Japan**

Regime*	Trade Direction	2004	2005	2006	2007	2008	2009	2010	2011
JTEPA (Nov 2007)	EXPORTS				20.27	21.30	25.37	23.24	23.57
Japanese GSP	EXPORTS	12.28	9.67	8.17	7.13	0.66	0.57	0.52	0.19
JTEPA (Nov 2007)	IMPORTS				3.25**	7.72	3.50***	N/A	N/A
DES/DDS Japan	IMPORTS	N/A	N/A	N/A	44.3	28.94	8.27***	N/A	N/A

Source: Calculations by the Author using data from official records

\* Date in parenthesis refers to the date of implementation of JTEPA

\*\* Only for the two months since implementation (November-December 2007)

\*\*\* Only for January-October 2009

Although overall trade flows between Thailand and Japan are not as concentrated as for Thailand-Australia bilateral trade, utilization of JTEPA is also highly concentrated within the top 20 items at HS4, especially for imports (Table 4). For the short period for which data are available, concentration in the utilization of JTEPA for imports has declined (Hypothesis 2). Utilization of unilateral schemes for both exports (GSP) and imports (DES/DDS) is also highly concentrated (see below).

**Table 4: Share of Top 20 items in Thai exports and imports to Japan  
(total and preferential trade flows) \***

Regime	2004	2005	2006	2007	2008	2009	2010	2011
Top 20 overall exports (% total exports)	45.80	46.44	47.21	45.50	47.60	44.44	44.00	43.39
Top 20 exports under JTEPA (% total exports under JTEPA)				71.74**	72.90	73.21	67.34	N/A
Top 20 exports under Japanese GSP (% total exports under Japanese GSP)	61.04	67.08	64.00	61.90	90.76	96.10	100	100
Top 20 overall imports (% total imports)	50.73	49.77	44.63	46.70	43.90	45.10	44.99	45.39
Top 20 imports under JTEPA (% total imports under JTEPA)				96.42**	91.70	80.29***	N/A	N/A
Top 20 imports under DES/DDS (% total imports under DES/DDS)	N/A	N/A	N/A	60.53	59.42	55.64***	N/A	N/A

Source: Calculations by the Author using data from official records

\* Top 20 items at HS4 level

\*\* Only for the two months since implementation (November-December 2007)

\*\*\* Only for January-October 2009

### ***5.3. Political economy of TAFTA and JTEPA utilization***

Empirical evidence indicates that over time the private sector in Thailand has been increasingly involved in the formulation of Thai FTAs. For some economic sectors and FTAs, businesses have actually taken a proactive leading role and pushed the government to initiate negotiations (see working paper of footnote 12). Hypothesis 3 postulates that sectors that succeeded in their lobbying efforts in favor of FTA liberalization should make high use of preferential tariffs once the FTA enters into force. To test this hypothesis, quantitative data on disaggregated sectoral utilization of TAFTA and JTEPA were confronted with qualitative evidence of previous lobbying by those sectors in favor of these agreements.

As elaborated at length by this Author elsewhere (see working papers referred in footnotes 9 and 12), the main supporters of TAFTA were Japanese and American carmakers seeking to integrate Australia within the Thailand and ASEAN automotive network. Interestingly, between 2005 and 2011, out of the over 1,300 items tradable at HS4, just two codes, 8704 (pickup trucks) and 8703 (passenger vehicles), jointly accounted for 43-62% of

TAFTA utilization by Thai exporters (Table 5). In line with Athukorala and Kohpaiboon (2011), it was found that virtually 100% of Thai exports of vehicles to Australia in the period 2005-2011 took place under TAFTA preferences.

**Table 5: Top 20 items in Thai exports and imports under TAFTA and evidence of lobbying**

Top 20 items in Thai exports under TAFTA 2005-2011 *	Evidence lobbying **	Top 20 items in Thai imports under TAFTA 2005-2009**	Evidence lobbying***
Vehicles and automotive parts (8704, 8703, 8409,4011)	+	Metals, metal ores slag and articles thereof (2608,2609,7204,7208,7225,7403, 7601,7606, 7801,7901)	+
Air conditioners, washing machines, refrigerators, vacuum pumps and general machinery (8415, 8450,8418,8413,9414, 8419,8421,8409,8481)	+	Dairy products (0402,0406)	+
Preparation of fish (1604)	+	Edible fruits and nuts (0802,0805,0806, 0808)	
Articles of iron and steel (7306, 7308,7312)	+	Cereals and milling industries and preparations of cereals (1001,1003,1107, 1109,1901)	+
Jewelry (7113)	+	Automotive parts (8708)	
Plastics and components (3920,3923,3901, 3902,3907,3920)		Wool (5101)	
Furniture (9401,9406)		Dyes and pigments (3206)	
Electrical machinery and parts (8544,8501)		Animal feed (2301, 2309)	+
Cosmetics and toilet products (3305,3306)		Pharmaceutical products (3004)	
Paper (4802,4818)		Edible vegetables (0704,0706,0712)	+
Light boats (8905)		Wood and pulp of wood (4407,4707)	+
Optical equipment (9001)		Wine (2204)	
		Inorganic chemicals (2818)	
		Coal (2701)	
		Bovine meat (0201)	+

Source: Calculations by the Author using data from official records (\*) and semi-structured interviews conducted by the Author (\*\*)

\* Top 20 items at HS4 exported by Thailand to Australia under TAFTA preferences during January 2005-December 2011

\*\* Top 20 items at HS4 imported by Thailand from Australia under TAFTA preferences during January 2005-October 2009

\*\*\* Evidence of lobbying by producers of the indicated items (as described in the working paper by this Author referred in footnote 12), is coded by a “+” sign. No symbol indicates that field research could not find evidence of business lobbying, although it cannot be excluded that it actually existed

Important to the argument is to distinguish between the relative weight that preferential trade of a given item (or sector) has in overall FTA utilization—referred here as

UR share—and the extent to which importers/exporters of that item (or sector) have used FTA preferences—UR itself—, independently of whether this utilization translated into high overall trade volumes. Besides automotive products, TAFTA has also been critical for Thai export of other goods that, despite accounting for a small share in total utilization of TAFTA, have made almost complete utilization of preferential tariffs. Thus, during 2005-2011, Thailand-made goods at HS6 exported to Australia that used TAFTA preferences for more than 80% of their value include refrigerators and air conditioners, precious stones and jewelry, glass products, processed flour, fruits, and footwear, representing some of the sectors that pushed in favor of TAFTA during its formulation stage (Table 5 and working paper referred in footnote 9).<sup>37</sup> In contrast, while Thai garment producers proactively pushed for the liberalization of the Australian market and eventually got their preferences embodied in TAFTA, their UR has averaged 44.3%. The reason for this relatively low UR by Thai garment exporters is to be found in the fact that in 2005, coinciding with the entry into force of TAFTA, Australia multilaterally reduced its applied MFN tariffs on textiles and garments, thus eroding the preferential margin granted by TAFTA. This example supports Hypothesis 1 and illustrates how preferential FTA liberalization is often accompanied by subsequent (or parallel) tariff reductions at the multilateral levels (Ornelas, 2005a; Ornelas, 2005b). On the import side, use of TAFTA has been highly concentrated on importers of metal products and vegetables (Table 5).

As TAFTA liberalization schedules proceeded, the number of goods that utilized its preferences increased. However, high concentration in bilateral trade flows has meant that the largest users off TAFTA have barely changed over time. For the period analyzed, the

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<sup>37</sup> This analysis was conducted at HS6 level, in addition to the HS4 shown in Table 5, to increase specification in UR.

ranking of the top 20 items at HS4 by utilization share include 34 items in the export side and 35 in for imports (Table 5).

Hypothesis 3 is also supported in the case of JTEPA. Utilization of JTEPA by Thai exporters has been highly concentrated among sectors whose business associations proactively pushed for the deal (Table 6). In 2011, processed food, plastics and textile and garments jointly accounted for 65% of all Thai exports that used JTEPA preferences, with the first group taking the largest share. In contrast, concerted lobbying action in favor of JTEPA by Japanese and Thai producers of textiles and garments has not translated in high UR and utilization share, probably reflecting that the ASEAN-Japan FTA offers more flexibility for this sector. Still, Thai producers of some items (e.g., 6109 and 6115, underwear) have used JTEPA preferences almost to the full extent.

As described elsewhere by the Author (<sup>38</sup>), Thailand made very few concessions in JTEPA to liberalize its automotive industry despite strong pressure from Japanese carmakers. Still, and reflecting the strong original interest of these firms in the FTA, in 2009—the latest year for which data were made available to us—rolled steel and vehicles and automotive parts represented 46.1% and 21.1%, respectively of Thai imports under JTEPA.<sup>39</sup>

As in TAFTA, the items (and sectors) accounting for the largest utilization share in JTEPA have maintained fairly constant over time and, for the period for which data were obtained, of the top 20 items at HS4 include just 27 and 32 items in the export and import sides, respectively (Table 6).

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<sup>38</sup> See working papers by the Author referred in footnotes 9 and 12 as well as in another working paper published by this Author in this series entitled: “Negotiating Protection under overlapping Free Trade Agreements”.

<sup>39</sup> These figures are relatively high when it is considered that Thai tariffs on automotive products will be phased over several years (see Table 4 in the working paper by this Author entitled: “Negotiating Protection under overlapping Free Trade Agreements”).



**Table 6: Top 20 items in Thai exports and imports under JTEPA and evidence of lobbying**

Top 20 items in Thai exports under JTEPA 2007-2011 *	Evidence lobbying **	Top 20 items in Thai imports under JTEPA 2007-2009*	Evidence lobbying***
Preparations of meat, fish and crustaceans (1602,1604,1605)	+	Iron and steel and articles thereof (bars and tubes) for non-automotive use (7228,7304)	+
Fish and crustaceans, molluscs (0304,0305, 0306,307)	+	Vehicles, automotive parts and iron and steel for the automotive industry (4011, 7208,7209,7210,7219,8702,8703,8704, 8708,8482,8483)	+
Dextrins (3505)		Machinery and mechanical appliances (8421,8427,8429)	
Polyethers, epoxides and polyesters (3907), plastic plates, sheets and films (3920), plastic containers and other miscellaneous (3923,3926)		Synthetic filaments and fibers (5402,5503) and worn clothing (6309)	+
Springs of iron and steel (7320)		Non-crude oil from petrol (2710)	
Jewelry (7113)	+	Automatic control instruments and parts (9032)	
Organic chemicals (2931,2940)		Dyes and pigments (3212)	
Miscellaneous aluminium articles (7610)		Organic chemicals (2930), miscellaneous chemicals (3815,3817)	
Frozen vegetables (0710) and preparations of fruits and nuts (2008)	+	Electrical machinery and equipment (8504, 8528,8536)	+
Miscellaneous edible preparations, sauces and condiments (2103)	+	Glues and adhesives (3506)	
Toilet products (3307)		Apples (0808)	+
Synthetic filaments (5402) and nonwovens (5603)	+	Lubricants and antirust preparations (3403)	
Apparel and clothing accessories knitted or crocheted, underwear items (6109,6115)	+		
Inorganic chemicals of carbon (2803)			
Float glass (7005)			

Source: Calculations by the Author using data from official records (\*) and semi-structured interviews conducted by the Author (\*\*)

\* Top 20 items at HS4 exported by Thailand to Japan under JTEPA preferences during November 2007-December 2011

\*\* Top 20 items at HS4 imported by Thailand from Japan under JTEPA preferences during November 2007-October 2009

\*\*\* Evidence of lobbying by producers of the indicated items (as described in the working paper by this Author referred in footnote 12), is coded by a “+” sign. No symbol indicates that field research could not find evidence of business lobbying, although it cannot be excluded that it actually existed

#### ***5.4. Variables affecting utilization of TAFTA and JTEPA***

This section, and the corresponding for Malaysia below, sought to expand the analysis of variables affecting FTA utilization conducted by Kohpaiboon (2010). It was found here that the value of preferential trade conducted under TAFTA and JTEPA correlated with all other variables related to FTA utilization, namely, FTA UR, UR rank, UR rank reverse, utilization

share, utilization share rank and utilization share rank reverse (not shown). As expected, results indicated that these six variables significantly correlated with the preferential tariff margin granted by each of these FTA for both export and import flows (Table 7 for UR of JTEPA for exports, not shown for the rest).<sup>40</sup>

**Table 7: Correlation between JTEPA UR for Thai exports and JTEPA preferential tariff margin \***

	PTM MFN-JTEPA 2007	PTM MFN-JTEPA 2008	PTM MFN-JTEPA 2009	PTM MFN-JTEPA 2010
<b>JTEPA UR for Thai exports 2007</b>	0.213 (< 0.001)			
<b>JTEPA UR for Thai exports 2008</b>		0.208 (< 0.001)		
<b>JTEPA UR for Thai exports 2009</b>			0.215 (< 0.001)	

Source: Calculations by the Author using data from official records

Abbreviations: JTEPA UR: JTEPA utilization rate. PTM MFN-JTEPA: preferential tariff margin MFN-JTEPA

\* Values refer to the Pearson correlation coefficient (p value, significance level)

Hypothesis 4 projected that Thai producers that benefited from GSP and DES/DDS before an FTA would actively lobby to make reduced tariffs in these schemes non-removable as part of the FTA and that they would also make early and high use of FTA afterwards. To test these arguments, I first explored the utilization of DES/DDS before implementation of TAFTA and of GSP and DES/DDS before entering into force of JTEPA. As expected—although to the best of my knowledge not previously reported—all seven utilization variables for the Japanese GSP correlated with the preferential margin offered by the program (Table 8 for UR, not shown for the rest). All variables associated to the utilization of DES/DDS for

<sup>40</sup> No correlation existed between the six utilization variables for TAFTA and JTEPA and the absolute preferential tariff level they offered. If an FTA applies a relatively low tariff on a particular item but there is only a small or no difference with the MFN applied tariff, there is no incentive to use the FTA. Only the preferential tariff margin is relevant to the utilization of FTAs.

imports from Australia and Japan were also significantly correlated to the preferential tariff margin (data not shown).

**Table 8: Correlation between Japanese GSP UR for Thai exports and GSP preferential tariff margin \***

	GSP UR 2004	GSP UR 2005	GSP UR 2006	GSP UR 2007 (Jan-Oct)
<b>PTM MFN-GSP 2004-2007</b>	0.206 (< 0.001)	0.192 (< 0.001)	0.222 (< 0.001)	0.217 (< 0.001)

Source: Calculations by the Author using data from official records

Abbreviations: GSP UR: Japanese GSP utilization rate. PTM MFN-GSP: preferential tariff margin between MFN and GSP tariffs

\* Values refer to the Pearson correlation coefficient (p value, significance level)

Utilization of the Japanese GSP program by Thai exporters before JTEPA implementation amounted to 12.2% of total exports to Thailand (Table 3). Likewise, and in keeping with the high number of Japanese subsidiaries in Thailand, the UR of DES/DDS privileges for Thai imports of Japanese products before JTEPA was much higher, in fact higher than JTEPA has ever reached—in 2007, 44.3% of all imports from Japan benefited from DES/DDS (Table 3).<sup>41</sup> Utilization rates of DES/DDS for imports of Australian goods before TAFTA implementation were lower but still relevant at around 16% (Table 1).<sup>42</sup>

As in their corresponding FTAs, utilization of these unilateral schemes has been highly concentrated, particularly in the case of Thai imports from Australia under DES/DDS (Tables 2 and 4). For instance, close to 40% of all Thai exports under the Japanese GSP before JTEPA corresponded to plastic and processed food. As predicted by Hypothesis 4, utilization of Japanese GSP preferences has declined as JTEPA liberalization has proceeded

<sup>41</sup> The higher use of DES/DDS compared to JTEPA is explained by the fact that, although limited to selected products, firms and geographical areas, DES/DDS offer full exemption of import duties whereas tariffs concessions by Thailand in JTEPA may take many years to reach tariff free rate.

<sup>42</sup> Contrary to GSP or FTAs, that during the phasing out period only grant partial tariff relief, DES/DDS involve complete remission or drawback of import duties.

(Table 3) while its utilization has become increasingly concentrated (Table 4).<sup>43</sup> Of note, the fact that in 2011, four years into the agreement, some exporters still used GSP preferences points to the resistance by Japan to bind into JTEPA some of the preferences it extends unilaterally under the GSP.

**Table 9: Top 20 items in Thai imports from Australia under DES/DDS and TAFTA**

Top 20 items in Thai imports from Australia under DES/DDS 2004	Top 20 items in Thai imports from Australia under TAFTA 2005-October 2009*
Articles of cooper (7403,7408), of zinc (7901), of lead (7801)	Aluminium (7601,7606)
Iron and Steel (7201,7204,7208,7209,7210, 7214,7216, 7217,7228)	Wool (5101)
Aluminium (7601,7602,7606)	Edible fruits and nuts (0802,0805,0806,0808)
Metal ores slag (2603,2608,2609,2614,2615)	Metal ores slag (2608,2609)
General machinery (8419,8420,8424,8479,8481) centrifuges (8421), engines, pumps & turbines (8407,8411,8414)	Cereals and milling industries and preparations of cereals (1001,1003, 1107,1109, 1901)
Air conditioning machine (8415), dishwashes (8422)	Dairy products (0402, 0406)
Automotive parts (8708)	Automotive parts (8708)
Wool (5101,5105)	Iron and Steel (7204,7208,7225)
Dairy products (0401,0402,0403,0404,0405)	Articles of cooper (7403), of lead (7801), of zinc (7901)
Inorganic chemicals (2804,2808,2818)	Animal feed (2301,2309)
Paper and articles of paper (4803,4804,4805)	Edible vegetables (0704,0706,0712)
Plastics and articles of thereof (3907,3919,3921,3923,3926)	Pharmaceutical products (3004)
Automatic data processing machines (8471,8479,8481)	Dyes and pigments (3206)
Electrical machinery and equipment (8515), electronic integrated circuits & related (8537,8542, 8544)	Wood and pulp of wood (4407, 4707)
Mineral fuels and oils (2707)	Wine (2204)
Cereals and milling industries and preparations of cereals (1001,1101,1901)	Inorganic chemicals (2818)
Miscellaneous chemical products (3810,3811,3816)	Bovine meat (0201)
Animal feeding (2309)	Coal (2701)
Dyes (3206)	
Optical and photographic equip. (9001,9032)	
Oil seeds and grains (1209,1210)	
Bovine meat (0202)	
Wood and articles of wood (4411) and furniture (9405)	
Albumin and starches (3501)	
Textiles (5811,6005, 6006)	

Source: Calculations by the Author using data from official records

\* Top 20 items at HS4 level for the indicated regime and period. Shadowed cells refer to product overlap across both sides of the table

Next, I compared the most traded items under GSP and DES/DDS preferences before FTA implementation with the most traded items under the corresponding FTA (Tables 9, 10 and 11). While there are no data available for the Australian GSP, Thai imports from

<sup>43</sup> Also in support of our arguments, utilization rates of DES/DDS for imports from Australia and Japan slightly declined with a lag of several years after TAFTA and JTEPA implementation, although concentration among their users remains high (Tables 1 and 3).

Australia under DES/DDS in 2004 showed a high overlap with the products imported by Thailand from Australia under TAFTA during 2005-2009 (Table 9, shadowed cells indicate product overlap across both sides of the table). Once again, this overlap between the top 20 most traded items under both regimes is particularly striking when it is considered that HS4 covers over 1,300 items. Likewise, a high degree of product overlap was found between Thai exports to Japan under GSP in the period 2004-2007, before JTEPA implementation, and Thai exports under JTEPA afterwards (Table 10). Some level of concurrence was also observed between the top 20 Thai imports from Japan under DES/DDS before JTEPA implementation with the pattern of most imported products under JTEPA (Table 11, see also below). Altogether, these data confirm Hypothesis 4, users of GSP and DES/DDS not only lobbied governments to secure these tariff reductions in an FTA (see working paper referred in footnote 12) but they have also made a high use of FTAs once implemented (this paper).

**Table 10: Top 20 items in Thai exports to Japan under Japanese GSP and JTEPA**

Top 20 items in Thai exports to Japan under Japanese GSP 2004-October 2007 *	Top 20 items in Thai exports to Japan under JTEPA November 2007-2011 *
Processed seafood (1604,1605)	Processed seafood (1602,1604,1605)
Polyethers,expoxides and polyesters (3907)	Fish and crustaceans (0304,0306,0307)
Plastic plates, sheets and films (3920)	
Plastic containers and other miscellaneous (3923,3926)	
Float glass (7005) and safety glass (7007)	Polyethers,expoxides and polyesters (3907)
	Plastic plates, sheets and films (3920)
	Plastic containers and other miscellaneous (3923,3926)
Dextrins (3505)	Dextrins (3505)
Sauces and condiments (2103)	Springs of iron and steel (7320)
Hats and headgear (6505)	Jewelry (7113)
Organic chemicals (2916,2917,2922,2940)	Inorganic chemicals of carbon (2803)
Miscellaneous metals (8301)	Preparations of fruits and nuts (2008)
Jewelry (7113)	Nonwovens (5603)
Screws and bolts of iron and steel (7318)	Frozen vegetables (0710)
Miscellaneous aluminium articles (7610,7616)	Miscellaneous aluminium articles (7610)
Toys (9503)	Organic chemicals (2931,2940)
Insulated wire and cable (8544)	Sauces and condiments (2103)
Wood (4409)	Toilet paper (3307)
Paper (4802)	Float glass (7005)
Vacuum flasks (9617)	Underwear items (6109,6115)
Nonwovens, knotted net of twine (5603,5608)	Synthetic filament yarn (5402)
Inorganic chemicals of carbon (2803)	
Synthetic filament yarn (5402)	

Source: Calculations by the Author using data from official records

\* Top 20 items at HS4 level for the indicated regime and period. Shadowed cells refer to product overlap across both sides of the table

**Table 11: Top 20 items in Thai imports from Japan under DES/DDS and JTEPA**

Top 20 items in Thai imports from Japan under DES/DDS 2007*	Top 20 items in Thai imports from Japan under JTEPA Nov 2007-Oct 2009*
Automotive parts (7318,8708) including engines, transmissions and parts thereof (8408,8409,8483,8511)	Flat rolled steel for the automotive industry (7208,7209,7210,7219)
Flat rolled steel for the automotive industry (7208,7209,7210,7219,7225)	Passenger and commercial vehicles (8702,8703,8704)
Bars and tubes (7213,7227,7228,7304) and miscellaneous articles (7326) of iron and steel	Automotive parts (4011,8482,8483,8708)
Parts for TV and radios (8529), electrical switches (8536),	Bars and tubes from iron and steel (7228,7304)
Electrical integrated circuits (8542), printed circuits (8534), boards and panels with electrical switches (8537), semiconductors (8541)	Fork-lift trucks, bulldozers other work trucks (8427,8429)
Plastics and articles thereof (3907,3919,3923,3925, 3926) and synthetic rubber (4002)	Synthetic filaments and fibers (5402,5503)
Parts for regulating and control instruments (9032) and miscellaneous precision machines (9031)	Non-crude oil from petrol (2710)
Miscellaneous electrical machines with indicating functions (8543). Parts for electrical machines (8538)	TV receivers (8528), electrical switches (8536), electrical transformers (8504)
Insulating fittings (8547)	Glues and adhesives (3506)
Air or vacuum pumps (8414)	Centrifuges (8421)
Machines for working plastic and rubber (8477), molding boxes for metal foundry (8480), miscellaneous machines (8479), interchange folds (8507)	Miscellaneous chemicals (3815,3817)
Inorganic chemicals (2843,2846)	Dyes and pigments (3212)
Turbojets and other gas turbines (8411)	Organo sulfur compounds (2930)
Unrecorded media for sound (8523)	Parts for regulating and control instruments (9032)
Phenols (2907)	Lubricants and antirust preparations (3403)
Parts for typewriters and office machines (8473)	Apples (0808)
Motorcycles (8711)	Worn textiles and clothing (6309)
Seats (9401)	
Synthetic filaments (5402)	
Cooper and articles thereof (7403,7409)	
Batteries and cells (8506)	

Source: Calculations by the Author using data from official records

\* Top 20 items at HS4 level for the indicated regime and period. Shadowed cells refer to product overlap across both sides of the table

The overlap between the products that benefited from unilateral regimes (GSP and DES/DDS) and FTAs was then tested statistically for all items traded at HS4, not just the top 20 most traded items. It was found a significant positive correlation between the UR of Japanese GSP in 2007 and the UR of JTEPA since then (Table 12). The strength of this correlation has been decreasing over time, probably reflecting parallel reductions in external MFN tariffs by Japan and in line with the arguments by Ornelas (2005a, 2005b). Similar correlation between GSP and JTEPA was found for the rest of utilization-related variables (UR rank, UR rank reverse, utilization share, utilization share rank, utilization share rank

reverse) (not shown). There has also been a decline over time in the correlation between the utilization share of GSP and JTEPA that could be explained on the fact that, in support of Hypothesis 4, a significant share of the initial utilization of JTEPA corresponded to Thai products previously exported under GSP, share that diminished over time as JTEPA schedules have progressively extended to cover more sectors.

**Table 12: Correlation between URs of JTEPA and Japanese GSP for Thai exports**

	GSP UR 2004	GSP UR 2005	GSP UR 2006	GSP UR Jan-Oct 2007
<b>JTEPA UR for Thai exports Nov-Dec 2007</b>	0.531 (< 0.001)	0.533 (< 0.001)	0.557 (< 0.001)	0.595 (< 0.001)
<b>JTEPA UR for Thai exports 2008</b>	0.533 (< 0.001)	0.508 (< 0.001)	0.511 (< 0.001)	0.563 (< 0.001)
<b>JTEPA UR for Thai exports 2009</b>	0.569 (< 0.001)	0.528 (< 0.001)	0.531 (< 0.001)	0.546 (< 0.001)
<b>JTEPA UR for Thai exports 2010</b>	0.396 (< 0.001)	0.399 (< 0.001)	0.424 (< 0.001)	0.442 (< 0.001)

Source: Calculations by the Author using data from official records.

Abbreviations: JTEPA UR: JTEPA utilization rate. Jap GSP UR: Japanese GSP utilization rate.

\* Values indicate Pearson correlation coefficient (p value, significance level)

In line with Table 11, there was also a significant positive correlation between DES/DDS and JTEPA when the items imported by Thailand from Japan under both regimes ranked by their share in overall utilization (utilization rank share and utilization share rank reverse) was compared (Table 13 and data not shown).<sup>44</sup>

<sup>44</sup> However, there was not statistically significant correlation between the absolute level of utilization (UR) of JTEPA and DES/DDS for Thai imports from Japan (not shown).

**Table 13: Correlation between utilization share rank (in reverse order) of JTEPA and DES/DDS for Thai imports**

	DES/DDS utilization share rank reverse for Thai imports from Japan January-October 2007
JTEPA utilization share rank reverse for Thai imports November-December 2007	0.271 (< 0.001)
JTEPA utilization share rank reverse for Thai imports 2008	0.427 (< 0.001)
JTEPA utilization share rank reverse for Thai imports 2009	0.477 (< 0.001)

Source: Calculations by the Author using data from official records.

\* Values indicate Pearson correlation coefficient (p value, significance level)

It would be expected that once producers that previously benefited from GSP or DDS/DDS start using FTAs, their utilization of these unilateral schemes will decrease and concentration among users increase (Hypothesis 4). Indeed, it was found that the UR of Japanese GSP declined from 7.13% of total Thai exports to Japan during 2007 to just 0.66% in 2008, once JTEPA entered into force in November 2007, while concentration in its use increase (Tables 3 and 4). These results reinforce the argument as JTEPA liberalized completely and from the start most items for which Japan offered tariff reductions through GSP (Hypotheses 1 and 4). Nevertheless, as also posited by Hypothesis 1, as FTAs involve non-removable binding of concessions, liberalization of relatively more sensitive items, even if included in the GSP regime, have been phased out over long periods. Thus, although utilization of GSP in 2011 represented less than 0.2% of total Thai exports to Japan, GSP was still used for the export of 21 codes at HS6 levels. Most of these items correspond to processed fish products—that will be liberalized under JTEPA during 2013—but also processed cereals and some chemicals that, remarkably, are excluded from liberalization under JTEPA but continue to be eligible under GSP. The resistance of Japan to liberalize in



JTEPA items already benefiting from GSP attest to the relevance that developed countries attach to the unilateral character of GSP schemes and their exclusive discretion to maintain or remove these concessions.

Next, it was also examined the impact of ROOs in the utilization of Thai FTAs. Econometric analysis in Kohpaiboon (2010) estimated that in 2008 the cost imposed by ROOs restricted the use of Thai FTAs by the equivalent of an excess tariff of 2-10%. To my surprise, I did not find a negative correlation between the restrictiveness index of ROOs in TAFTA and JTEPA at HS4 level and the URs of these FTAs (not shown). Several arguments trying to account for this paradoxical result are provided in the concluding section.

## **6. Political economy and variables affecting utilization of Malaysian FTAs**

Next, it was analyzed the utilization of MJEPA and the variables affecting it. Malaysian has five more bilateral FTAs but they have been implemented very recently, so there is no sufficient historical data about their utilization, and/or they involve relatively small partners. MJEPA also offer the possibility to compare its utilization with that of the Japanese GSP.

### ***6.1. Source of data and methodology***

The following primary data were obtained for this research:

a) *Value of bilateral trade flows between Malaysia and Japan.* Data was retrieved from the Trade Map database (Trade Map, undated). Data was collected mostly at the HS4 level (around 1,300 lines per year and for each trade direction) although some analyses were also performed at HS6 level (around 5,700 lines per year and for each trade direction). Data collected covered from January 2003 to up to July 2013.<sup>45</sup>

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<sup>45</sup> Despite preferential trade data cover only until December 2012 (see below) but overall trade flows have been examined up to July 2013.

b) *Trade values for Malaysian exports under MJEPA.* Data on PCOs for MJEPA was provided by the Malaysian Ministry of International Trade and Industry. All the trade data was at HS4 level in the 2007 version of the Harmonized System. Collected PCOs covered exports under MJEPA from its implementation in July 2006 up to December 2010.<sup>46</sup>

c) *Trade values for Malaysian exports under Japanese GSP.* Data on PCOs was provided at HS4 level by the Malaysian Ministry of International Trade and Industry. PCOs for exports under Japanese GSP covered from January 2003 until December 2010. In 2010, GSP preferences were still used for the export of a very small number of items.

d) *Applied and bound multilateral tariffs in Malaysia and Japan.* Data was retrieved from the WTO's Integrated Data Base (WTO-IDB, undated) at HS6 level and aggregated down to HS4. Tariff data was collected for the period January 2003 to December 2010.

e) *Tariff schedules under MJEPA.* Data was retrieved from the MJEPA treaty, available from government websites (METI-MJEPA, undated; MITI, undated). Tariff schedules in MJEPA are specified at HS6 but collapsed to HS4 for comparison with PCO data. Tariff schedules were collected from its implementation date up to December 2010.

f) *Preferential tariffs under Japanese GSP.* Data was retrieved from the website of Japan's Customs and Tariff Bureau (Japan Customs, undated) for the period between January 2003 and December 2010. Tariff data at HS8 level was aggregated down to HS4.

h) *Rules of origin in MJEPA.* Data was retrieved from the MJEPA treaty, available from government websites (METI-MJEPA, undated; MITI, undated).

To analyze the utilization of MJEPA and Japanese GSP preferences for the export of Malaysian products to Japan, I defined and computed the same variables described for the

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<sup>46</sup> This research was unable to obtain administrative records for Malaysian imports from Japan under MJEPA preferences.

Thai case, namely: a) *Preferential trade value*, b) *UR*, c) *UR rank*, d) *UR rank in reverse order*, e) *Utilization share*, f) *Utilization share rank*, g) *Utilization share rank in reverse order*, h) *Preferential tariff margin*, and i) *ROO restrictiveness index*.

## 6.2. Utilization of MJEPA

Since its implementation in July 2006, utilization of MJEPA preferences for Malaysian exports to Japan has been even lower than in JTEPA, with URs slightly over 10% (Table 14).<sup>47</sup> In the absence of more recent data, it is not possible to ascertain whether the drop in UR in 2010 represents any trend.<sup>48</sup>

**Table 14: Utilization rates (%) of preferential trade regimes in Malaysian exports to Japan**

Regime*	2003	2004	2005	Jan-June 2006	July-Dec 2006	2007	2008	2009	2010
<b>MJEPA UR for Malaysian exports (July 2006)</b>					11.58	12.22	11.66	11.53	5.65
<b>Japanese GSP UR</b>	10.51	12.18	12.48	14.20	0.37	0.04	00.7	0.06	0.05

Source: Calculations by the Author using data from official records

\* Date in parenthesis refers to the date of implementation of MJEPA

MJEPA, the first FTA implemented by Malaysia, did not gather from the local private sector the enthusiasm and support of later FTA negotiations with the United States (and TPP) or the European Union (see <sup>49</sup> and below). I was unable to obtain official records for imports under MJEPA, although considering that: a) Malaysian tariff schedules in MJEPA take longer to achieve complete liberalization than Japanese ones and b) Malaysia also provides DES/DDS, one could speculate that utilization of MJEPA preferences for the import of Japanese products could be also low.

<sup>47</sup> As in JTEPA, the same disclaimer regarding the high level of Japanese tariffs bound as duty-free applies to the low utilization of MJEPA. In 2006, the year before JTEPA entered into force, Japan had 55.1% of tariffs codes bound at zero-rate.

<sup>48</sup> If the decline in MJEPA UR in 2010 is confirmed in successive years, it could be probably explained by reductions in the multilateral tariffs applied by Japan, once again in line with arguments by Ornelas (2005a, 2005b).

<sup>49</sup> See working paper by this Author referred in footnote 12.

As in the Thai case, utilization of MJEPA by Malaysian exporters has been highly concentrated among the top 20 codes at HS4 level that account for over 70% of total FTA utilization (Table 15). Of note, just four HS4 codes, namely, palm oil (1511) and plastics (3907, 3920, 3923) represent almost half of the value of all Malaysian items exported to Japan under MJEPA. Similar level of product concentration is observed for overall Malaysian exports to Japan (Table 15). Contrary to the initial proposition, concentration in MJEPA utilization has not declined in the 4.5 years since implementation. As most tariffs phase out in waves, concentration in MJTEPA utilization could still decline in coming years. Alternatively, it is possible that Malaysian producers are using MJEPA mainly to export to Japan products previously traded under the Japanese GSP so the pattern has barely changed once GSP preferences are subsumed into MJEPA (see below). For the period preceding MJEPA implementation, utilization of GSP was also highly concentrated (see also below).

**Table 15: Share of Top 20 items in Malaysian exports to Japan  
(total and preferential trade flows) \***

Trade regime	2003	2004	2005	Jan- June 2006	July- Dec 2006	2007	2008	2009	2010
Top 20 overall exports (% total exports)	73.60	71.72	72.22	71.92		73.82	77.72	74.23	75.58
Top 20 exports under MJEPA (% total exports under MJEPA)					71.20	70.91	72.78	72.12	73.38
Top 20 exports under Japanese GSP (% total exports under Japanese GSP)	67.10	73.20	77.34	79.59	71.45	100	100	100	100

Source: Calculations by the Author using data from official records

\* Top 20 items at HS4 level

### ***6.3. Political economy of MJEPA utilization***

In Malaysia, MJEPA was supported mainly from producers of palm oil, textiles and garments, chemicals and plastics, all of them items that in the final FTA text received lower imports duties in Japan. I therefore tested whether these sectors have made high use of MJEPA preferences (Hypothesis 3). Indeed, many of those sectors ranked among the top 20

Malaysian items at HS4 by value that were exported to Japan under MJEPA (Table 16). In addition to producers of palm oil and plastics referred earlier, firms in the chemicals, textiles and garments, steel and wood industries accounted for the largest share of MJEPA utilization (Table 16). It is worth noting that this list of the largest MJEPA users in absolute terms has remained more homogeneous over time than in Thailand.

**Table 16: Top 20 items in Malaysia exports to Japan under MTEPA and evidence of lobbying**

Top 20 items MJEPA exports July 2006-2010 *	Evidence lobbying **
Palm oil and its fractions (1511) and palm kernel, coconut and babassu oil (1513), cocoa butter, fat and oil (1804)	+
Plastics plates, sheets and films (3920), plastic containers (3923), polyethers, exposides, polyesters and polymers of vinyl chloride in primary forms (3904,3907)	+
Organic chemicals (acyclic alcohols and halogenats, acyclic nonocarbox acids and halogens and polycarboxylic acids and anhydrous, halogenats and sulfurs, etc.) (2905,2915,2917)	+
Wood and articles of wood (wood sawn or chipped, wood continuously shaped, fileboard of wood and plywood, veneered panels and similar laminated wood) (4407,4409,4411,4412) and furniture (9403)	
Miscellaneous chemical products (insecticides, industrial moncarboxylic fatty acid oils from refining, blinders for foundry moulds or cores (3808,3823,3824)	+
Wadding, felt and nonwovens and clothing accessories (gloves and mittens, nonwovens) (5603,6116)	+
Electric transformers, static converters and inductors (8544)	+
Cooper products (7410)	
Crustaceans live (0306)	+
Vacuum flasks and vessels (9617)	
Automotive parts (8708)	
Miscellaneous articles of base metal (8302)	
Toilet paper (4818)	
Refractory bricks and other ceramic construction articles (6902)	
Handtools and tools used in agriculture (8001)	

Sources: Calculations by the Author using data from official records (\*) and semi-structured interviews conducted by the Author (\*\*)

\* Top 20 items at HS4 exported by Malaysia to Japan under MJEPA preferences during the period July 2006-December 2010

\*\* Evidence of lobbying by producers of the indicated items (as described in the working paper by this Author referred in footnote 12), is coded by a “+” sign. No symbol indicates that field research could not find evidence of business lobbying, although it cannot be excluded that it actually existed

#### 6.4. Variables affecting utilization of MJEPA

To the best of my knowledge, there are no studies on the utilization of Malaysian FTAs using official records. Therefore, I investigated whether or not the variables determining FTA

utilization for Thai FTAs also apply to MJEPA. First, correlations among MFN, MJEPA and GSP tariffs at HS4 level were run. Importantly, it was found a strong correlation among tariffs in all three regimes, suggesting that, in line with Hypotheses 1 and 4, items protected behind high tariffs at the multilateral level receive higher tariffs in preferential regimes (Table 17). Or, in other words, preferential regimes, whether unilateral or reciprocal, tend to liberalize more (and probably faster) items that already receive low MFN tariffs.

**Table 17: Correlation between tariffs under MFN, MJEPA and Japanese GSP regimes \***

	MJEPA tariffs 2006	MJEPA tariffs 2007	MJEPA tariffs 2008	MJEPA tariffs 2009	MJEPA tariffs 2010	MFN tariffs 2007-2010 **	GSP tariffs 2003-2005 **
<b>Japanese GSP Tariffs 2003-2005 **</b>	0.852 (<0.001)	0.852 (<0.001)	0.849 (<0.001)	0.815 (<0.001)	0.844 (<0.001)	0.884 (<0.001)	
<b>MFN tariffs 2007-2010 **</b>	0.844 (<0.001)	0.841 (<0.001)	0.836 (<0.001)	0.829 (<0.001)	0.824 (<0.001)		0.884 (<0.001)

Source: Calculations by the Author using data from official records

\* Values shown indicate Pearson correlation coefficient (p value, significance level)

\*\* For most items, MFN and Japanese GSP tariffs suffered relatively small changes during the indicated periods. MFN and GSP tariffs used to calculate correlations were the average of the duty applied for each code at HS4 level during the indicated period

Next, it was examined the potential correlation between the six utilization variables for MJEPA and the tariff savings afforded by the FTA for each HS4 code over the 2006-2010 period. As for Thai FTAs, it was found that the UR of MJEPA correlated, although only at moderate strength, with the preferential tariff margin (Table 18 for UR and not shown for the rest of utilization variables).<sup>50</sup> Interestingly, although the MJEPA UR has not increased since implementation (Table 14), its correlation with the preferential tariff margin did (Table 18), probably indicating that Malaysian exporters that make use of MJEPA preferences started using them early on and that the progressive increase in the preferential margin has not enticed higher utilization.

<sup>50</sup> As in the case of TAFTA and JTEPA, there was no correlation between the utilization variables for MJEPA and the absolute preferential tariff level.

**Table 18: Correlation between MJEPA UR for Malaysian exports and MJEPA preferential tariff margin \***

	PTM MFN-MJEPA 2006	PTM MFN-MJEPA 2007	PTM MFN-MJEPA 2008	PTM MFN-MJEPA 2009	PTM MFN-MJEPA 2010
<b>MJEPA UR for Malaysian exports July-Dec 2006</b>	0.126 (< 0.001)				
<b>MJEPA UR for Malaysian exports 2007</b>		0.225 (<0.001)			
<b>MJEPA UR for Malaysian exports 2008</b>			0.253 (<0.001)		
<b>MJEPA UR for Malaysian exports 2009</b>				0.267 (<0.001)	
<b>MJEPA UR for Malaysian exports 2010</b>					0.268 (<0.001)

Source: Calculations by the Author of data from official administrative records

Abbreviations: MJEPA UR: MJEPA utilization rate; PTM MFN-MJEPA: preferential tariff margin MFN-MJEPA

\* Values shown indicate Pearson correlation coefficient (p value, significance level).

Next, it was tested if, as projected by Hypothesis 4, utilization of MJEPA relates to previous use of Japanese GSP.<sup>51</sup> It was found that utilization (UR and related utilization variables) of Japanese GSP by exporters in Malaysia correlated, although only weakly, with the preferential tariff margin between GSP and the applied MFN tariffs (Table 19)

**Table 19: Correlation between Japanese GSP UR and GSP preferential tariff margin \***

	GSP UR 2003	GSP UR 2004	GSP UR 2005	GSP UR 2006 (Jan-June)
<b>PTM MFN-GSP 2003-2006</b>	0.193 (< 0.001)	0.151 (< 0.001)	0.050 (< 0.001)	0.152 (< 0.001)

Source: Calculations by the Author using data from official records

Abbreviations: PTM MFN-GSP: preferential tariff margin MFN-GSP; GSP UR: Japanese GSP utilization rate.

\* Values shown indicate Pearson correlation coefficient (p value, significance level)

<sup>51</sup> This research was unable to obtain official records for the utilization of DES/DDS for imports from Japan as it is considered sensitive information. Section 93 of the 1976 Malaysia's Customs Act establishes that firms could claim drawback of 90% of the duties charged on inputs used in the manufacturing of goods for exports. Other programs provide exemption of import duties on intermediate goods based on fulfillment of different criteria (e.g., export, research and development, etc.). In contrast to Thailand, import privileges in DES/DDS are often negotiated with firms on a case-by-case basis (interviews).

**Table 20: Top 20 items in Malaysian exports to Japan under Japanese GSP and MJEPA**

<b>Top 20 items in Malaysian exports to Japan under Japanese GSP 2003-June 2006 *</b>	<b>Top 20 items in Malaysian exports to Japan under MJEPA July 2006-2010 *</b>
Palm oil and its fractions (1511) and palm kernel, coconut and babassu oil (1513), animal or vegetal oils chemically modified (1516), glycerol (1520)	Palm oil and its fractions (1511) and palm kernel, coconut and babassu oil (1513), cocoa butter, fat and oil (1804)
Plastics plates, sheets and films (3920,3921), plastic containers (3923), polymers of styrene, polyethers, epoxides, polyesters and polyamides (3903,3907,3908)	Plastics plates, sheets and films (3920), plastic containers (3923), polyethers, epoxides, polyesters and polymers of vinyl chloride in primary forms (3904,3907)
Organic chemicals (2905,2915,2917)	Organic chemicals (2905,2915,2917)
Industrial monocarboxylic fatty acid oils and alcohols (3823)	Wood and articles of wood (wood sawn, shaped, fileboard or laminated wood) (4407,4409,4411,4412), and furniture (9403)
Wood and articles of wood (wood sawn, shaped, fileboard or laminated wood) (4407,4409,4411,4412)	Miscellaneous chemical products (insecticides, industrial monocarboxylic fatty acid oils and alcohols, blinders for foundry moulds or cores (3808,3823,3824)
Synthetic filament (5402)	Wadding, felt and nonwovens and clothing accessories (gloves and mittens, nonwovens) (5603,6116)
Cooper products (7410)	Electric transformers, static converters and inductors (8544)
Nonwovens (6116)	Cooper products (7410)
Pigments and dyes (3206)	Crustaceans live (0306)
Electric transformers, static converters and inductors (8544)	Vacuum flasks and vessels (9617)
Vacuum flasks and vessels (9617)	Automotive parts (8708)
Handkerchiefs (6213)	Miscellaneous articles of base metal (8302)
Screw, bolts and nuts of iron and steel (7318)	Toilet paper (4818)
Miscellaneous articles of base metal (8302)	Refractory bricks and other ceramic construction articles (6902)
Miscellaneous articles of aluminium (7616)	Handtools and tools used in agriculture (8001)
Bread and pastry cakes (1905)	

Source: Calculations by the Author using data from official records

\* Top 20 items at HS4 level for the indicated regime and period. Shadowed cells refer to product overlap across both sides of the table

Examination of the top 20 items by trade value exported under GSP during the period immediately before to MJEPA implementation revealed a highly constant and concentrated pattern of exports. Over 70% of Malaysian exports under GSP were comprised by palm oil, wood and furniture, plastics, and chemicals (Table 20). There was also a remarkable overlap, even higher than in Thailand, between the top 20 Malaysian exports conducted under GSP preferences before June 2006 and under MJEPA after then (Table 20). This comparison was then extended to all tariff codes at HS4 level and it was found a positive statistical correlation between exports under both preferential regimes (Tables 21, 22 and 23, not shown for the rest of utilization variables). Altogether these results confirm Hypothesis 4 and indicate that,



to a significant extent, Japanese concessions in MJEPA have replaced preferential tariffs offered unilaterally through its GSP program.

**Table 21: Correlation between URs of MJEPA and Japanese GSP for Malaysian exports \***

	GSP UR 2003	GSP UR 2004	GSP UR 2005	GSP UR Jan-July 2006
<b>MJEPA UR for Malaysian exports Jan-June 2006</b>	0.453 (< 0.001)	0.444 (< 0.001)	0.317(< 0.001)	0.421 (< 0.001)
<b>MJEPA UR for Malaysian exports 2007</b>	0.652 (< 0.001)	0.523 (< 0.001)	0.309 (< 0.001)	0.570 (< 0.001)
<b>MJEPA UR for Malaysian exports 2008</b>	0.633 (< 0.001)	0.499 (< 0.001)	0.292 (< 0.001)	0.509 (< 0.001)
<b>MJEPA UR for Malaysian exports 2009</b>	0.589 (< 0.001)	0.454 (< 0.001)	0.229 (< 0.001)	0.489 (< 0.001)
<b>MJEPA UR for Malaysian exports 2010</b>	0.547 (< 0.001)	0.471 (< 0.001)	0.278 (< 0.001)	0.449 (< 0.001)

Source: Calculations by the Author using data from official records

Abbreviations: MJEPA UR: MJEPA utilization rate; GSP UR: Japanese GSP utilization rate.

\* Values shown indicate Pearson correlation coefficient (p value, significance level)

**Table 22: Correlation between UR rank reverse of MJEPA and GSP for Malaysian exports \***

	GSP UR rank reverse 2003	GSP UR rank reverse 2004	GSP UR rank reverse 2005	GSP UR rank reverse Jan-June 2006
<b>MJEPA UR rank reverse for Malaysian exports July-December 2006</b>	0.643 (< 0.001)	0.664 (< 0.001)	0.751 (< 0.001)	0.748 (< 0.001)
<b>MJEPA UR rank reverse for Malaysian exports 2007</b>	0.672 (< 0.001)	0.677 (< 0.001)	0.733 (< 0.001)	0.758 (< 0.001)
<b>MJEPA UR rank reverse for Malaysian exports 2008</b>	0.647(< 0.001)	0.629 (< 0.001)	0.700 (< 0.001)	0.715 (< 0.001)
<b>MJEPA UR rank reverse for Malaysian exports 2009</b>	0.615 (< 0.001)	0.594 (< 0.001)	0.689 (< 0.001)	0.678 (< 0.001)
<b>MJEPA UR rank reverse for Malaysian exports 2010</b>	0.572 (< 0.001)	0.590 (< 0.001)	0.654 (< 0.001)	0.640 (< 0.001)

Source: Calculations by the Author using data from official records

Abbreviations: MJEPA UR rank reverse: MJEPA utilization rate rank reverse; GSP UR rank reverse: Japanese GSP utilization rank reverse.

\* Values shown indicate Pearson correlation coefficient (p significance level).

If MJEPA preferences have replaced GSP, use of the latter should have declined as MJEPA was implemented (Hypothesis 4). Indeed, the UR of GSP dropped drastically from 14.20% of total exports during the first semester of 2006 to just 0.37% in the second half after MJEPA entered into force in July 2006 (Table 14). In 2010, GSP preferences were used by just five tariff lines at HS4 (0.05% of total exports), mostly processed food items for which MJEPA did not offer liberalization yet. As in Thailand, the fact that some items liberalized under GSP remained protected five years into MJEPA reflects the importance that Japan attaches to the irreversibility of concessions under FTAs, compared to the discretion of those granted unilaterally under GSP.

**Table 23: Correlation between utilization share rank (in reverse order) of MJEPA and Japanese GSP for Malaysian exports \***

	GSP utilization share rank 2003	GSP utilization share rank 2004	GSP utilization share rank 2005	GSP utilization share rank Jan-June 2006
<b>MJEPA utilization share rank for Malaysian exports July-December 2006</b>	0.452 (< 0.001)	0.512 (< 0.001)	0.551 (< 0.001)	0.611 (< 0.001)
<b>MJEPA utilization share rank for Malaysian exports 2007</b>	0.425 (< 0.001)	0.492 (< 0.001)	0.522 (< 0.001)	0.541 (< 0.001)
<b>MJEPA utilization share rank for Malaysian exports 2008</b>	0.392 (< 0.001)	0.418 (< 0.001)	0.447 (< 0.001)	0.460 (< 0.001)
<b>MJEPA utilization share rank for Malaysian exports 2009</b>	0.394 (< 0.001)	0.437 (< 0.001)	0.499 (< 0.001)	0.518 (< 0.001)
<b>MJEPA utilization share rank for Malaysian exports 2010</b>	0.339 (< 0.001)	0.425 (< 0.001)	0.449 (< 0.001)	0.461 (< 0.001)

Source: Calculations by the Author using data from official records.

\* Values shown indicate Pearson correlation coefficient (p significance level).

Analysis of Thai FTAs here failed to find an inverse correlation between their utilization and the restrictiveness of their ROOs and I sought to investigate whether this also occurred for MJEPA. The ROO restrictiveness index of each HS4 code in MJEPA was

computed for correlation with all utilization variables. As for Thai FTAs, no significant negative correlation was found (not shown and see below for discussion).

Since there are no econometric studies on the variables affecting MJEPA utilization, I run a linear regression analysis with the UR of MJEPA in 2007 as the dependent variable and GPS UR in 2003 and the preferential tariff margin between MFN tariffs and MJEPA tariffs for 2007 as independent variables. It was found that the explanatory value of GSP was much larger than that of the preferential tariff margin, GSP UR in 2003 explained 42.6% of the UR of MJEPA in 2007 (Table 24). When the regression analysis was repeated for MJEPA UR in 2010 using as independent variables GPS UR in 2003 and the preferential margin afforded by MJEPA in 2010, GSP UR explained 29.9% of MJEPA UR (Table 25). One reason for the declining explanatory value of GSP could be due to changes in the pattern of Malaysian exports to Japan between 2003 and 2010 that were not revealed in the period 2003-2007. However, the contribution of GSP did not increase when MJEPA UR in 2010 was regressed using as independent variable the UR of GSP in the first semester of 2006 (not shown). Instead, the lower weight of GSP in the UR of MJEPA in 2010 could be related to changes in the composition of trade using MJEPA between 2007 and 2010. Despite that concentration among the top 20 codes exported under MJEPA (Table 15) and correlations in Tables 21 to 23 remained stable over that period, it is still possible that more recent exports under MJEPA have started to diverge from those under GSP earlier as tariff schedules in MJEPA are liberalized and its UR for less-traded items increased. Alternatively, the sharp drop in MJEPA UR in 2010 (Table 14) may have affected its correlation with GSP utilization. Regression analyses of MJEPA UR over a longer period would be therefore needed.

**Table 24: Estimated coefficients for linear regression models for MJEPA UR 2007 \***

	Model 1	Model 2	Model 3
<b>GSP UR 2003</b>	0.627 [0.021] (p < 0.001)		0.609 [0.020] (p < 0.001)
<b>PTM MFN-MJEPA 2007</b>		2.543 [0.311] (p < 0.001)	1.586 [0.240] (p < 0.001)
<b>Constant</b>	3.903	6.577	1.267
<b>R<sup>2</sup></b>	0.426	0.051	0.445

Source: Calculations by the Author using data from official records

\* For each model the regression coefficient is followed by the estimated standard error (in square brackets) and the p-value for t-tests of the coefficients (in parenthesis)

**Table 25: Estimated coefficients for linear regression models for MJEPA UR 2010 \***

	Model 1	Model 2	Model 3
<b>GSP UR 2003</b>	0.536 [0.023] (p < 0.001)		0.509 [0.023] (p < 0.001)
<b>PTM MFN-MJEPA 2010</b>		3.142 [0.298] (p < 0.001)	2.409 [0.253] (p < 0.001)
<b>Constant</b>	5.801	5.832	1.402
<b>R<sup>2</sup></b>	0.299	0.081	0.346

Source: Calculations by the Author using data from official records

\* For each model the regression coefficient is followed by the estimated standard error (in square brackets) and the p-value for t-tests of the coefficients (in parenthesis)

## 7. Discussion

Most works on the political economy of East Asian regionalism argue that recent FTAs have been driven primarily for political motivations rather than economic ones and were formulated by the political leadership in these countries with little participation or interest on the part of the private sector (e.g., Aggarwal and Koo, 2006; Lee, 2006; Sally, 2006; Terada, 2009; Ravenhill, 2010). In addition, a number of estimates and surveys indicate that firms in East Asia have made very low utilization of existing FTAs (Haddad, 2007; Ravenhill, 2008; Ravenhill, 2010; Kawai and Wignaraja, 2011a). Only two studies, both on Thailand, involved analysis of official records on FTA utilization, concluding that FTAs have not made

significant impact in terms of trade creation but mainly served to liberalize highly traded goods (Kohpaiboon, 2010; Athukorala and Kohpaiboon, 2011).

Empirical evidence collected by the Author for this project has countered most of those arguments. In a related paper, it was found that the private sector in Thailand and Malaysia played an important role in FTA policymaking, in some cases pushing governments to launch negotiations (see working paper referred in footnote 12). This paper analyzed the utilization of Thai and Malaysian FTAs in the context of both the political economies that originally set them in place and the utilization of existing unilateral tariff reduction schemes. It was found that utilization of FTAs in both countries was larger than most estimates and survey projected but, with the exception of TAFTA, it was nevertheless low. However, low overall utilization hid significant sectoral variability with some sectors making virtually complete utilization of FTA preferences, independently of trade volumes. Sectors that used FTAs to the greatest extent were often among the strongest *ex-ante* supporters of FTA liberalization during negotiations and/or that benefited from GSP and DES/DDS unilateral schemes.

Primary data on preferential trade in both countries were computed to test four main arguments, namely: 1) FTAs establish legally binding commitments on tariff reduction. Consequently, goods for which tariffs are unbound or bound with large overhangs at the multilateral level and/or that are excluded from unilateral schemes would be more likely to receive longer phase out periods in FTA liberalization schedules; 2) Sequencing in FTA liberalization would determine the evolution and sectoral concentration of FTA utilization. As FTA liberalization schedules are progressively implemented, overall utilization should increase and involve more items. 3) Quantitative analyses of the utilization of FTAs should

be coupled with the political economy determinants involved in their formulation. It would be expected that sectors that successfully lobbied for FTA liberalization will make high use of FTA preferences (in absolute and/or relative terms); 4) Producers that benefit from GSP or DES/DDS programs should support the inclusion of these unilateral tariff reductions into binding and non-removable FTA concessions. If they eventually succeeded, their utilization of unilateral schemes should decline in favor of the use FTAs. Analysis of trade administrative records confirmed all four hypotheses that will be discussed in turn.

Overall utilization of TAFTA by Thai exporters exceeds 60% of total exports, which is in line with that of well-established FTAs elsewhere.<sup>52</sup> However, overall utilization of TAFTA for Thai imports and of JTEPA (and probably MJEPA) for both trade directions has been low. As argued earlier, low utilization of JTEPA and MJEPA preferences by Thai and Malaysian exporters should be put into context with the large share of duty-free tariff lines, around half, applied by Japan. When utilization is calculated only for goods for which FTAs provide a preferential tariff margin, utilization of JTEPA by Thai exporters exceeds 70%.<sup>53</sup> On the other hand, the low utilization of TAFTA and JTEPA by Thai importers (and probably of MJEPA by Malaysian importers) could be reasoned on longer FTA liberalization schedules in Thailand (and Malaysia) compared to Australia and Japan. Meantime Thailand and Malaysia progressively implement FTA tariff schedules, eligible importers in both countries use DES/DDS privileges.

For the three FTAs examined, just 20 items, out of the over 1,300 codes at HS4 level, accounted for between 67.3% and 96.4% of all trade using their preferences. In addition, the

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<sup>52</sup> In 2000, overall UR of the North-American Free Trade Agreement, between the United States, Canada and Mexico, was 64% (Anson et al., 2005).

<sup>53</sup> Applying the same methodology to TAFTA would put its utilization by Thai exporters close to 100%. In Australia, the share of applied tariffs set at zero is only slightly lower than in Japan. Dominance of automotive products, 63.5% of total Thai exports under TAFTA in 2011, helps explaining the greater utilization of TAFTA vis-à-vis JTEPA (see working papers by this Author referred in footnotes 9 and 12.).

identity of these top 20 items has remained fairly constant over time. Such extreme concentration in the overall share of FTA utilization has two important consequences. First, focus on the largest users by overall utilization share overlooks the high UR, often close to 100%, incurred in the export or import of some goods with lower trade volumes and outside the top 20. Arguably, for the exporters and importers of these goods, FTAs could have large economic impacts that escaped studies centered on overall FTA URs (Ravenhill, 2010; Kawai and Wignaraja, 2011) or exclusively on sectors accounting for the largest share of overall utilization (Kohpaiboon, 2010; Athukorala and Kohpaiboon, 2011). Second, the capacity of Thai FTAs to foster trade creation has been questioned (Athukorala and Kohpaiboon, 2011). Indeed, high concentration in overall utilization share—that, incidentally, also occurs in overall trade flows—limits the possibilities of FTAs to drastically change bilateral trade patterns and for overall trade creation. But, while trade creation in less traded sectors would be more difficult to identify, it cannot be excluded that it actually occurs.<sup>54</sup>

Concentration in FTA utilization shows a small declining trend in TAFTA and JTEPA but not in MJEPA. Nevertheless, considering that much of the initial FTA utilization simply replaces use of unilateral schemes and that liberalization of many tariff lines phases out over 5-10 years period, a longer timeframe would be required to assess how concentration in FTA utilization evolves.

This paper was able to link evidence of business support and lobbying in the formulation of FTAs described elsewhere (see <sup>55</sup>) with their sectoral utilization afterwards. In

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<sup>54</sup> In any case, it would be naïve to expect that FTA liberalization, or any other form of liberalization for that matter, would automatically result in trade creation, as this involves more than eliminating tariffs and requires establishing customer and logistic links (see below in the main text).

<sup>55</sup> See working paper by this Author referred in footnote 12.

line with the initial argument, it was found that FTAs were used heavily (as a share of total trade under the FTA) and to a large extent (relative to total trade flows for a given item) by sectors that benefit from larger FTA preferential tariff margins and that often corresponded to those initially lobbying for FTA liberalization. For instance, the leading role of carmakers pushing for TAFTA and JTEPA was reflected in the large FTA utilization and share of automotive products in Thai exports under TAFTA or of steel and automotive products in Thai imports under JTEPA. Likewise, lobbying by key Thai and Malaysian exporters (e.g., processed food, plastics, chemicals, palm oil, textiles and garments, steel) in favor of JTEPA and MJEPA translated later into high URs and UR shares. Nevertheless, while this paper is, to the best of my knowledge, the first to unearth these links, further and more detailed analyses of the data and over longer periods would be needed.

A wealth of studies have analyzed and quantified the trade restricting effects of ROOs in FTAs (e.g., Estevadeordal et al., 2004), including in Thai FTAs (Kohpaiboon, 2010; Intaravitak et al., 2011). Econometric simulations in the two latter works calculated that ROOs in Thai FTAs amount to a tariff equivalent of 2-10% and that relaxation of ROOs may have greater impact on FTA utilization than tariff liberalization per se. Surprisingly, this paper found that utilization of Thai and Malaysian FTAs was not inversely correlated with ROOs restrictiveness. Although calculation of the ROO restrictiveness index involved collapsing tariff codes from HS6 to HS4 level, aggregation maintained the highest level of restriction so any restrictive effect of ROOs should have been even amplified. Further analyses would be required to account for the lack of effect of ROOs in my analyses, but two explanations could be advanced. First, the scale of the restrictiveness index used here (Cadot et al., 2006) is potentially too small to capture variability in ROO restrictiveness in Thai and



Malaysian FTAs. In that regard, for most tariff lines, the index fell within three out of the seven scores possible.<sup>56</sup> Although controversial, another potential explanation is that ROOs are not as restrictive as the above-mentioned econometric models predict. In support of such argument, Kawai and Wignaraja (2011b) found that only 26% of the firms surveyed in Thailand indicated that ROOs added costs to their business or affected their current or future use of FTAs. Anecdotal evidence from my own qualitative field research also points in this direction.<sup>57</sup>

The low utilization of FTAs has been attributed *inter alia* to the prevalence of DES/DDS programs in many East Asian countries that, by reducing tariffs for firms operating within regional production networks, make redundant (when not harmful) the creation of FTAs (e.g., Ravenhill, 2010). In turn, this paper found that firms' dependence on these unilateral tariff reduction schemes have in fact fostered the formation first and utilization later of FTAs. Being preferential tariffs in GSP and DES/DDS unilaterally given, they are potentially removable at the discretion of the granting country. In addition, their use is restricted at multiple levels. Utilization of GSP preferences is not only subject to product- and country-specific export ceilings but countries lose their eligibility to GSP once they reach certain development status. Likewise, utilization of DES/DDS privileges is usually limited within a time period, physical location, economic sector and/or to inputs incorporated into export-bound goods.

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<sup>56</sup> Nevertheless, scales in other ROO restrictiveness indexes are similar.

<sup>57</sup> Most firms and business associations interviewed for this project indicated that, independently of whether or not they were using FTAs at the time, they did not find ROOs as a critical factor restricting FTA utilization and that other factors are more important. In Thailand, application to PCOs requires that firms provide information about their cost structure and interviews found that some firms, especially small ones, were hesitant to use FTAs because the potential tax consequences derived from reporting this information. For large firms, an often-mentioned reason for not using FTAs was that they obtained larger tariff savings from DES/DDS privileges, particularly those offered by the Board of Investment, whose application procedures are easier.

During the 2000-2005 period, just before JTEPA and MJEPA were implemented, Thailand and Malaysia ranked only after China as the world's largest beneficiaries of the Japanese GSP program. And my analysis found that a sizeable share of Thai imports from Australia and Japan takes places through DES/DDS privileges—15.9% and 44.3% before implementation of their respective FTAs. Economic actors are more likely to mobilize to avoid losses with respect to the status quo than to secure new gains (Baldwin, 2006). Accordingly, producers in Thailand and Malaysia that benefitted from GSP and DES/DDS sought to integrate these unilateral liberalization schemes into legally binding agreements and were among those sectors more actively lobbying in favor of FTAs. Once FTAs were implemented, these producers were also more likely to be among the first and largest (in absolute or relative terms) users of FTAs, not only because they sought to keep benefiting from preferential tariffs but also because these firms already had in place all the procurement/export linkages as well as the logistics associated to documenting and applying for PCOs. My analyses showed that utilization of Thai and, especially, Malaysian FTAs was highly correlated with the previous use of GSP or DES/DDS. In fact, FTA utilization correlated with greater strength to the utilization of these programs than with the preferential tariff margin that, after all, is at the essence of FTAs. For instance, during the first year of MJEPA, 42.5% of its utilization for Malaysian exports to Japan was explained by previous utilization of the Japanese GSP. This result is in line with evidence showing that the higher the political trade dependence of countries on American and European GSP programs, the highest the likelihood of those countries sought an FTA with the Northern partner (Shadlen, 2008; Manger and Shadlen, 2013).<sup>58</sup>

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<sup>58</sup> Of note, both studies take a country-level analysis, not an intra-country sectoral approach as in this paper. They use the concept of *political trade dependence* referred as “the degree to which developing countries rely on such programs [GSP and GSP-related programs]

FTAs should be therefore evaluated not only for their capacity to create and expand new trade flows but, even more importantly, for binding tariffs at two levels. First, in their FTA concessions, Thailand and Malaysia have bound (and even eliminated) tariffs that were either unbound or bound with large overhangs at the multilateral level. Second, FTAs served to bind unilateral tariff concessions in GSP and DES/DDS, which have started to progressively replace. Current utilization of Japanese GSP preferences by Thai and Malaysian exporters has been reduced to a handful of goods not covered yet by JTEPA and MJEPA. The still large utilization of DES/DDS to import goods from Australia and Japan to Thailand is related not only to slow liberalization schedules by Thailand but also to the fact that DES/DDS eliminate tariffs completely while FTAs may take several years to grant duty free.<sup>59</sup> However, given the above-mentioned restrictions attached to the use of DES/DDS it could be predicted that FTA preferences would also eventually replace them.

FTA liberalization reduces the incentives of import-competing sectors to lobby for high external tariffs—phenomenon known as *rent destruction*—so FTA preferential tariffs are eventually multilateralized and extended to countries outside the bloc (Ornelas, 2005a; Ornelas, 2005b).<sup>60</sup> Just as JTEPA and MJEPA eroded Japanese GSP preferences, FTA preferential margins would eventually shrink and disappear as multilateral tariffs are also progressively reduced. My analysis found that goods attracting the highest tariffs at the multilateral level are also more likely to receive high tariffs in FTAs (and unilateral regimes). As multilateral liberalization progresses, either via WTO rounds or through FTA-induced

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and [...] [their] market access is subject to political idiosyncrasies in concession-granting developed countries” (Manger and Shadlen, 2013).

<sup>59</sup> DES/DDS also involve lower administrative costs than applying for PCOs in FTAs and their users tend to be large firms with strong administrative capabilities.

<sup>60</sup> Reduction of external tariffs by FTA members could potentially result in overall trade creation, reducing incentives for countries outside the FTA bloc to support multilateral liberalization (Ornelas, 2005c).

rent destruction, utilization of FTAs would decline and eventually concentrate around a small set of goods. It could be therefore hypothesized that as FTA liberalization is eventually exhausted, elimination of remaining tariff peaks will only take place at multilateral trade negotiations.

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