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Bilateral Free Trade Agreements Blocs:
Firms, States and the Redistribution of Power
within Production Networks under Regionalism**

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Creation and Shifting of Rents within Bilateral Free Trade Agreement Blocs

Firms, States and the Redistribution of Power within Production Networks under Regionalism¹

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Abstract

Starting in the 1980s, trade and investment flows by lead firms organizing production networks in East Asia have led to significant regional economic integration. In contrast to other regions, it has only been since the turn of the century that East Asian countries have begun to institutionalize their integration through free trade agreements (FTAs). By their nature, FTAs discriminate against firms and states outside the bloc. However, bilateral FTAs could also create and shift rents within the bloc and selectively improve the leverage of some firms and states vis-à-vis other firms and states also inside the FTA area. To the extent that FTAs could be designed to provide asymmetric market, procurement and restructuring advantages to some firms but not others, they could redistribute power among firms within a production network and an FTA area. At the same time, and despite erosion of the policy space and power of states over production networks, compared to other forms of liberalization, FTAs could provide governments with additional sources of leverage over lead firms. FTAs offer greater flexibility in liberalization coverage and sequencing and could be designed to selectively foster procurement and technical linkages between lead firms local suppliers. To test these hypotheses it was analyzed the automotive production network in Thailand and Malaysia in the context of recent bilateral FTAs. In pursuing their corporate and national objectives, firms and governments in both countries have made use of FTAs to create and capture selective rents that improved their relative position within national and regional automotive production networks.

¹ This paper was originally written in August 2010. Figures and Tables were updated to reflect recent developments. The author wishes to acknowledge critical review of several drafts by Professor K. Shadlen. The paper also received review comments from Professor K.A. Chase (Brandeis University, Waltham, MA, USA) in May 2011. All remaining errors are solely the responsibility of the author.

Abbreviations:

APC: automotive parts and components

AFTA: ASEAN FTA

ASEAN: Association of South East Asian Nations

ATIGA: ASEAN Trade in Goods Agreement

DES/DDS: duty exemption schemes / duty drawback schemes

FTA: free trade agreement

GATT: General Agreement on tariffs and trade

GM: General Motors

JTEPA: Japan-Thailand economic partnership Agreement

LCR: local content requirement

MAJAICO: Malaysia Japan Automotive Industries Cooperation

MFN: most-favoured nation

MJEPA: Malaysia-Japan Economic Partnership Agreement

OEM: original equipment manufacturer

ROO: rules of origin

TAFTA: Thailand-Australia FTA

TIEHS: Thailand-India Early Harvest Scheme

WTO: World Trade Organization

1. Introduction

Early in their development process, East Asian nations resorted to import substitution industrialization just as Western countries previously did. The later introduction in East Asia of export-oriented strategies and unilateral liberalization led to the rapid emergence of production networks where parts and components are traded across national and firm boundaries (Kimura and Ando, 2005; Baldwin, 2008; Hiratsuka and Kimura, 2008; Hiratsuka and Uchida, 2010). During the last two decades, these East Asian cross-border production networks have unleashed a significant level of market-driven regional economic integration (regionalization). However, and in contrast to other regions, institutionalization of economic integration in East Asia by means of free trade agreements (FTAs) (regionalism) is only a recent phenomenon (Hiratsuka, 2007). With the exception of the ASEAN (Association of Southeast Asian nations) trade bloc, and until the early 2000s, East Asian countries did not participate in the worldwide proliferation of regionalism but today they stand among the most active signatories of FTAs.

A wealth of works in the global commodity/value chain and global production network literatures has elegantly mapped the distribution of power and value between lead firms, organizing production, and their suppliers, both nationally and across countries (reviewed in Hess and Yeung, 2006). However, most studies in these traditions remain firm-centered, leaving out the way governments' policies influence and are influenced by inter-firm power dynamics.

Within a production network, firms seek to gain comparative advantage and power with respect to other firms not only by exercising their intrinsic and locational advantages, but also through capturing rents offered by the institutional context. Globalization has eroded

the capacity of states to implement targeted industrial policies and reduced their power over firms operating within production networks, on which they increasingly depend to spur economic development (Yeung, 2013). Nevertheless, through command of the regulatory framework, states can influence the distribution of rents and the balance of power among firms and within productions networks. In turn, firms can leverage their capital and technological assets to affect states' policies.

Much of the scholarly attention around FTAs has focused on how firms inside an FTA area benefit from expanded market access at the expense of outside firms (trade diversion), which consequently increases their power within the cross-border production network (Schiff and Winters, 2003). This paper delves into why firms and states seek FTAs and how they exploit unique features in them to gain selective advantages. To that end, it will explore the organization of cross-border production networks under regionalism through the conceptualization and analysis of power relations between and among firms and states, examining the ways FTAs could have altered these power configurations. This paper contends that FTAs offer opportunities for firms and states to enhance their comparative advantage *selectively*, not only with respect to firms and states outside the bloc, but also vis-à-vis to others already inside. By expanding market and procurement options for lead firms, FTAs increase their power over suppliers and the government in the host country. But, to the extent that FTAs could be designed to provide these benefits asymmetrically, FTAs could also selectively enhance the position of some lead firms in relation to others also *inside* the bloc. In turn, a state could use FTAs to affect lead firms' operations selectively and foster their procurement and technology linkages with local suppliers. By offering asymmetric

distribution of rents (selective rents), FTAs foster competition or collaboration among lead firms, suppliers and states within a production network to affect their formulation.

To test the above arguments, I analyzed the Thai and Malaysian automotive sectors in the context of recent FTAs. The automotive industry is one of the most protected manufacturing sectors, having often been at the center, when not at the origin, of regionalism initiatives worldwide (Carrillo et al., 2004). As a grouping, ASEAN represents the world's sixth largest automotive producer, historically led by Thailand and Malaysia.² Back in the 1960s and until the early 1980s, the automotive industries of both countries were relatively similar but diverging government policies and corporate strategies engendered different power dynamics between and among firms and the state that have eventually resulted in different outcomes.³ Thailand and Malaysia also rank among the countries in East Asia that have implemented more FTAs.

Empirical evidence obtained through extensive sectoral and firm-level research confirmed the initial arguments.⁴ Despite differences in their institutional and policymaking environments and in the structure of their automotive sectors, governments and automotive firms in Thailand and Malaysia sought specific configurations in FTAs that enhanced their leverage vis-à-vis other states and firms outside as well as inside the FTA area. As a result, FTAs signed by both countries have altered the organization and distribution of power within their respective automotive industries

² In 2012, Thailand accounted for 57.8% and 41.3% of all vehicles produced and sold in ASEAN, respectively. The corresponding figures for Malaysia were 13.4% and 18.0%, respectively (OICA database). In 2009 and 2010-2012, Indonesia surpassed Malaysia as ASEAN's second largest producer (data from OICA database).

³ Comparison of the evolution of the Thai and Malaysian automotive industries has been object of intense academic research, much of it published since research for this research project started in July 2006 (e.g., Abdulsomad, 1999; Abbott, 2004; Doner, 2009; Wad, 2009; Wad and Govindaraju, 2011; Kohpaiboon and Jongwanich, 2013; Natsuda and Thoburn, 2013; Natsuda et al., 2013).

⁴ The paper focuses exclusively on the automotive sector but draws on many of the 212 in-depth semi-structured interviews conducted for this project with private sector representatives and government officials in Thailand and Malaysia during two independent trips in 2008 and 2009, which were complemented with numerous personal communications and secondary research during 2010-2012.

The rest of the manuscript is organized as follows. The next section sketches key features of the automotive production network. Section three outlines the analytical framework for the study. Sections four and six analyze the Thai and Malaysian automotive industries prior to regionalism. Section five and seven present empirical data on both industries in the context of FTAs. Section eight discusses findings and offers some concluding remarks.

2. The automotive production network

In producer-driven chains, like the automotive industry, the lead firm (e.g., Toyota, Ford) is also the brand-bearing and original equipment manufacturer (OEM) that makes all key decisions regarding design and production strategies and conducts most of the assembly and distribution of final goods (Sturgeon et al., 2008; Sturgeon et al., 2009). To manufacture a vehicle (also referred as a *completely built-up* unit), assembly plants could independently produce and/or outsource all automotive parts and components (APCs) or, when manufacturing capabilities or scales are limited, start instead from a *completely knocked-down* kit that contains most of the elements of a vehicle.

Because of its multiple spillovers, the automotive industry has been often promoted and protected. During the 1970s and 1980s, Western and Japanese carmakers established independent assembly plants in multiple East Asian countries as a way to jump over high tariffs on vehicles (Doner, 1991; Staples, 2008). Although gradual liberalization across the region since the early 1990s prompted these firms to initiate a rationalization of their procurement and production strategies, technical and logistic factors inherent in the industry prevent the adoption of global sourcing and production patterns prevalent in sectors like

electronics (Sturgeon et al., 2009).⁵ Consequently, automotive production tends to take place within national and regional networks “nested into the organizational structures” of global suppliers and OEMs (Sturgeon, 2008:302; Sturgeon et al., 2009:10). The way these global business structures are in turn nested within national, regional and global institutional contexts remains understudied.

The structure of the APC supplier base varies by OEM and host country but, especially in Japanese firms, is often organized in tiers, where only the first-tier suppliers serve OEMs directly (Humphrey, 2003; Sturgeon et al., 2008). Since the 1990s, OEMs have been transferring responsibilities in design of key APCs and module pre-assembling to first-tier *global suppliers*, also referred as half-tier, mostly Western and Japanese multinationals (e.g., Denso, Delphi), that follow OEMs worldwide. Local suppliers acquire technological know-how from more advanced foreign suppliers or directly from carmakers.⁶ Competition among OEMs is passed on to suppliers that are continuously pressured to reduce costs and improve quality standards and delivery.⁷ Western carmakers, particularly American firms, favor shorter-term, market relations with their suppliers (Humphrey, 2003; Sturgeon et al., 2008). In contrast, even when relocated abroad, Japanese OEMs rely more on closer and longer-term links with their suppliers.

⁵ In addition to many APCs being costly to transport, lean manufacturing and just-in-time logistics force suppliers to cluster around OEMs. This strong national/regional orientation in the automotive sector results in higher domestic/regional value content than in other industries.

⁶ Based on the complexity of inter-firm transactions and suppliers' capability, the global commodity/value chain literature distinguishes five modes of governance in lead firm-supplier relations that in an increasing scale of power asymmetry range from market linkage (governed by price) to modular, relational, captive and hierarchical (within the firm) (Gereffi et al., 2005). Although it varies according to the OEM's country of origin, the increasing assumption of responsibilities by global suppliers has made OEM-supplier linkages more relational. Relational links make more costly for OEMs to switch suppliers. Our interviews with Thai and Malaysian suppliers found that, although Japanese OEMs are more supportive (e.g., transferring process engineering knowledge), over time, both Japanese and Western OEMs have reduced their assistance.

⁷ For critical APCs, OEMs maintain design and production in-house or import them from their regional headquarter (intra-firm trade). Our research in Thailand and Malaysia found that procurement decisions by suppliers are most often determined by the standards specified by OEMs rather than price. Most APC exports and replacement market sales are indirect through OEMs.

3. Regionalism and the distribution of rents and power within production networks

In the late 1980s, most of East Asia initiated a process of unilateral liberalization, often reinforced multilaterally, that fostered regional economic integration and the emergence of cross-border production networks (Hiratsuka, 2010). However, with the sole exception of the ASEAN FTA (AFTA), East Asia escaped to the worldwide wave of FTAs that started in the early 1990s.⁸ It was not until the turn of the century that East Asian countries started institutionalizing their integration; now close to 60 FTAs have been implemented, most of them as bilateral agreements (reviewed in Kawai and Wignaraja, 2013).

Global production network theory incorporates non-firm actors into its analysis of production networks, but most of its empirical elaborations share the firm-centric focus of global commodity/value chain studies (Henderson et al., 2002; Coe et al. 2008; Gereffi, 2013). Even when the institutional context is considered, only its unidirectional influences on firms are examined, leaving out how it came about in the first place and the way inter-firm dynamics feedback to the institutional context and shape governmental policies.⁹

The dependent variable explored in this paper is the distribution of power among actors in the Southeast Asian automotive production network (lead firms, suppliers and states) in the context of recent bilateral FTAs.¹⁰ It will be argued that this is not simply a function of inter-firm governance structures (Gereffi et al., 2005; footnote 6), but also of the mutual interactions between: a) the corporate strategies (domestic, regional, global) of lead firms and suppliers, and b) the domestic regulations and international trade and investment policies of states or, more specifically here, of the interactions between regionalization and regionalism.

⁸ AFTA was launched in 1992 but it was only in 2003 that intra-ASEAN tariffs began to be significantly reduced. Still, Malaysia excluded its automotive sector from AFTA liberalization schedules until 2005 (see below).

⁹ In fact, the few studies about the impact of regionalism on the organization of production emerged from the global commodity/value chain strand (e.g., Gereffi et al., 2002).

¹⁰ Global production network theory also includes in production networks non-firm actors beyond states like trade unions or non-governmental organization. Our interest here is limited to firms and states.

The primary concern is to understand why lead firms in a given country and production network seek specific FTAs. This paper will try to ascertain: a) whether and how FTAs create opportunities for a selective redistribution of rents, power, and value, between and among firms and states operating in production networks and, b) whether and how actors have tried to shape FTAs to their advantage, creating and capturing these selective advantages.

In chain and global production network theories, power in a production network is bestowed on the lead firm as a structural capacity, while suppliers are only at the receiving end of the lead firms' strategies. But, as a relational concept, the power of a firm (or a state) within a national/regional/global production network is exercised with respect to other firms and states. Likewise, power and value are never static, but subject to constant reconfiguration. Inter-firm relations and network governance evolve not only with modifications in technology, suppliers' capabilities and/or lead firms' strategies—as posited by Gereffi et al., (2005:96)—but, arguably, also when market and institutional environments change and firms and states react strategically to the actions of other firms and states.

Firms (both lead firms and suppliers) attempt to build their comparative advantage over competitors or leverage in lead-supplier relationships through the acquisition of specific intrinsic resources and capabilities, but also by seeking, lobbying for and capturing rents available in the institutional setting. For suppliers in developing countries, linkages to lead firms offer opportunities for contracts and technology transfer. It is contended here that suppliers could not only often develop their own strategies, but could also try to influence policymaking to gain power with respect to lead firms. In that regard, suppliers' source of leverage within a production network is not so much intrinsic, as for lead firms and states,

but rather it emanates from a supportive regulatory framework.

Developing states often engage in race-to-the-bottom competitions to offer lead firms the best incentives, so as to attract their investment and host high technology and value-added activities within the production network. Multinationals could leverage their capital and technological assets to extract rents from states but they still depend on the evolving regulatory environment.

In exploring whether, why and how dynamics within the automotive network shaped and have been shaped by FTAs, I will first briefly examine their configuration under earlier trade regimes.

3.1. National and regional production networks before regionalism

Under import substitution, governments enhance the comparative advantage of selected firms (foreign or local) by offering them oligo/monopolistic conditions domestically and trade protection from external competition. To jump over high tariffs, multinational lead firms establish independent plants in multiple countries, producing similar products, initially primarily for local consumption. Except in large markets, production is conducted at suboptimal economies of scale, which added to the simultaneous protection of upstream inputs results in high production costs, eventually passed on to domestic consumers. Once lead firms have sunk investment their leverage vis-à-vis the state declines.

Since foreign investment by lead firms does not necessarily generate backward linkages, many governments introduced regulations that forced lead firms to transfer technology and outsource inputs locally through technical transfer and local content requirements (LCR). Local suppliers in Thailand and Malaysia that relied on these

requirements lobbied for their establishment and maintenance (Abdulsomad, 1999).¹¹ In 2000, the World Trade Organization (WTO) outlawed the use of LCRs although technical transfer requirements are still permitted.

Limitations inherent in import substitution and competition for investment prompted developing countries to turn toward exports and progressively ease trade and investment restrictions, mostly unilaterally. When import substitution is pursued simultaneously with export-oriented strategies, states faced the dilemma of protecting upstream input producers without undermining the international competitiveness of downstream exporters. To that end, governments introduced tariff rebates for imported inputs that are incorporated into goods for exports through duty exemption/drawback schemes (DES/DDS) and export processing zones.

Export orientation coupled with DES/DDS increase production scales and access to inputs at world prices raising the x-efficiency of lead firms. In any case, the decision by a lead firm to export (and what and where) does not rest with the subsidiary, but with its principal according to a global strategy. Contrary to LCRs, DES/DDS enhance the power of lead firms over the state and local suppliers.¹² Export promotion exposes local suppliers to external competition, but it could potentially benefit more efficient suppliers.

Lead firms that (over)invested across multiple countries under import substitution regimes would oppose any sudden multilateral liberalization of trade barriers on final goods that could lead to redundancy and/or overcapacity.

¹¹ LCRs promote contracts with and transfer of know-how to local suppliers but not necessarily *indigenous* ones as local content could be achieved by outsourcing from relocated foreign affiliates. The ability of LCRs to upgrade local suppliers in Thailand has been questioned (Kohpaiboon and Jongwanich, 2013), although they fostered a growth in their numbers in Thailand and Malaysia (Abdulsomad, 1999).

¹² Nevertheless, even in the presence of DES/DDS, states could incentivize local content and local suppliers could leverage over lead firms the domestic protection of inputs for domestic-bound products.

3.2. Regional production networks under regionalism

Exporting lead firms could use DES/DDS to import inputs tariff-free, but they may still face high tariffs on their final products at destination markets. For these firms, both multilateral and FTA liberalization grant easier access for their final goods in other markets, at the same time that liberalize input procurement without the export conditionality of DES/DDS. Although multilateral liberalization maximizes scales for exporters, firms may favor FTAs because of their discriminatory effect against competitors outside (Chase, 2003; Chase, 2005). It is posited in this paper that, in addition to generate rents to exporters inside the bloc, FTAs could also shift selective rents among lead firms already within the bloc. Accordingly, firms and states will support FTA configurations that strengthen their power with respect to other actors within the production network and FTA.

Use of FTAs' preferential tariffs requires that exported goods comply with rules of origin (ROOs) that specify whether a product has undergone sufficient transformation within the bloc. Most often, ROOs establish that the item contains a minimum value content from within the FTA area or that has undergone a change in the tariff line classification. Since final goods could contain inputs from multiple countries, some outside the FTA area, ROOs are particularly relevant in cross-border production networks.¹³

Consider a model in which A and B represent two developed countries and X a developing country. LF_A and LF_B are lead firms producing similar final goods in a given production network. LF_A has its base and a production plant in country A (LF_{A-A}) and LF_B has home and a plant in B (LF_{B-B}). If A and X sign an FTA, LF_A (LF_{A-A}) would be able to export its final products to X free of tariffs, as opposed to lead firm LF_B (LF_{B-B}) since

¹³ ROOs are included in FTAs to avoid trade deflection, but could be used strategically for protectionist purposes. Disparity in ROOs across overlapping FTAs could have distorting effects in production networks (Bhagwati, 1995; Cadot et al., 2006; Baldwin, 2008).

country B has no FTA with X (Figure 1). Trade diversion created by FTA A-X generates “*market rents*” for LF_{A-A} that could expand its production scales and overall power vis-à-vis LF_{B-B} .¹⁴ LF_{B-B} could neutralize trade diversion by setting production within the A-X bloc or by lobbying its government to join FTA A-X (or create FTA B-X) triggering the classical domino of FTAs (Baldwin, 1995; Baldwin and Jaimovich, 2012).

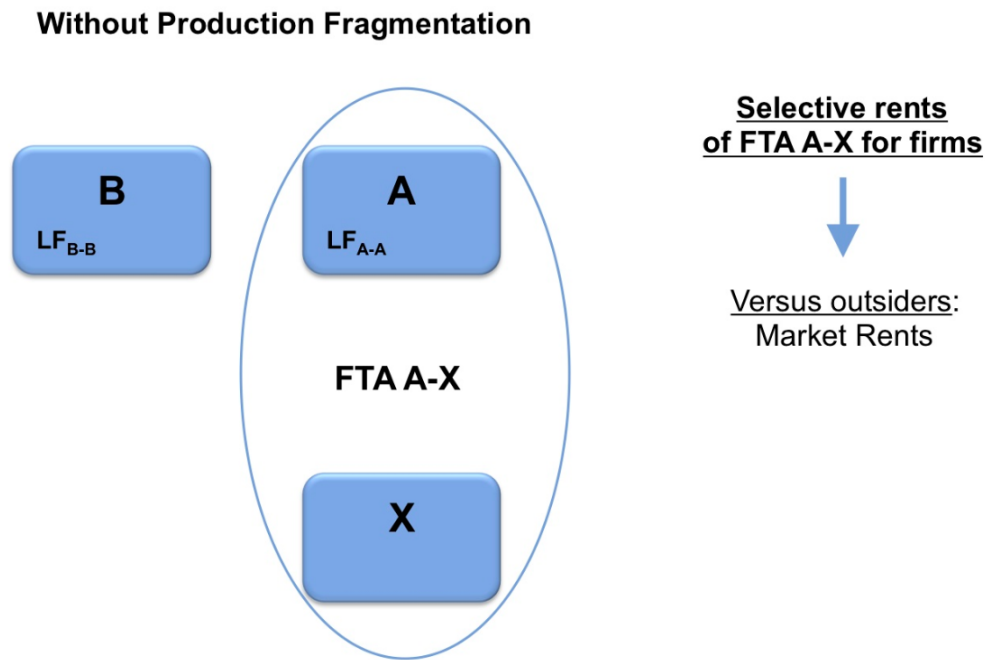


Figure 1: Trade diversion inherent to any FTA creates rents for firms within the FTA area (see text for details).

For trade in final goods, firms’ preferences regarding FTA liberalization are determined by their import-competing or export-oriented nature (Milner, 1999). In East Asia, where production networks have developed to greater extent than in any other region (Kimura and Obashi, 2011), the way production fragmentation influences preferences for FTAs as well as

¹⁴ If A and X have different external MFN tariffs, exporters in the low-tariff country, likely LF_{A-A} , could profit by marking-up their exports to the high-tariff country by the excess external tariff in X (or just below), which firms based in X pass to domestic consumers.

the impact that FTAs have on production strategies merit consideration and analysis.

It is posited here that certain FTA configurations could increase the relative power of some lead firms with respect to other also *inside* the bloc (Figure 2). In the example above, consider now that LF_A has fragmented its production and moved some stages to country X (e.g., plant LF_{A-X} , conducting labor-intensive assembly). LF_{A-X} would be engaged in the import parts and components and the of export final goods (reverse imports) with country A. An FTA A-X would allow LF_{A-X} to export its final goods back to A tariff-free. Although subsidiaries of lead firms from other countries that are also present in X (e.g., a subsidiary of LF_B from country B based in X, LF_{B-X}) could also export to A using FTA A-X, this FTA is likely to benefit LF_{A-X} more than LF_{B-X} (“*reverse imports rents*”).¹⁵

Higher-tariff country X not only applies high tariffs on final goods but also on intermediate inputs. In the absence of FTA A-X, lead firms producing in X could either: a) pass on to consumers the higher costs of protected local intermediate inputs incorporated into goods for domestic consumption or b) use DES/DDS to import intermediate inputs free of duty if these are incorporated into final goods for exports. Therefore, for lead firms producing in X, FTA A-X does not provide additional procurement gains over DES/DDS.¹⁶

However, in addition to the persistence of high tariffs on parts and components in some sectors (e.g., the automotive sector), the above argument would only hold if procurement patterns were the same among all lead firms, which usually are not. This opens the door for FTAs to generate asymmetric rents in the import of intermediate inputs—“*procurement*

¹⁵ In East Asia, the relevance of these reverse imports rents is limited since exports back to Japan by Japanese subsidiaries in the region are low outside electronics and photographic equipment and are the lowest for the automotive sector (Chase, 2005). For instance, exports of vehicles from Japanese plants in Thailand back to Japan were negligible before 2010 and only increased in 2010-2012 (Trade Map; interviews).

¹⁶ In fact, widespread use of DES/DDS across much of East Asia has been argued as a factor in the low economic relevance and utilization of FTAs among businesses in the region (Ravenhill, 2010; see also working paper by this Author (also in this LSE’s International Development Working Paper series) entitled: “Utilization of Free Trade Agreements by Sectoral Interests and Binding of Unilateral Concessions”).

rents”—among lead firms inside the bloc. Under FTA A-X, LF_{A-X} would be able to import inputs from A tariff-free and independently of the destination of the final good. The possibility for other foreign (e.g., LF_{B-X}) and local (e.g., LF_{X-X}) lead firms in X to benefit from liberalization of inputs from A would depend on their procurement pattern (Figure 2). To the extent that LF_{A-X} is likely to depend on inputs from A *more* than other firms based in X, FTA A-X would generate selective procurement rents to LF_{A-X} . For instance, in East Asian production networks, Japanese subsidiaries naturally tend to have stronger procurement links with Japan than Western firms do.¹⁷ Procurement rents will increase the relative power of LF_A within the production network, not only versus lead firms outside the bloc (e.g., LF_{C-C}) but *also* with respect to others within it (e.g., LF_{B-X} , LF_{X-X}) (Figure 2).¹⁸ Following principal-agent theory, by expanding procurement choices for LF_{A-X} , FTA A-X allows LF_{A-X} to squeeze suppliers in X.¹⁹

It is contended here that procurement rents would be more important in at least four scenarios. First, in cross-border intra-firm procurement, as this type of trade is captive and less sensitive to price for switching sources. Second, when lead firms have invested in long-term relationships with suppliers (e.g., Japanese lead firms overseas with their supplier networks at home). Third, when domestic-bound production, ineligible for DES/DDS, represents a large share of total production. Lastly, in sectors with less standardized intermediate goods (e.g., the automotive industry), which cannot be procured from multiple sources and countries. Arguably, firms under these circumstances will have strong incentives

¹⁷ In addition, in most East Asian production networks, Japanese subsidiaries have stronger procurement links with Japan than do Western firms with their home bases in Europe or the United States.

¹⁸ In industries with limited global outsourcing, LF_{B-X} may depend more on inputs from the regional hub A than from distant home B. Likewise, not all firms from country A with plants in X have the same procurement dependence on intermediate goods from A to the point that, as found in our research, a firm from A could support an FTA A-X while other might not, or could even oppose it. Therefore, the distribution of procurement rents could be firm-specific and cannot be predicted by the lead firms' home country requiring for its assessment of firm-level research.

¹⁹ This should either reinforce market forms of lead firm-suppliers relations or, at the other extreme, hierarchical intra-firm outsourcing.

to lobby for FTAs that selectively liberalize their main offshore outsourcing flows.

Hypothesis 1: *When lead firms in a country have different sourcing patterns, an FTA between the host country and one of the input source countries could generate asymmetric procurement rents among lead firms inside the FTA bloc.*

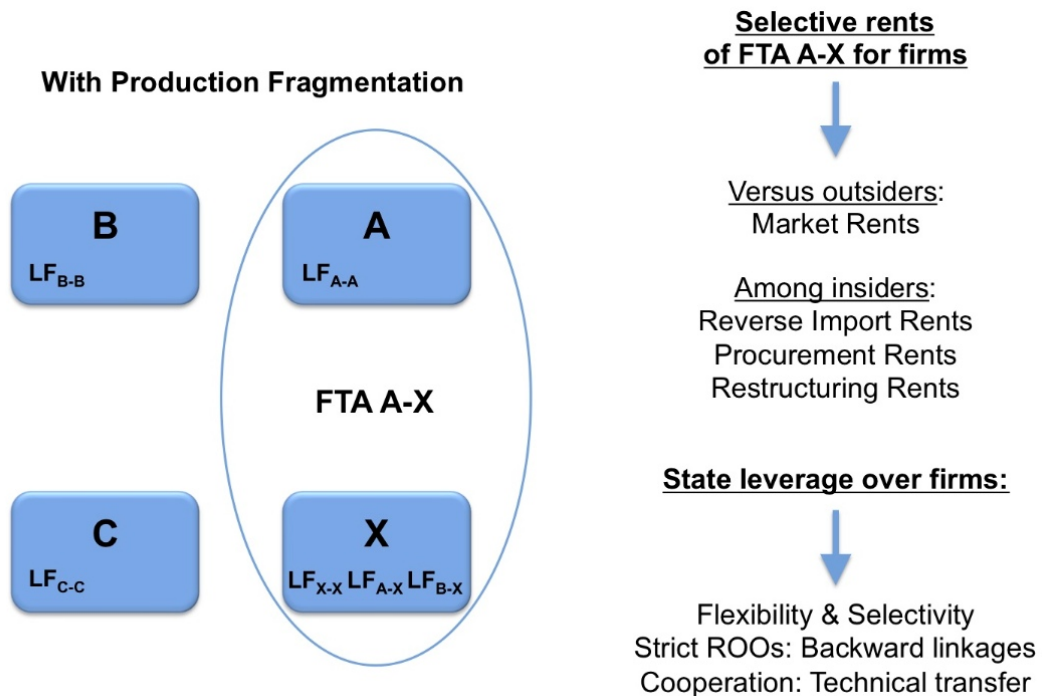


Figure 2: When lead firms fragment production and move some stages to other countries, certain FTA configurations could generate asymmetric rents (reverse import, procurement, restructuring), not only with respect to firms outside the bloc but also among those inside (see text for details).

For lead firms inside an FTA, liberalization offers the possibility to link dispersed production units and progressively restructure production from the national to the FTA bloc level while being protected from outside competitors by external multilateral tariffs (Chase, 2003; Chase, 2005). It is argued here that efficiency gains from restructuring would also be selective (amounting to “restructuring rents”), benefitting more lead firms that have plants in

the two countries that form the FTA (e.g., LF_A over LF_X) (Figure 2).²⁰ Once again, the key point here is that FTAs could create *selective* benefits among firms inside the bloc, not only versus outsiders.

Hypothesis 2: *When lead firms in a given country have also production stages in other countries, an FTA between the host country and one of those other countries could generate asymmetric restructuring rents among lead firms inside the FTA bloc.*

Liberalization—and globalization more generally—has reduced the influence and leverage of states over multinational lead firms and their overall steering of the economy (Yeung et al., 2013). Any type of liberalization has distributional effects among nations but in North-South bilateral FTAs developed countries often impose on developing ones regulatory reforms on beyond-border issues that favor their interests and those of their firms (Shadlen, 2005; Pekkanen, 2007).²¹ It is submitted here that, in turn, FTAs offer developing countries possibilities to gain leverage over lead firms and developed states that are not possible in other liberalization fora. Compared to multilateral liberalization, FTAs provide developing governments with more options for selective liberalization coverage and sequencing as well as to foster procurement and technological linkages between multinational lead firms and the local supply base.

²⁰As with procurement rents, the distribution of restructuring rents is not determined simply by the firm's home country, but also by factors intrinsic to each firm. For instance, if before the FTA, LF_A established plant LF_{A-X} as a way to jump over high tariffs in X, FTA A-X may prompt LF_A to consolidate all production in A (LF_{A-A}), or specialize each plant in different products. On the other hand, if LF_A only produced in A (LF_{A-A}) before the FTA, LF_A may move some production stages to X once FTA A-X is implemented to profit from investment provisions in the FTA.

²¹ Developed countries often leverage their position in bilateral FTAs to force developing nations to surrender policy space still available under WTO.

Ambiguities and flexibilities in General Agreement on Tariffs and Trade's (GATT) Article XXIV and Enabling Clause, regulating coverage and sequencing of FTA liberalization, leave room for states to protect sensitive sectors in FTAs in ways that are not possible under "single undertaking" multilateral WTO liberalization.²² Since FTAs establish tariff levels and ROOs at the highest level of product specification, liberalization or protection could be targeted to narrow subsectors, potentially to specific firms. Greater flexibility and specificity of sectoral coverage and sequencing in FTAs create another level of asymmetric impacts of FTAs among insiders. As signatories of FTAs, this should increase the leverage of governments over lead firms.

Hypothesis 3: *Compared to multilateral liberalization, FTAs offer governments more options for selective targeting and sequencing of liberalization or protection, which should increase their leverage over lead firms.*

It is also argued here that FTAs could be negotiated to foster sector-specific backward linkages between lead firms and local suppliers. Independently of whether LCRs were welfare-enhancing or -decreasing, some developing countries valued them greatly and requested from the WTO a temporary extension beyond the original 2000 deadline, particularly for the automotive industry. As discussed earlier, it is well established that FTA preferential tariffs could induce a supply switching from firms in third nations to firms in FTA partners, a *tariff-mediated* trade diversion (Schiff and Winters, 2003). This paper contends that in sectors where production fragmentation is prevalent, strict ROOs could have

²² The Doha Round also proposes to reduce high tariffs more rapidly than lower ones while in FTAs tariff peaks could be reduced gradually or excluded altogether.

supply-switching effects that could resemble WTO-illegal LCRs, a *ROO-mediated* trade diversion.

By establishing high levels of intra-bloc transformation, strict ROOs favor outsourcing from suppliers located within the FTA. If country X seeks to promote its domestic supply base in a given industry, it could strategically negotiate its FTA with A to impose strict ROOs on final goods in a highly product-specific manner. In most FTAs, inputs from the partner also qualify towards the “FTA area value content” established by ROOs (e.g., inputs from either A and/or X). A motivated government in X would negotiate equally stringent ROOs in subsequent FTAs with other countries (e.g., B, C, etc.). Once X has implemented multiple FTAs, each with its own ROOs, it is possible that the value content of final goods made by LF_{A-X} —potentially with inputs from home country A—may qualify to preferential tariffs under FTA A-X, but not under FTAs B-X or C-X. This should encourage LF_{A-X} (and other firms based in X: LF_{X-X} , LF_{B-X} , LF_{C-X}) to outsource preferentially from suppliers in X in order to qualify for all the FTAs signed by X.²³ To the extent that strict ROOs promote linkages between lead firms and local suppliers, FTAs could enhance the leverage of states and suppliers over lead firms.²⁴

Hypothesis 4: *A motivated government seeking to increase local content in manufacturing could strategically negotiate strict ROOs in FTAs to foster*

²³ The distorting effect of inconsistent ROOs across overlapping FTAs is often referred as the “spaghetti or noodle bowl effect” (Bhagwati, 1995; Baldwin, 2008). As with LCRs (see footnote 11), strict ROOs promote procurement from local suppliers but not necessarily from *indigenous* firms.

²⁴ Of note, and contrary to the expected restrictive effect of ROOs on the utilization of FTAs, this research project could not find significant inverse correlation between the utilization rate of selected Thai and Malaysian FTAs and the restrictiveness of their ROOs (see working paper referred in footnote 16 for data and discussion on this paradoxical result).

backward sourcing linkages from lead firms to local suppliers in ways that would resemble WTO-illegal LCRs.

For developing countries, forcing or incentivizing lead firms to transfer technology to local suppliers becomes more difficult after firm's establishment but, it is argued here, governments could use FTAs to that effect. A common feature in North-South FTAs in East Asia is the inclusion of cooperation provisions that go beyond government-to-government capacity building in technical trade issues to also include assistance by firms from the developed partner to local firms in the developing country in highly targeted projects. By bundling technical cooperation into a package of reciprocal tariff concessions, developing states and their indigenous supply base could direct funds and know-how to sectors of their choice and gain leverage over lead firms.

Hypothesis 5: *A motivated developing government seeking to upgrade the capabilities of its local supply base could strategically negotiate cooperation chapters in FTAs to channel technology assistance by the partner's lead firms to local suppliers.*

As in the scenario before regionalism, the main source of leverage for suppliers in FTA formulation derives from the rents furnished to them by the institutional environment. Regionalism reduces the leverage of suppliers over lead firms but, as discussed above, FTAs could also be used to their benefit by imposing procurement restrictions (e.g., strict ROOs), and technical linkages (e.g., cooperation provisions) on lead firms. By eliminating tariffs on

intermediate goods, and thereby fostering contractual relations with lead firms within the bloc, FTAs increase the power of suppliers inside the trade area with respect to those outside. Suppliers' preferences regarding regionalism would be contingent on their competitiveness. More advanced suppliers, potentially benefiting from increased production by lead firms, would therefore support FTAs.²⁵

As in the scenario before regionalism, the main source of leverage for suppliers in FTA formulation derives from the rents furnished to them by the institutional environment. On the one hand, by eliminating tariffs on intermediate goods and expanding procurement options for lead firms across the bloc, FTAs reduce the leverage of suppliers over lead firms. But, as discussed above, FTAs could also be used to the benefit of suppliers by imposing procurement restrictions (e.g., strict ROOs), and technical linkages (e.g., cooperation provisions) on lead firms. On the other hand, as FTAs foster contractual relations between suppliers and lead firms within the bloc, FTAs would increase the power of suppliers inside the trade area with respect to those outside. Eventually, suppliers' preferences regarding regionalism would be contingent on their competitiveness. Advanced suppliers, potentially benefiting from increased production by lead firms, would therefore support FTAs.²⁶

4. The automotive production network in Thailand before regionalism²⁷

The investment incentives introduced by the Thai government in the early 1960s fostered the entry of foreign automotive OEMs (mostly Japanese) that, in joint venture with local entrepreneurs, assembled vehicles out of completely knocked-down kits for a protected

²⁵ In the automotive industry, where APC exports are mostly indirect through OEMs, market rents accrue to suppliers only marginally. As FTAs facilitate procurement of high-tech inputs from more developed countries, they could potentially limit incentives for upgrading of the supply base in the less developed country.

²⁶ In the automotive industry, where APC exports take place mainly through OEMs, market rents accrue to suppliers only indirectly.

²⁷ This section draws on secondary literature, *inter alia*, on Doner (1991, 2009), Abdulsomad (1999), Abbott (2004) and Niyomsilpa (2008) complemented with information from interviews.

market. Heavy dependence on imported automotive products contributed to trade deficits, which prompted the government to establish LCRs and a partial ban on imports of fully-assembled vehicles in the mid-1970s. Although probably secondary to trade balance considerations, LCRs were also introduced to promote local suppliers. LCRs increased the number and leverage of indigenous suppliers but also benefitted Japanese assemblers that produced more localized models than Western firms. Newly gained influence by suppliers and divisions among carmakers, allowed the government to raise LCRs progressively and postpone rationalization of an overcapacity industry. The departure of several Western OEMs in the 1970s allowed Japanese assemblers to reap all the benefits of rapid growth in domestic vehicle demand during the late 1980s.

Starting in the late 1980s, import substitution began to be coupled with export-promotion strategies, including the strengthening of DES/DDS and export-processing zones. Yet, by 1995, exports accounted for less than 1.4% of total production. Unilateral liberalization was reinforced by commitments under AFTA and GATT's Uruguay Round. Restrictions on assembled vehicle imports were lifted and tariffs reduced.

Rapidly increasing vehicle demand in Thailand instigated a surge of investment into the industry, not only by established Japanese firms and Western carmakers that returned in the late 1990s. Thailand became the favourite location for carmakers in ASEAN because it had the largest market and supply base, but mainly due to its lack of a national car program. With their eyes on AFTA and WTO, American carmakers did not re-enter Thailand just to serve its domestic market but also to establish their export base for ASEAN and beyond. Nevertheless, most indigenous suppliers were not up to export standards, so this period also witnessed investments by first-tier foreign suppliers.

Vehicle demand and production collapsed in the wake of the 1997 Asian financial crisis (Figure 3). Although applied multilateral tariffs on vehicles from *outside* ASEAN were raised, Thailand maintained its international commitments to abolish LCRs by 2000 and reduce intra-ASEAN tariffs in line with established AFTA schedules. Domestic sales recovered by 2004 but the crisis deeply transformed the industry (Niyomsilpa, 2008). Local partners in most assembly plants went bankrupt leaving their foreign counterparts in full equity control. Likewise, many Thai suppliers closed down or were bought up by foreign firms, mostly Japanese firms, leaving only a few surviving indigenous firms at the first-tier. Carmakers reacted to the Asian crisis by redirecting excess capacity abroad, marking Thailand's take-off as an automotive exporting country (Figure 3).

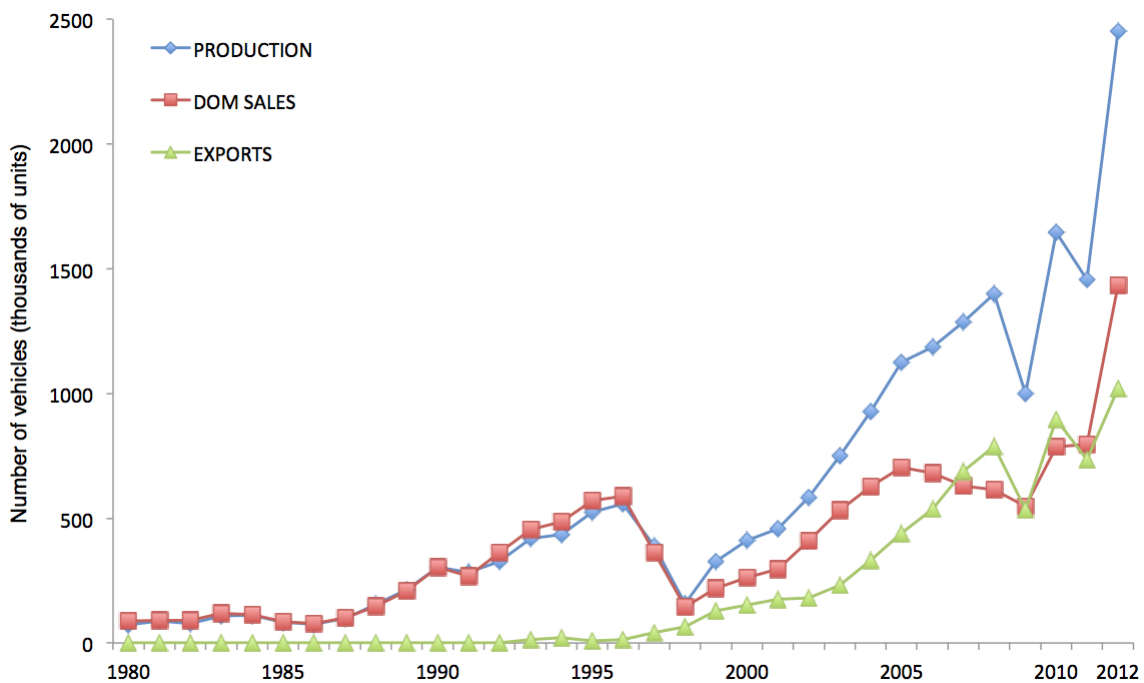


Figure 3: Production, domestic sales and exports of vehicles (passenger and commercial) in Thailand. Source: Thailand Automotive Institute and Thailand Automotive Industry Association.

5. The automotive production network in Thailand under regionalism

Following the Asian crisis, the Thai government endeavoured to consolidate Thailand as the regional automotive hub through foreign investment and a combination of import substitution with export promotion. In turn, carmakers redoubled their pressure on the Thai (and other ASEAN) government for the acceleration of AFTA implementation and started lobbying in favor of bilateral FTAs with some key partners.

Although most international OEMs and suppliers have production facilities in several ASEAN countries, Thailand holds the largest manufacturing capacity and most advanced operations. Production reached 2.5 million units in 2012, setting Thailand as the world's ninth largest producer, the third for commercial pickup vehicles (Figure 3).²⁸ Japanese firms have traditionally dominated the Thai automotive industry. On average, over 85% of vehicles assembled in Thailand over the last decade have been Japanese models compared to around 12% American and only 0.5% European (Table 1 for 2008, a mid-year for the period under study).²⁹ Japanese carmakers produce in Thailand a range of commercial vehicles and passenger cars, except larger-engine luxury models that are imported directly from Japan. European firms only dominate production in the niche segment of large-engine cars, assembled from completely knocked-down kits imported from Europe.

In 2012, Thailand was the biggest automotive market in ASEAN and the third largest exporter in East Asia after Japan and Korea. Japanese OEMs represent over 85% of domestic

²⁸ Figures in this section were obtained from interviews with representatives from automotive business associations, individual firms and government agencies in Thailand (e.g., Thailand Automotive Institute, Thai Automotive Industry Association, Thai Auto-Parts Manufacturers Association, the Automotive and Auto Parts Industry Clubs of the Federation of Thai Industries, Office of Industrial Economics, Board of Investment and individual carmaker and supplier firms), complemented by personal communications and sectoral reports. With a large rural population and a favorable excise system, light commercial vehicles (pickup trucks) had historically dominated production, domestic sales and exports. In 2012, pickups still accounted for two thirds of exports, but just 44% of domestic sales. In 2007, trying to create a second niche product, the government launched the "eco-car project" for the export-oriented production of low-carbon emission passenger cars. Only 60,000 eco-cars were produced in 2010 but this figure is projected to reach 430,000 vehicles in 2013 (Bangkok Post, August 6, 2013).

²⁹ Japanese influence is actually higher since for some vehicles produced by Ford and General Motors share platforms with Japanese carmakers (Mazda and Isuzu, respectively), therefore also depending to some extent on Japanese inputs.

sales and over 80% of exports (Table 1).³⁰ Main export markets of Thailand-made vehicles are Australia, other ASEAN countries, and the Middle East, while reverse exports to home countries, including to Japan, have been negligible before 2010. Toyota alone accounts for around 40% of total production, local sales and exports, dominance that has translated into significant influence in Thai policymaking with Toyota as key sponsor of several Thai FTAs (see below).³¹

The supply base in Thailand is ASEAN's largest and most developed. Despite the elimination of LCRs, domestic value content of Thailand-made vehicles has progressively increased (Techakanont, 2011; interviews).³² Still, Thailand imports more APCs than it exports, especially some key functional APCs and rolled steel from Japan (including for some American models) or from OEMs' subsidiaries in the region. Although there are over 300 Thai-owned APC manufacturers classified as first-tier, the bulk of indigenous suppliers are specialized on labor-intensive body parts and/or lack independent capabilities in module production, design and research and development and require assistance from OEMs or international suppliers (interviews; Kohpaiboon and Jongwanich, 2013). Interviews revealed that while upgrading of the supply base is a stated policy goal, the government is not necessarily concerned about its ownership, and relies mainly on market forces (e.g., agglomeration of export-oriented foreign firms) to foster technological transfer.

³⁰ Mitsubishi was the first OEM to export from Thailand and continues to be the firm that exports the largest share of its production. Toyota only started exporting from Thailand in large volumes since the launching of its International Multi-purpose Vehicle project in 2002 (interviews; Techakanont, 2011).

³¹ The large influence of Toyota in Thai automotive policy, and Thai trade and industrial policy more generally, was revealed in interviews with government officials and other carmakers from all nationalities. One of the areas where this influence was manifested was in the launching of the eco-car project in 2007, which was initially supported by Honda but opposed by Toyota. Although beyond the limits of this paper, evolution of the project and its impact on bilateral FTAs has reflected competing export strategies among different Japanese carmakers (Niyomsilpa, 2008; interviews). Toyota's late entry into the eco-car project has resulted in a slight decrease in its production and domestic sales share since 2007 in favor of Nissan, Honda and Mitsubishi (interviews).

³² Localization is higher for Japanese models followed by American's and stands around 80-90% for pickups and 40-70% for passenger cars (interviews; Kohpaiboon and Jongwanich, 2013).

Table 1: Share (%) of vehicle production, domestic sales and exports in Thailand (2008) *

	Production	Domestic Sales	Exports
Toyota	41.5%	43.7%	40.6%
Mitsubishi	12.4%	3.8%	18.5%
Isuzu	11.3%	22.1%	6.4%
Honda	11.6%	15.0%	9.31%
Nissan **	5.2%	5.1%	5.4%
Mazda **	9.2%	1.8%	14.6%
Ford		1.5%	
GM	7.4%	3.6%	5.17%
Other	1.4%	3.4%***	0.02%

Source: Thai Automotive Industry Association

* Average market share for total registered vehicles (commercial and passenger cars)

** Mazda and Ford have a joint venture in Thailand (Thai Auto Alliance)

*** European carmakers hold around two thirds of sales for over 2500cc passenger cars, segment that represents less than 0.5% of the overall market

5.1. Thai FTAs

Thailand was not only one of the first countries in East Asia to pursue bilateral FTAs, but, during much of the last decade, it was also one of the most active. As of August 2013, in addition to AFTA, Thailand has implemented five bilateral treaties and five ASEAN-centered FTAs (³³), but only AFTA and the bilateral treaties with Australia, India and Japan are relevant to the automotive industry.

For many ASEAN countries, the automotive industry is one of the most sensitive and both early ASEAN functional cooperation programs and AFTA itself were largely shaped by state and corporate interests around the sector. As the ASEAN automotive industry was fragmented along national boundaries, starting in the 1980s, international carmakers,

³³ See Table 1 in a working paper by the 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".

particularly Japanese firms, sought to rationalize procurement and production scales at the regional level. To that effect, they lobbied ASEAN governments first for “complementation sourcing programs” that liberalized regional trade in APCs and later of both APCs and assembled vehicles through AFTA (Yoshimatsu, 2008; interviews).³⁴

The impact of AFTA during the 1990s was very limited because of it left ample room for protectionism and of its poor implementation (Ravenhill, 2008). AFTA schedules were accelerated after the Asian crisis, requiring all intra-ASEAN tariffs to be capped at 20% by 2000, at 0-5% by 2003. Items could be temporarily excluded from this timeline as long as all manufacturing lines returned to normal track by 2003. Intra-ASEAN tariffs among the main ASEAN economies were eliminated in 2010 when AFTA was replaced by the ASEAN Trade in Goods Agreement (ATIGA).³⁵ Raw materials, APCs and vehicles are now sourced, produced and traded within ASEAN according to a division of labor that results from the interplay between the corporate strategies of automotive firms and an inter-governmental agreement as AFTA (Table 2). As the regional automotive hub, Thailand has been the main beneficiary of AFTA that has played a crucial role in attracting investment by international carmakers and suppliers.³⁶ Although Thailand has protected the automotive industry behind high multilateral tariffs, it complied with AFTA liberalization schedules.³⁷

³⁴ Lobbying by Japanese and Western firms was key for the regional liberalization of electronics and information technology products (Baldwin, 2006) and of parts and components, mostly in the automotive industry, within Southeast Asia (Yoshimatsu, 2002; Yoshimatsu, 2008).

³⁵ Full implementation of the Agreement in the less developed ASEAN countries (Cambodia, Myanmar, Laos and Vietnam) will occur in 2015, when ASEAN countries have scheduled the creation of the ASEAN Economic Community with the goal of achieving full economic integration.

³⁶ During the period 2006-2010, Thailand attracted US\$ 6.7 billion to its automotive and transport equipment industry, compared to US\$ 2.6 billion and US\$2.3 billion into Indonesia and Malaysia, respectively (interviews; Bank of Thailand, Indonesia’s Investment Coordinating Board and Malaysian Investment Development Authority websites).

³⁷ Initial exclusion by Malaysia of its automotive sector from AFTA schedules (see below) prompted some unofficial retaliatory measures by Thailand in the form of non-tariff barriers on Malaysian automotive products. Most of these non-tariff barriers seem to have been eliminated by 2009 although Malaysia’s excise system still discriminates against non-Malaysian content in vehicles (see below) (interviews with government officials and automotive firms both in Thailand and Malaysia).

Table 2: Division of labor among OEM's subsidiaries in ASEAN

OEM	Plants for functional APC	Vehicle assembly plants *
Toyota	<p><u>Thailand</u>: diesel engines, engine parts and press parts.</p> <p><u>Malaysia</u>: electronic control units and steering system in Malaysia</p> <p><u>Indonesia</u>: gasoline engines and pressed parts</p> <p><u>Vietnam</u>: accelerators</p> <p><u>Philippines</u>: transmission and constant velocity joints</p>	<p>+ <u>Thailand</u>: Camry, Corolla, Hilux, Yaris, Vios, Wish, Fortuner, Prius</p> <p>++ <u>Malaysia</u>: Hiace, Hilux, Vios, Innova, Fortuner, Camry</p> <p>+ <u>Indonesia</u>: Innova, Fortuner</p> <p>++ <u>Vietnam</u>: Camry, Corolla, Hiace, Innova, Vios</p> <p>++ <u>Philippines</u>: Innova, Vios</p>
Honda	<p><u>Thailand</u>: pressed parts, frame panels, electrical parts, interior parts and engine parts</p> <p><u>Malaysia</u>: Malaysia in instrumental panel assembly, bumper, drive shaft and constant velocity joint, (manual transmissions, stamping parts)</p> <p><u>Indonesia</u>: in cylinder head assembly, cylinder block, engine valve, steering handle and automatic transmission</p> <p><u>Philippines</u>: engine fuel system, emission systems, engine electric parts, suspension parts, manual transmissions</p>	<p>+ <u>Thailand</u>: City, Jazz, Civic, Accord, CR-V, Brio</p> <p>++ <u>Malaysia</u>: City, Civic, Accord, CR-V</p> <p>+ <u>Indonesia</u>: Jazz, CR-V, Freed (for export to ASEAN)</p> <p>++ <u>Vietnam</u>: Civic, CR-V (NO Export)</p> <p>++ <u>Philippines</u>: City (NO Export)</p>
Nissan	<p><u>Thailand</u>: engines</p>	<p>+ <u>Thailand</u>: Frontier, Navara, Teana (export), Tilda, March (export), Almera</p> <p>++ <u>Malaysia</u>: Serena, Sentra, Latio, Frontier, Urban, Sylphy, Grand Livina, Teana, Navara, X-Trail</p> <p>+ <u>Indonesia</u>: Grand Livina, Livina, X-Trail, Serena, March, Juke</p> <p>++ <u>Philippines</u>: Sentra, X-Trail, Grand Livina, Frontier, Navara, Patrol, Urban</p>
Mitsubishi	<p><u>Thailand</u>: engines</p> <p><u>Indonesia</u>: engines, press parts, body parts</p> <p><u>Philippines</u>: transmissions</p>	<p>+ <u>Thailand</u>: Triton, Lancer, Lancer Ex, Pajero (export), Sport, Mirage (export), Canter</p> <p>++ <u>Malaysia</u>: Canter, Fuso</p> <p>+ <u>Indonesia</u>: Colt, Canter, Fuso</p> <p>++ <u>Vietnam</u>: Grandis, Zinger, Canter</p> <p>++ <u>Philippines</u>: Delica, Adventure, Lancer, Canter, Fuso</p>
Mazda (joint venture with Ford in Thailand)	<p><u>Thailand</u>: transmissions</p> <p><u>Philippines</u>: engine parts</p>	<p>+ <u>Thailand</u>: Mazda BT-50, Mazda 2, Mazda</p> <p>++ <u>Malaysia</u>: Mazda 3</p> <p>++ <u>Vietnam</u>: Mazda 2</p>
Daihatsu (joint venture with Perodua in Malaysia)	<p><u>Malaysia</u>: engines (Perodua)</p>	<p>+ <u>Malaysia</u>: Alza, Myvi, Viva</p> <p>+ <u>Indonesia</u>: Terios, Xenia, Grand Max, Luxio</p>
Suzuki		<p>+ <u>Thailand</u>: Ecocars (Swift)</p> <p>++ <u>Malaysia</u>: commercial vehicles</p> <p>+ <u>Indonesia</u>: Grand Vitara, APV, Carry, Futura, Swift, SX4</p>
Isuzu	<p><u>Thailand</u>: diesel engines, forged parts, press molds</p> <p><u>Indonesia</u>: diesel engines, casting parts</p> <p><u>Philippines</u>: transmissions</p>	<p>+ <u>Thailand</u>: pickups, commercial vehicles</p> <p>* <u>Malaysia</u>: commercial vehicles, buses, trucks</p> <p>+ <u>Indonesia</u>: commercial vehicles, buses, trucks</p> <p>++ <u>Vietnam</u>: trucks</p> <p>++ <u>Philippines</u>: commercial vehicles, buses</p>
Ford (joint venture with Ford in Thailand. Exited Malaysia in 2008 and Philippines in 2012)	<p><u>Philippines</u>: gasoline engines</p>	<p>+ <u>Thailand</u>: Laser, Protégé, Focus, Fiesta, Ranger, Everest, EcoSport, Mazda-3, Mazda-BT50</p> <p>++ <u>Malaysia</u>: Ranger, Laser, Telstar, Transit, Econovan, Mazda BT50</p> <p>++ <u>Vietnam</u>: Escape, Everest, Mondeo, Ranger, Focus, Transit</p> <p>+ <u>Philippines</u>: Ranger, Lynx, Tribute, Protégé, Focus, Mazda3, Escape</p>
GM/Chevrolet (Exited Indonesia in 2005, back in 2013)	<p><u>Malaysia</u>: electrical components</p>	<p>+ <u>Thailand</u>: Optra, Blazer, Colorado, Captiva, Aveo, Zafira, Cruze</p> <p>+ <u>Indonesia</u>: Blazer (dctd)</p> <p>++ <u>Vietnam</u>: Aveo, Lacetti, Spark, Captiva. Vivant, Spark Van, Colorado</p>
Volvo		<p>++ <u>Thailand</u>: S60, S80, XC90</p> <p>++ <u>Malaysia</u>: S40, S60, S80, V50, XC90</p>

BMW		++ Thailand: Series 3, 5 and 7 ++ Malaysia: Series 3 and 5 ++ Indonesia: Series 3 and 5
Proton	Malaysia: engines and engine parts	+ Malaysia: Preve, Exora

Source: Interviews and personal communications with OEMs' representatives complemented with data from websites and reports

* Only main models are included.

+ Vehicles produced for the domestic market and for exports to other ASEAN markets and beyond. Note that not all models are exported

++ Vehicles produced exclusively (or almost exclusively) for the domestic market

Once automotive firms in Thailand had restructured their productive processes in the context of an ASEAN-wide division of labor, they started lobbying for bilateral FTAs that fitted their specific procurement, production and export strategies and that could therefore generate selective rents with respect to other firms based in Thailand. Nevertheless, the same automotive firms resisted reciprocation, with multilateral tariffs on automotive products ranking among the highest in Thailand.

Even before negotiations for the Thailand-Australia FTA (TAFTA) started in 2002, Australia was already the largest market for Thailand-made vehicles that accounted for a quarter of all Thai exports to Australia. In contrast, high tariffs in Thailand meant that Australian automotive products had a small presence in the kingdom. In the final treaty, which went into effect in 2005, both countries agreed to fully liberalize their respective automotive industries by 2010.³⁸

Despite that India and Thailand have both grown to be among the world's largest automotive manufacturers, trade in vehicles between both countries has been almost negligible. Most international OEMs have plants in India, but the market is segmented differently than in Thailand. When negotiations for a bilateral FTA started in 2002, OEMs in both countries were adamantly against liberalization of bilateral trade in vehicles.³⁹ However,

³⁸ The automotive industries in both countries are somehow complementary with Thailand's strength is in commercial vehicles and small passenger cars, while Australia's advantage is in larger-engine cars and higher-technology APCs.

³⁹ Carmakers in Thailand opposed to easier access for competitively-priced Korean or Indian brands produced in India, and OEMs in India demanded protection from imported Thailand-made Japanese models.

some of these OEMs lobbied for the liberalization of specific APCs. In October 2003, an early harvest agreement was signed—the Thailand-India Early Harvest Scheme (TIEHS)—to liberalize a small number of tariff lines while the fully-fledged FTA is still being negotiated.

Japan offers tariff-free multilateral access to all automotive products. Therefore, when Japan and Thailand started negotiations for the Japan-Thailand Economic Partnership Agreement (JTEPA) in 2004, the exclusive interest of the FTA for automotive firms was the extent to which Thailand was ready to liberalize its protected automotive industry. Given the weight of the sector in the Thai economy and of Japanese firms in the Thai automotive industry, the sector became a central issue at negotiations.

5.2. Use of selective rents and flexibilities in Thai FTAs

Most international OEMs and suppliers have benefited from the progressive liberalization of the ASEAN automotive market. However, in line with Hypotheses 1 and 2, Japanese firms—with a longer, broader, and deeper presence across ASEAN—have extracted more selective rents from ASEAN complementation sourcing programs and AFTA than American and European firms.⁴⁰ Accordingly, Japanese carmakers lobbied the strongest to ASEAN governments for the implementation of these trade regimes (Yoshimatsu, 2002; interviews). In the most successful complementation program, the ASEAN Industrial Cooperation, 90% of the 129 projects were for the trade of automotive products, mostly completely knocked-down kits.⁴¹ Given Thailand's position as the automotive regional hub, its government supported these complementation programs that were actively used by carmakers and international suppliers in Thailand but not by domestically-oriented indigenous suppliers.

⁴⁰ European firms (e.g. Volvo, Mercedes-Benz, BMW, Peugeot) import kits directly from Europe and supplement them with non-critical parts sourced in the local market. They use AFTA less and mostly for trade of finished vehicles.

⁴¹ The Brand-to-Brand Complementation (1988-1995) and the ASEAN Industrial Cooperation (1996-2003, although continued to be used until full AFTA implementation in 2010) programs established specific projects for APC liberalization (Yoshimatsu, 2002). Some firms also use these programs for trade in assembled vehicles.

Confirming initial arguments, Thailand participated in 67% of all automotive-related projects, of which 82% involved Japanese OEMs and suppliers while only 7% were American and/or European firms (data from the Thai Ministry of Industry; interviews). Toyota and Honda alone, with the most extensive network of operations in ASEAN (Table 2), accounted for two thirds of all automotive complementation projects.

Thai exports of assembled vehicles to other ASEAN countries increased after AFTA tariffs began to significantly decline in 2003 and have accelerated since 2010 (Table 3). In light of high multilateral tariffs on the industry in most ASEAN countries, automotive products are among the most traded items under AFTA. Overall Thai utilization of AFTA for exports has increased from less than 10% in 2001 to 35.1% in 2010, largely due to trade in automotive products (data from the Thai Ministry of Commerce). For instance, in 2008 (a mid-year for the period under study), about a third of all Thai exports using AFTA preferences were automotive products and out of them more than half were assembled vehicles for which utilization of AFTA was virtually complete (data from the Thai Ministry of Commerce; Kohpaiboon, 2010).

Interviews with international OEMs and global suppliers indicated extensive use of AFTA, mostly for intra-firm trade of OEM's proprietary high-technology APCs, engines, transmissions, completely knocked-down kits and assembled vehicles (interviews). Because of confidentiality issues, trade authorities in Thailand do not provide disaggregated data on AFTA utilization—or on the utilization of any other FTA for that matter—at the firm-level (see working paper referred in footnote 16). Nevertheless, considering that Japanese brands account for over 80% of Thai vehicle exports to ASEAN, it is safe to infer that, as in earlier complementation sourcing programs, Japanese OEMs (particularly, Toyota as the larger

exporter) have benefited the most from the procurement rents granted by AFTA (Hypothesis 1).⁴²

Table 3: Trade in vehicles (in US\$ millions) among the main automotive producing countries in ASEAN *

		2002				2012			
		Exporter				Exporter			
		Thai	Mal	Indon	Philipp	Thai	Mal	Indon	Philipp
Importer	Thailand	-	0.9	9.9	18.9	-	107.5	476.8	25.6
	Malaysia	28.5	-	0.3	0.0	834.7	-	172.7	5.3
	Indonesia	50.5	3.1	-	4.9	1999.7	66.1	-	14.7
	Philippines	7.2	0.2	0.0	-	808.6	0.0	335.2	-
TOTAL exports		86.2	4.2	10.2	23.8	3,643.0	173.6	984.7	45.6

Source: Trade Map database (Trade Map, undated)

* Total exports of vehicles (commercial and passenger vehicles: codes 8701,8702, 8703,8704 under the Harmonized Commodity Description and Coding System)

Besides tariff liberalization, Japanese and American OEMs have also taken advantage of AFTA to restructure production at the ASEAN level (Hypothesis 2) (Table 2). For instance, Ford closed its assembly operations in Malaysia in 2008 and in the Philippines in 2012, and now serves both countries from its plants in Thailand. In 2009, in anticipation of the complete elimination of AFTA tariffs the following year, Volvo considered closing down its factory in Thailand and consolidate production in Malaysia (interviews). Eventually, Volvo has maintained both operations virtually intact despite AFTA implementation, as have done other European carmakers.

Although 85% of Thai trade in APCs with the rest of ASEAN is conducted among OEMs subsidiaries, large first-tier suppliers, particularly foreign firms, have also profited from the selective rents offered by complementation programs and AFTA (interviews). For

⁴² Although Mitsubishi is the OEM in Thailand that exports the largest share of its production, it operates mainly in export free zones and makes little use of AFTA and other FTAs (see below) (interviews).

instance, Japanese APC manufacturer Denso accounted for 6% of all projects under the ASEAN Industrial Cooperation program. Field research also found that utilization of AFTA for APC exports by leading Thai-owned first-tier suppliers has been much lower than for vehicles (even lower among lower-tier suppliers), reflecting not only lower tariffs and preferential margins on APCs, but, more importantly, also logistical limitations. OEMs request that first-tier suppliers follow them to other ASEAN countries and set their plants nearby, instead of exporting their APCs from their home country. Nonetheless, Thai first-tier suppliers interviewed valued AFTA because it will potentially expand their procurement, export and restructuring options for the future.⁴³

While AFTA was progressively being implemented, international carmakers sought to integrate Australia within the Thai/ASEAN production network. At the time, the main carmakers in Australia were Japanese Toyota and Mitsubishi and American General Motors (GM) (via its subsidiary Holden) and Ford. Toyota and Mitsubishi supplemented local production in Australia with imports from Thailand and Japan while GM imported some models and APCs from Thailand and Korea (interviews). Honda, without plants in Australia, served demand from Thailand and Japan. However, at the time, Australia did not have FTAs with Japan or Korea.⁴⁴ Japanese and American carmakers were expected to benefit from market rents vis-à-vis European firms, especially for Thai exports of vehicles to Australia. European firms did not project major direct impacts from TAFTA, as Volvo and BMW served Australia directly from Europe, while their position in Thailand could not be challenged by upper segment cars produced in Australia.⁴⁵

⁴³ Interviews with indigenous Thai suppliers in 2008 and 2009 revealed that, despite their strength vis-à-vis their ASEAN counterparts and that slow implementation bought them time to adapt, they were concerned about full AFTA implementation in 2010.

⁴⁴ As of July 2013, Australia is seeking to seal final agreements in its respective bilateral FTAs with Japan and Korea.

⁴⁵ Production levels by European carmakers based in ASEAN were too small to serve Australia, whose consumers were also reluctant to buy Thailand-made European luxury vehicles.

TAFTA confirmed the initial hypotheses. The FTA has been beneficial to carmakers based in Thailand—particularly Toyota, and GM/Isuzu with the largest volumes—, which have increased production and exports of vehicles to Australia, benefitted from cheaper Australian higher-technology APCs (e.g., engines), and restructure their production at the bilateral level (Hypotheses 1 and 2). Some firms started reorganizing beforehand and then lobbied for TAFTA to consolidate restructuring savings.⁴⁶ For instance, in the early 2000s, Toyota had transferred production of some models from Australia to Thailand and wanted to eliminate Australian tariffs on them. Although Toyota has potentially extracted more selective restructuring rents than other firms, other Japanese and American OEMs have also benefited. Thus, Mitsubishi closed its Australian operations in March 2008 and moved them to Thailand, Ford will do the same in 2016, and Honda, without previous presence in Australia, now supplies its market from Thailand instead of from Japan.⁴⁷

In the eight years since TAFTA was implemented, Thai vehicle exports to Australia have quintupled, and now account for over a third of total exports. Increased production has also benefited Thai-based suppliers. Illustrating carmakers' original interest in TAFTA, during 2005-2011, over half of Thai exports to Australia under TAFTA were vehicles (see working paper referred in footnote 16). Likewise, and in line with its strong and early support for TAFTA (see working paper referred in footnote 33), GM was the first and main OEM using TAFTA to import cars from Australia (interviews).⁴⁸ In any case, a representative from a leading OEM interviewed for this project indicated that the selective rents afforded by

⁴⁶ As early as 2002, Japanese and American carmakers and APC manufacturers in Thailand and Australia pressed both governments for bilateral liberalization in TAFTA (interviews, see working paper by this Author referred in footnote 33).

⁴⁷ The subsidiary of Ford in Australia could not materialize the benefits originally expected from TAFTA (interviews). Modifications in the Thai excise duty system soon after TAFTA was signed penalized Ford over some of its competitors (Productivity Commission, Review of Bilateral and Regional Trade Agreements, Submission by Ford Motor Company, March 1, 2010. Accessed on July 13, 2010 at: http://www.pc.gov.au/_data/assets/pdf_file/0005/96944/sub051.pdf). As production costs in Australia quadruple those in Asia, Ford has decided to close its plants in Australia by 2016 (*Financial Times*, May 23, 2013).

⁴⁸ Contrary to initial expectations, Australian exports of APCs and vehicles to Thailand have increased only modestly because of the changes in Thai excise duties referred in the previous footnote and the repositioning of Australia within OEMs' strategies.

TAFTA for the company have been eventually more modest than trade flows indicate, mainly because extreme competition among OEMs has forced firms to pass tariff savings on to consumers.

As indicated in the previous section, carmakers in Thailand and India were not interested in the bilateral liberalization of vehicles. Instead, some firms, particularly Toyota, sought the TIEHS as a mean to rationalize their procurement network (interviews), as reflected in the final treaty that includes five automotive items, namely, transmissions and some engine and electrical parts. The year before TIEHS was signed, Toyota had established a subsidiary in India to produce transmissions for export to Thailand and planned to expand production of small cars in India with diesel engines sourced from Thailand (interviews).

Interviews found that the TIEHS has been utilized predominantly for intra-firm trade by some OEMs, mainly Toyota and Ford, and global suppliers and has provided them with procurement rents vis-à-vis other competing firms in Thailand. Despite that only 5 of the 84 items included in TIEHS are automotive products, over 85% of its overall utilization in early years was concentrated on transmissions and engine parts, reflecting the interest (and influence) of Toyota in the agreement (TDRI 2006:179; interviews).

Compared to TAFTA or TIEHS, a bilateral FTA with Japan as JTEPA offered Japanese firms greater possibilities for selective market and restructuring rents with respect to American and European carmakers already manufacturing in Thailand.⁴⁹ Japanese high-end models (Lexus, Acura, Infiniti) sold in Thailand are imported from Japan as completely-built-up units and attracted an 80% import tariff, whose elimination through JTEPA would enhance the comparative advantage of Japanese carmakers over European brands that

⁴⁹ Japanese OEMs sought to gain through JTEPA the same free access for APCs and vehicles offered by TAFTA as well as to avoid losing ground to competitors from other nations (United States, European Union, Korea) that were negotiating (or planning to) FTAs with Thailand or ASEAN at the time.

dominate the luxury segment in Thailand.⁵⁰ Although Japanese OEMs produced a wide range of small- and mid-size cars in Thailand, Japan demanded Thai liberalization for all Japan-made vehicles, so as to gain flexibility in producing future models and, therefore, potential restructuring rents (Hypothesis 2). Contrary to TAFTA, where both Japanese and American carmakers benefitted, JTEPA split carmakers as Western firms strongly opposed Thai liberalization of vehicles from Japan.⁵¹

Despite increasingly larger Thai value content of Japanese models manufactured in Thailand, Japanese OEMs import from Japan some functional APCs and high-grade steel, whose liberalization in JTEPA could potentially generate selective procurement rents (Hypothesis 1). Field research during 2008-2009 indicated that some OEMs, especially Toyota and Honda, were eager to the full implementation of JTEPA schedules to save on procurement costs. As the largest sellers of passenger cars for the Thai market, ineligible for DES/DDS privileges, Toyota and Honda would disproportionately benefit from procurement rents compared to other firms based in Thailand. For instance, JTEPA offered limited scope for procurement rents to Isuzu that produces commercial pickup trucks with high-domestic content, or to Mitsubishi, which exports over two thirds of its production, and operates mainly from duty free zones. GM and Ford share platforms with Japanese firms but mostly for commercial vehicles, which reduced their dependence on Japanese APCs, although they would still benefit from JTEPA liberalization of Japanese steel. Finally, for European firms complementing completely knocked-down kits with mostly local APCs, liberalization of

⁵⁰ Japanese OEMs produce these cars in Japan at more efficient scales than European OEMs do in Thailand.

⁵¹ At the time, Japanese OEMs were not looking to realize selective rents from reverse imports because: a) Japan does not apply tariffs on automotive products and, b) reverse imports of vehicles from Japanese subsidiaries in ASEAN back to Japan have always been negligible and even declined following JTEPA implementation. As recently as 2011, Toyota denied plans to export cars from Thailand to Japan (*Bloomberg*, Sept 8, 2011) although Mitsubishi has more recently mulled that possibility (*Bangkok Post*, April 23, 2012). Nevertheless, some reverse exports to Japan from Japanese subsidiaries in Thailand have occurred during 2011-2013 in the small-engine eco-cars segment and in the aftermath of the 2011 tsunami in Japan (Trade Map database; personal communication). Longer-term analyses would be required to ascertain whether these reverse imports consolidate.

Japanese inputs would not yield significant procurement advantages either. For Japanese global suppliers, Thai liberalization in JTEPA could bring benefits from restructuring rents through rationalization of the production network. Meantime, for Thai-owned suppliers, liberalization of Japanese APCs and/or assembled vehicles would reduce demands.⁵²

The automotive sector became the main stumbling block during JTEPA negotiations (see working paper referred in footnote 33). The Thai government resisted any liberalization of vehicles that could make existing investments redundant and exploited flexibilities in FTAs regarding selectivity and sequencing of tariff liberalization (as well as in ROOs, see below) to support the overall automotive industry (Hypothesis 3). JTEPA was eventually implemented in November 2007 and left unchanged tariffs on cars below 3000cc, and reduced from 80% to 60% by 2011 those on larger-engine cars (METI-JTEPA, undated). In contrast, the Thai government saw liberalization of APCs and steel as key to improve the competitiveness of the sector. Nevertheless, attending to local suppliers' demands, Thailand negotiated a long tariff phase out for these inputs.⁵³

During the five years that JTEPA has been in force, and despite marginal liberalization and long phased out implementation, Thai imports of APCs from Japan (particularly engines, transmission, ignitions, pumps) have trebled (Trade Map). Field research could only obtain JTEPA utilization data for imports up to 2009 (see working paper referred in footnote 16), when JTEPA utilization for the import of APCs stood at 8%. This low utilization rate could be explained by the fact that most APCs had not been liberalized

⁵² Some Thai suppliers expressed concerns that JTEPA would increase Japanese OEMs' leverage and be used to squeeze them under the threat of switching to Japanese suppliers for future models. Our research also found that some small independent Japanese suppliers that moved to Thailand following their OEMs were concerned that Thai liberalization of Japan-made APCs could negatively impact them.

⁵³ Tariffs on most APCs were initially capped at a maximum of 20% and fully eliminated in 2013. Sensitive APCs (e.g., engines, transmissions, parts of thereof) were left unchanged at implementation and targeted for full liberalization by 2015. However, in early 2012, to help struggling Japanese OEMs in the aftermath of the floods that ravaged many automotive plants in Thailand, the Thai government slashed all tariffs on APCs coming from Japan; some still attracting tariffs of up to 20% under JTEPA (*Bangkok Post*, June 23, 2012).

yet. Of note, in 2009, the utilization of DES/DDS for most APCs was around 20% and was up to 60% for diesel engines (data from the Thai Ministry of Finance; see also working paper referred in footnote 16).

5.3. Procurement and technological linkages in Thai FTAs

When AFTA entered into force in 1992, ROOs established a 40% regional value content requirement across all tariff lines in order to be eligible for the use of its preferential tariffs. This level of ROO restrictiveness in AFTA suited Japanese and American OEMs in ASEAN that during the 1990s operated under LCRs.⁵⁴ As domestic value content in Thailand-made vehicles has progressively increased, ROOs in AFTA have not limited the procurement options of Japanese and American firms based in Thailand. However, most European, Korean and Chinese carmakers in Thailand operate at this 40% value content level (interviews).

Research for this project found that the Thai government has made use, to various levels and with different success, of the options available in bilateral FTAs to promote backward linkages and technical transfer between automotive OEMs and the supply base in Thailand. In contrast to Malaysia, use of LCRs in Thailand was as much related to reduce trade deficits as to increase domestic value content.

TAFTA was the first FTA, and so far the only one, where Thailand has fully liberalized its automotive sector outside ASEAN and ASEAN-centered FTAs.⁵⁵ Contrary to AFTA, TAFTA set product-specific ROOs. In setting the level of restrictiveness of ROOs for automotive items, Thailand faced a dilemma. On the one hand, it needed to use sufficiently

⁵⁴ In addition, automotive production in Thailand (and the rest of ASEAN) at the time was domestically-oriented although largely dependent on completely knocked-down kits imported from each OEM's home country. ROOs in AFTA were relaxed in 2004 to allow partial cumulation and include the value of inputs with more than 20% of ASEAN value content into the final calculation.

⁵⁵ Liberalization of the automotive industry in ASEAN-centered FTAs has been very limited

strict ROOs to avoid tariff-free transshipment of vehicles via Australia and to promote local suppliers. However, ROOs could not be so high as to hamper the procurement options of Thai-based OEMs exporting to Australia, largely Japanese firms that depend on imported inputs from Japan. Field research interviews found that Australia favored ROOs based in change in tariff classification, easier to implement, while Thailand pushed for value content ROOs in order to promote procurement backward linkages. Interestingly, knowing that ROO compliance would be more difficult for other firms, Toyota favored a stringent 50% value content (interviews). Eventually, ROOs established that vehicles attain a minimum of 40% bilateral value content *plus* a change in tariff classification. At the time of TAFTA signing, Thailand was also negotiating other FTAs. Accordingly, and in line with the argument in Hypothesis 4, strict ROOs in TAFTA prompted some Australian suppliers to open affiliates in Thailand not only to benefit from agglomeration scales but also to qualify for ROOs in other Thai FTAs beyond TAFTA.

In the TIEHS, ROOs for automotive products are also stricter than in AFTA and require a change in tariff classification *plus* a minimum of 40% of Thai value content excluding any other ASEAN content. As in TAFTA and also in support of the initial argument, some Indian suppliers set up plants in Thailand in the aftermath of the TIEHS.

In JTEPA, ROOs for automotive products are more relaxed and require either a minimum value content of 40% or a change in tariff classification. Interviews found that, during JTEPA negotiations, Thailand demanded a minimum of 20% value content requirement from each country, proposal that was rejected by Japan, particularly in light of the negative by Thailand to liberalize tariffs on vehicles. Field research also revealed that Toyota, with high levels of localization in both countries, favored ROOs based on value

content requirement over change in tariff classification, preferred by Western firms, as the latter is easier to achieve for OEMs with lower production volumes. Of note, JTEPA also includes a note, exclusively issued for automotive products, establishing that the country exporting vehicles (most likely Japan as reverse imports have been negligible so far) would be able to use inputs from the other FTA partner, and still be considered as originating material toward value content. This note was incorporated in JTEPA at the request of the Thai government to benefit Thai-based suppliers (interviews). Although, as general rule, value content toward ROOs is cumulated among FTA members, legally this is *not necessarily* the case when FTAs establish product-specific ROOs (interviews).

JTEPA includes a cooperation chapter that, in regard to the automotive industry, provides training of local suppliers on process management by Japanese experts from Toyota, Honda and Nissan and first-tier supplier Denso. This use of FTAs to channel technology assistance to the local supply base is in line with Hypothesis 5. However, it is my contention that Thailand did not exploit to the full extent the potentiality of cooperation provisions in JTEPA (see below in Discussion). Although well received by Thai suppliers, the scheme was only fully spelled out in 2008, once JTEPA had entered into force, so the Thai government did not negotiate beforehand detailed targets or specific binding commitments by Japan (interviews), limiting its effectiveness.⁵⁶

6. The automotive production network in Malaysia before regionalism⁵⁷

Few other sectors in Malaysia have been shaped by the policy environment as the automotive industry. Starting in the mid-1960s, the government promoted local assembly of vehicles as a

⁵⁶ An earlier version of the *Automotive Human Resource Development Program*, in place since 2005, was expanded in 2008 to be included in JTEPA.

⁵⁷ This section draws on secondary literature, inter alia, on Jomo (1994), Abdulsomad (1999), Abbott (2004) complemented with information from interviews.

mean to substitute imports and spur industrialization. Assembly operations were conducted by joint ventures between foreign OEMs and local ethnic-Chinese firms, whose output was destined exclusively for the domestic market. Production was protected from external competition through high tariffs and import licenses, which were preferentially allocated to ethnic-bumiputera/Malay firms.⁵⁸ During the 1990s, in an effort to increase local content in Malaysia-made vehicles and to foster local APC manufacturing, the government progressively raised tariffs on imported APCs and imposed on international OEMs LCRs and mandatory lists of APCs to be sourced locally.⁵⁹

The state-led import substitution drive initiated by Malaysia in 1981 was short-lived outside key strategic sectors like the automotive industry. That year, the government launched the National Car Project aimed not only at creating a national automotive industry but primarily to foster an indigenous supply base and the participation of bumiputeras in the sector. At the same time, foreign automotive OEMs assembling in the country had to form minority-controlled ventures with local firms, mostly government-linked companies. In 1983, PROTON was established as a venture with Mitsubishi to manufacture mid-size cars.⁶⁰ Since its inception, the government protected PROTON with a range of trade barriers and supported it with preferential excise duties and various subsidies. Within only a decade, PROTON captured over 70% of the domestic market, encouraging the government to establish in 1993 another national carmaker, PERODUA, to manufacture subcompact cars in

⁵⁸ Since the late 1960s, a key element in Malaysia's economic policy has been promoting greater participation in the economy of the local ethnic-Malay/bumiputera population.

⁵⁹ An earlier attempt by the government in the 1970s to introduce LCRs was frustrated by the strong resistance from OEMs and lack of political clout by suppliers. Nevertheless, the capabilities of local suppliers remained low and there was no significant technological transfer from foreign OEMs.

⁶⁰ At first, then government-linked HICOM controlled 70% of PROTON and Mitsubishi 30%. Although listed in 1992, PROTON's controlling stake was held by government-linked firms and its management has always been bumiputera. Mitsubishi sold its participation in 2004. Since January 2012 the majority holder has been the now private conglomerate DRB-HICOM.

a venture with Japanese Daihatsu.⁶¹ Despite that PROTON and PERODUA were respectively the first and third largest OEMs in ASEAN during much of the 1990s, both firms remained mostly domestically-oriented, with very small export volumes to countries that fitted within Mitsubishi's and Daihatsu's interests (see below). In the early 1990s, GM considered to set its regional base in Malaysia on condition that the government scrap LCRs and the National Car Project; Malaysia refused and GM established its regional hub in Thailand.

Introduction of LCRs and the National Car Project boosted the total number of Malaysian-owned suppliers but, by the late 1990s, only a third were bumiputeras. In addition, technology transfer was very limited and most local suppliers produced only simpler and labor-intensive APCs while functional components were manufactured by PROTON itself or were imported from Japan.

The Asian crisis depressed Malaysian vehicle production and domestic sales by 60% (Figure 4) but, unlike foreign OEMs in Thailand, PROTON and PERODUA did not resort to exports to compensate for lower local demand. In response to the crisis, Malaysia temporarily excluded all automotive items from AFTA liberalization schedules that had targeted intra-ASEAN tariffs to be capped at 5% by 2003. At the multilateral level, Malaysia raised tariffs on most automotive products and requested an extension from the WTO for the use of LCRs beyond the 2000 deadline, specifically for its automotive. To attract investment, equity restrictions were relaxed in all manufacturing sectors except in the automotive industry.

⁶¹ Initially, government-linked companies held 68% of PERODUA. It remains unlisted with 53% controlled by Malaysian capital, mostly government-linked companies, and 47% by Daihatsu. As national carmaker, PERODUA benefits from selected privileges but, unlike PROTON, its strategic direction is determined outside Malaysia by Daihatsu.

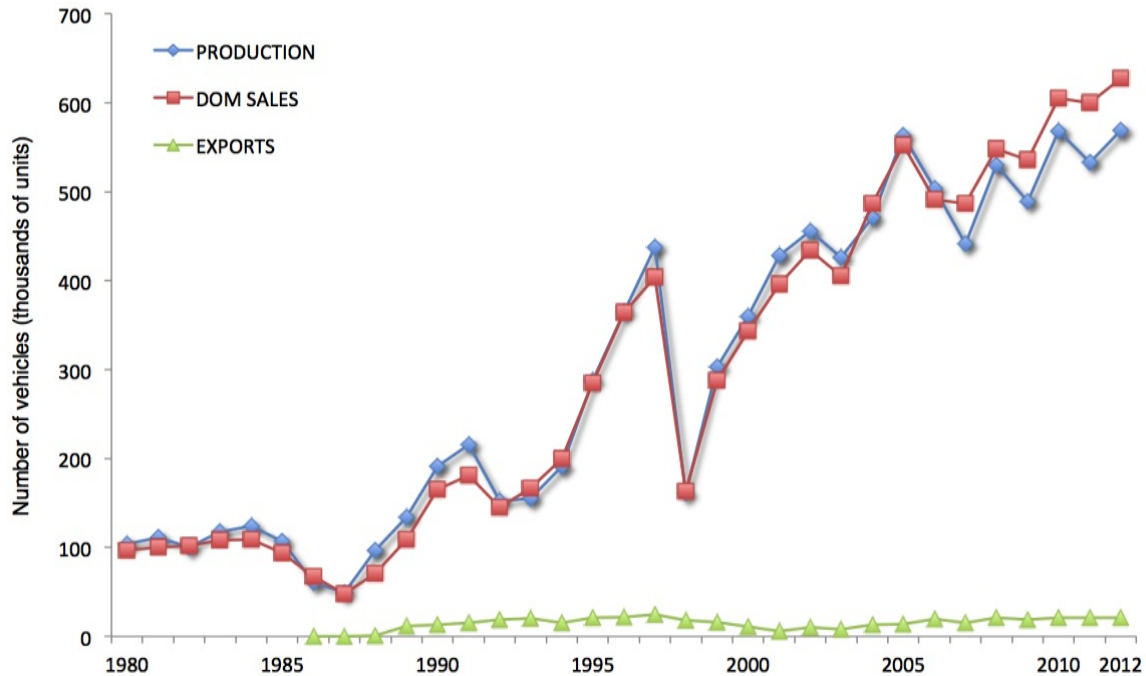


Figure 4: Production, domestic sales and exports of vehicles (passenger and commercial) in Malaysia. Source: Malaysian Automotive Association (MAA). Data on exports were calculated by the Author based on figures obtained from individual OEMs and includes both completely-built-up units and completely knocked-down kits.

7. The automotive production network in Malaysia under regionalism

After the crisis, Malaysia continued to shield its national carmakers from competition from foreign automotive firms assembling in Malaysia or elsewhere in ASEAN. Malaysia eliminated LCRs in the automotive sector in 2004 once the waiver from the WTO had expired, illustrating the value Malaysia attached to LCRs to promote backward linkages. The National Automotive Policy, issued in 2006, also reduced multilateral tariffs on assembled vehicles and completely knocked-down kits and eventually brought Malaysia in line with AFTA schedules (see below) (MITI, 2006).⁶²

⁶² Revision of the National Automotive Policy in 2009 eliminated foreign equity restrictions for OEMs assembling cars outside the core segment of PROTON and PERODUA, namely, cars with engines exceeding 1800cc, electric and hybrid cars and commercial vehicles (MITI, 2009). However, field research interviews revealed that Japanese OEMs plan to maintain their joint ventures with Malaysian firms because of the political clout they provide. The National Automotive Policy was amended again in 2012 and its final text is expected to be released in late 2013.

Nevertheless, Malaysia has kept using its regulatory framework to protect national OEMs and promote higher use of local inputs. Thus, tariff reductions on imported vehicles were accompanied by the introduction of excise duties on passenger cars ranging from 90% to 250%. The excise duty system escalates with engine size, benefiting smaller engine cars producers like PROTON and PERODUA. More controversially, excise duties are exempted for the share of the vehicle representing Malaysian content, which fosters utilization of Malaysian inputs and, once again, favors PROTON, whose models have over 80% of domestic content compared to the 30-40% in Japanese or Korean models.⁶³

Table 4: Production, domestic sales and exports of vehicles in Malaysia by OEM (2008)*

	Production	Domestic Sales	Exports
Proton	29.5%	25.5%	83.7%
Perodua	36.0%	30.3%	13.9%
Toyota	12.4%	18.4%	
Honda	6.0%	5.8%	
Nissan	6.6%	5.5%	
Isuzu	1.9%	0.9%	
Mitsubishi	0.1%	1.6%	
Daihatsu	1.0%	1.0%	
Naza	2.1%	2.2%	
Inokom	1.0%	1.1%	
American **	0.1%	0.4%	
European	1.5%	1.7%	
Other	1.8%	5.6%	2.4%

Source: Malaysian Automotive Association. Exports were calculated by the Author using data obtained from individual OEMs and includes both assembled vehicles and completely knocked-down kits.

* Average market share for total registered vehicles (commercial and passenger cars)

** Ford stopped assembly in Malaysia in mid-2008

⁶³ Excise duties on vehicles were introduced in 2004 and raised in 2005. The maximum excise duty was reduced to 125% in 2006 and 105% in 2007. Although justified on the need to compensate for the loss of revenue from lower tariffs, the excise system has benefitted national OEMs and local suppliers. Initially, PROTON and PERODUA received 50% rebate on excise duties but the system was later replaced by the local content-based calculation rule. Malaysian government officials maintain that the excise system is compliant with WTO and AFTA (interviews). Since the 1970s, Malaysia has maintained different forms of non-automatic licensing system of imported vehicles, amounting to import quantitative restriction, known as Approved Permits. Approved Permits are issued by the Ministry of International Trade and Industry and distributed among bumiputera firms. Elimination of Approved Permits has been postponed in several occasions, with their current deadline in 2020.

Automotive production recovered to pre-crisis levels by 2001, but growth has been slower than in Thailand (Figure 4). Since 2006, PERODUA has surpassed PROTON in production and domestic sales (Table 4 for 2008, a mid-year for the period under study). PROTON is also losing ground to Japanese models assembled in Malaysia or imported through AFTA.⁶⁴

As in Thailand, the Malaysian government has sought to couple import substitution with export promotion. However, production by national and foreign OEMs in Malaysia continues to be mostly oriented toward the domestic market (Figure 4 and Table 4). During 2003-2009, PROTON exported on average 10% of its production (data from Ministry of International Trade and Industry), while PERODUA exports stand at less than 2%. Low export volumes—mainly to the United Kingdom and to developing countries—are explained on the weak international competitiveness of national OEMs (particularly of PROTON), low technology transfer by their partners and, in the case of PERODUA, little interest by Daihatsu in creating an export-oriented brand (interviews).⁶⁵ Restrictions on foreign participation in the automotive industry have limited investment by international OEMs and suppliers, which has hampered the competitiveness not only of foreign affiliates in Malaysia but also of national carmakers. Japanese and Korean OEMs in Malaysia cater almost exclusively to the domestic market.⁶⁶

Many foreign first-tier suppliers are present in Malaysia but, unlike in Thailand, the

⁶⁴ Western and other foreign carmakers make for a small market share. European vehicles are assembled locally out of kits, imported from ASEAN or directly from Europe. Bumiputera conglomerate Naza assembles Kia and Peugeot models. Hyundai and Chery have small assembly facilities. American models are imported, since GM has no plants in Malaysia and Ford discontinued assembly in mid-2008.

⁶⁵ Following Mitsubishi's sale of its stake in PROTON in 2004 (see footnote 60), the company and the government have been looking for an international OEM partner but all efforts were frustrated by the government's refusal to give up management control to foreigners (interviews). After a decade of declining sales and, for many years, of fiscal deficits, PROTON's main option for expanding scales, and even for survival, is to seek markets abroad.

⁶⁶ Only a very small number of units are exported, mostly within ASEAN.

majority of APC manufacturers are local firms. In late 2009, nearly 90% of suppliers served PROTON and/or PERODUA and many depend on them exclusively (interviews). Malaysia has succeeded in developing an indigenous supply base but low technical capabilities and small scales limit the competitiveness of most Malaysian suppliers, and in turn, that of PROTON. Nevertheless, some Malaysian suppliers (e.g., Ingress, Hi-Com Tek See, Sapura, Delloyd, APM) have achieved international competitiveness exporting and/or setting plants abroad to serve global OEMs.⁶⁷ Given their simpler operations, the supply base of Japanese and Korean OEMs is much smaller. Malaysia imports APCs mainly from Japan, other ASEAN countries, China and India.

7.1. Malaysian FTAs

During the 1980s and 1990s, Malaysia tried to shelter its infant automotive industry and opposed intra-ASEAN liberalization of automotive products. Malaysia defended that regional ASEAN complementation programs were only beneficial to non-ASEAN OEMs and, consequently, its government initially hindered the implementation of the ASEAN Industrial Cooperation scheme (Yoshimatsu, 2002; interviews; see below).

Later, in the aftermath of the Asian crisis, Malaysia excluded the entire sector from AFTA liberalization. In 2005, following pressures from other ASEAN members regarding exclusion of the Malaysian automotive sector from AFTA liberalization schedules, Malaysia began reducing import duties on ASEAN automotive products, topped them in 2006 at 5% (the limit established by AFTA for 2003) before full elimination in 2010.⁶⁸

Within ASEAN, Malaysia it is a net importer of automotive product. Although

⁶⁷ Malaysian suppliers operate at lower scales than their Thai counterparts but enjoy a more secure market thanks to national OEMs. PERODUA is praised by suppliers as more supportive than PROTON.

⁶⁸ Still, OEMs and officials in Thailand claimed that Malaysia pushes its regulatory framework to the limit to discriminate against imported vehicles from the rest of ASEAN (interviews).

Malaysia uses AFTA preferences to exports APCs (mostly electronic components to Thailand and Indonesia), and small volumes of PROTON cars (mainly to Thailand), these are very small in comparison to imports of key functional APCs and assembled vehicles, mostly Japanese models from Thailand and Indonesia.

Malaysia was initially reluctant to enter into bilateral FTAs, but fear of exclusion from other FTAs prompted Malaysia to negotiate its own. As of August 2013, in addition to AFTA and ASEAN-centered regional FTAs, Malaysia has six bilateral FTAs in force (see Table 2 in working paper referred in footnote 33). Only AFTA and the Malaysia-Japan Economic Partnership Agreement (MJEPA) are pertinent to the automotive industry.⁶⁹ Malaysia started negotiating its FTA with Japan in 2003. At the time, Thailand was not yet the export base it is today and Malaysia sourced from Japan one third of all APCs and two thirds of all vehicles it imported. Although AFTA liberalization was on course, and Japanese carmakers planned to make Thailand their regional hub, they were still eager to liberalize the Malaysian automotive sector to Japanese imports (interviews).

7.2. Use of selective rents and flexibilities in Malaysian FTAs

The Malaysian government eventually conceded and approved projects in the ASEAN Industrial Cooperation complementation program. In fact, automotive firms established in Malaysia participated in about half of all projects pertaining to the automotive sector. However, except for one project with PERODUA and four between Volvo subsidiaries, all other automotive-related projects with Malaysian participation involved Japanese OEMs that, as in Thailand, benefitted to the largest extent from the procurement rents offered by these complementation schemes (data from the Ministry of International Trade and Industry;

⁶⁹ At the time of field research (2008-2009), Malaysia had active bilateral FTAs with Japan (2006) and Pakistan (2008). Since then, Malaysia has enforced bilateral FTAs with New Zealand (2010), India (2011), Chile (2012) and Australia (2013).

interviews).

As recently as 2006, PROTON and PERODUA were pressing the government to delay the alignment of Malaysian tariffs on automotive products with AFTA schedules (interviews). Likewise, most Malaysian-owned suppliers resisted AFTA liberalization and counted on the government to keep protecting the sector as well as on national OEMs to maintain their contracts (interviews). Field research revealed that, in 2003, the government had lifted informal procurement restrictions on national OEMs to source inputs from foreign suppliers inside or outside Malaysia. Although both national OEMs, particularly PROTON, indicated that they remain committed to indigenous suppliers' development, they are now nominally free to procure APCs based exclusively on commercial criteria.⁷⁰

AFTA has made procurement more flexible for all OEMs in Malaysia, both national and foreign. Malaysian imports of APCs from ASEAN have quintupled since 2004, while imports of vehicles have grown from US\$3.5 million to over US\$1.2 billion (Trade Map). In 2012, 42.2% of all Malaysian imports of APCs originated in ASEAN (of which 78.3% came from Thailand), and 27.4% came from Japan. Meanwhile, 42.5% of vehicles imports came from ASEAN (of which 85% from Thailand) and 42.14% from Japan. Importantly, and in line with my initial arguments, 75% of all vehicles imported by Malaysia from the rest of ASEAN during 2005-2009, even before intra-AFTA tariffs were fully eliminated, were of Japanese brands (interviews). Field research could not obtain data on the utilization of AFTA for these trade flows in automotive products. However, from my interviews, it would be safe to assume that Japanese OEMs in Malaysia have made a high utilization of AFTA preferences. PERODUA has some procurement linkages with Daihatsu plants in Indonesia

⁷⁰ This, facilitated by full implementation of AFTA in 2010 and increasing competition among OEMs in Malaysia, could potentially loosen up mutually captive relations between small Malaysian-owned suppliers and national OEMs.

but lack the extensive network of Japanese OEMs in ASEAN. Altogether, AFTA has potentially allowed Japanese OEMs in Malaysia to capture selective procurement and restructuring rents with respect to national OEMs (and Western carmakers) (Hypotheses 1 and 2).

Exports of automotive products from Malaysia to ASEAN have also grown although at a lower pace than imports. Since 2010, exports of PROTON cars to ASEAN have increased, but they only amount to around 1% of the market in Thailand, its major destination in ASEAN (interviews).⁷¹ The bulk of Malaysian exports of automotive products to ASEAN are APCs, mostly by OEMs and Japanese suppliers but also some first-tier Malaysian-owned suppliers.

AFTA has also allowed foreign OEMs, but not national carmakers, to restructure their production strategies in Malaysia in the context ASEAN. For instance, in 2008, in anticipation of full AFTA liberalization, Ford closed down its plant in Malaysia, which it now serves from Thailand. As the regional hub, Thailand has benefited more than Malaysia from ASEAN-wide restructuring of the sector. Nevertheless, this does not mean that foreign OEMs with presence in both countries have consolidated their production in a single country. For instance, at the time of field research, Toyota, BMW, and Volvo announced plans to start assembling some of their models in Malaysia rather than importing them from Thailand using AFTA (interviews). Part of the reason behind these strategic moves is found on the fact that local assembly of vehicles, particularly for large engine luxury cars, significantly reduces excise duties. But interviews also found that, especially for some firms (e.g., Toyota, Honda), political and marketing considerations weighted heavily in their decision to maintain local

⁷¹ For PROTON, the only OEM in Malaysia that could decide its own export strategy, AFTA provides an opportunity to expand much needed scales.

production.⁷² In line with my initial arguments, although AFTA (and FTAs in general) could have spelt doom for the automotive sector in Malaysia, its government has used its regulatory framework to promote national OEMs and local suppliers at the expense of imported vehicles.

As in other Japanese FTAs, the automotive sector took center stage during MJEPA negotiations (see working paper referred in footnote 33). At that time, Malaysia had its automotive sector waived from LCRs at WTO and excluded from AFTA schedules. Japanese carmakers and first-tier suppliers sought the elimination of Malaysian tariff and non-tariff barriers on assembled vehicles, APCs and steel.⁷³ In addition, MJEPA offered Japanese automotive firms the possibility of selective procurement and restructuring rents with respect to national OEMs and Malaysian subsidiaries of Western carmakers that depended on APCs and completely-knocked down kits from either Thailand or from their home country.⁷⁴

PROTON imported inputs from Japan but it received tariff rebates and it was also moving toward virtually complete localization following the introduction of its own engine technology. Consequently, PROTON opposed MJEPA not only because it would increase imports of Japanese vehicles, but also because it would reduce procurement costs for competing Japanese OEMs assembling in Malaysia (interviews).⁷⁵ As they did in Thailand, European carmakers opposed liberalization of vehicles, completely knocked-down kits and APCs from Japan that would save Japanese OEMs import tariffs as well as excise duties

⁷² If Japanese OEMs were to leave Malaysia and serve its market from Thailand, their political clout and capacity to influence policymaking would be considerably reduced.

⁷³ At the start of negotiations in December 2003, automotive and steel products jointly represented over 18% of Japanese exports to Malaysia for only 0.2% in the opposite direction. Since Japan has zero tariffs on automotive products, benefits from MJEPA were unidirectional.

⁷⁴ Interestingly, for Japanese OEMs, MJEPA would also liberalize completely knock-down kits imported from subsidiaries in Thailand (or elsewhere in ASEAN), since Malaysia custom regulations deem these kits as having originated from the OEM home country (Japan) (interviews).

⁷⁵ At the time, PROTON had started losing market share to Japanese OEMs and PERODUA. Field research found that PERODUA maintained a mixed disposition. On the one hand, although PERODUA also benefitted from tariff rebates, it depended more on Japanese inputs than PROTON did.

(interviews). The Malaysian Automotive Association, encompassing the interests of all foreign OEMs and distributors, but dominated by Japanese firms, endorsed MJEPAs as an opportunity to start opening up the Malaysian automotive sector.

The main competition to Malaysian-owned suppliers' comes from ASEAN, particularly from Thailand, but the two associations of suppliers to PROTON and PERODUA opposed MJEPAs not so much because it would increase procurement options for national OEMs, but mainly because it could reduce the market share of PROTON and PERODUA.⁷⁶

Eventually, Malaysia accepted to fully open its automotive sector in MJEPAs but, in line with Hypothesis 3, it used available options in FTAs for selectivity and flexibility in liberalization coverage and sequencing to support its main goals. Tariffs on completely knocked-down kits were eliminated from the start, those on APCs and cars of more than 2000cc were progressively phased out by 2010 but liberalization for vehicles below that level, in direct competition with national OEMs, will only be fully realized by 2015.⁷⁷

The full impact of MJEPAs on the Malaysia automotive industry could only be assessed after liberalization of smaller passenger cars is completed in 2015, although it is unlikely this will bring significant changes with respect to AFTA, since Japanese OEMs could already import those cars from Thailand. Still, between the implementation of MJEPAs in 2006 and December 2012 imports of vehicles over 2000cc from Japan have multiplied by more than five times, and imports of some key functional APCs have quadrupled.

⁷⁶ The excise duty system on assembled vehicles also cushions suppliers from MJEPAs impacts. Suppliers in the Malaysian Automotive Component Parts Manufacturers, many less dependent on national OEMs, lobbied instead for a long phase-out of tariffs on APCs.

⁷⁷ Malaysia's decision to open its protected automotive sector to Japan is partially explained in the context of AFTA, which allows Japanese models produced elsewhere in ASEAN to enter Malaysia tariff-free anyway. In such a situation, Malaysia had little option but to liberalize its automotive sector while trying to extract other concessions (See working paper by this Author, also in this series, entitled: "Negotiating Protection under overlapping Free Trade Agreements").

Disaggregated data on Malaysian imports under MJEPA are not available but field research interviews found that completely knocked-down kits are the main item imported under its preferences. Japanese OEMs but also PERODUA have been the main beneficiaries of this FTA, and have improved their competitiveness vis-à-vis PROTON, which has made less use of it. At least until late 2009, PERODUA was not only the first but also the largest importer of completely-knocked-down kits under MJEPA, even ahead of Toyota and Honda (interviews). Local and Japanese suppliers in Malaysia have made little or no utilization of MJEPA.

7.3. Procurement and technological linkages in Malaysian FTAs

The establishment of a national automotive industry in Malaysia was largely related to the government's goal to develop the local supply base. In that regard, Malaysia has used strict ROOs in FTAs to support this objective (Hypothesis 4). For instance, the Malaysian government succeeded in its demands to Japan of a high ROO of 60% value content for vehicles in MJEPA, as compared to the 40% that applies to most other tariff lines (METI-MJEPA, undated; MITI, undated; interviews). Such highly restrictive ROOs would limit OEMs in Japan (or Malaysia) from relying too heavily on imported APCs from suppliers elsewhere and potentially promoting backward linkages with Malaysian suppliers.⁷⁸

As part of MJEPA's cooperation chapter, Japan offered Malaysia the *Malaysia Japan Automotive Industries Cooperation* program (MAJAICO) that provided technical assistance in the automotive sector (Hypothesis 5). During five years, ending in June 2011, MAJAICO implemented a number of projects, including training by Nissan's experts of Malaysian APC manufacturers and PERODUA as well as business matching with Japanese firms. Field

⁷⁸ Unfortunately for Malaysia, as with most ASEAN-centered FTAs, the ASEAN-Japan FTA signed later required only 40% ASEAN-Japan value content.

research for this project found that, as in Thailand, specific projects in MAJAICO were only detailed at the implementation stage, once the agreement had been officially signed. Although Japan carried through with its commitments and participating suppliers have reported benefits, Malaysia could not fully exploit all possibilities in cooperation provisions.⁷⁹

Interestingly, and also confirming Hypothesis 5, the 2009 revision of the National Automotive Policy openly stated that cooperation chapters in FTAs should be geared to enhance the capabilities of local suppliers and that the government should use FTAs to promote the integration of domestic suppliers into the supply chains of international OEMs (MITI, 2009).

8. Discussion

The automotive sector is one of the most regulated manufacturing industries and, considering the large investments involved, automotive firms are very sensitive to the policy environment. In the late 1980s, as ASEAN countries embarked on unilateral liberalization and export-orientation, foreign carmakers established in the region sought to reorganize their procurement at the ASEAN level and pushed governments to introduce APC complementation sourcing programs. Only later did they look for restructuring their production across the region through liberalization of assembled vehicles in AFTA. More recently, international OEMs and suppliers have lobbied for bilateral FTAs with countries outside ASEAN in order to reduce costs in their specific extra-regional procurement and export flows.

⁷⁹ Several projects in MAJAICO had limited success and some suppliers claimed the existence of bias in favor of suppliers that had technical agreements or ventures with Japanese firms or that used Japanese technology (interviews)

A significant body of the literature on regionalism has centered on the burden imposed by FTAs on firms operating in production networks (e.g., diverging and costly ROOs) and on developing states (e.g., loss of policy space). Less attention has been given to why some firms and developing states seek bilateral FTAs for reasons beyond generic expansion of markets or access to cheaper inputs and whether and how these actors maximize the possibilities presented by FTAs to capture selective advantages.

Thailand and Malaysia protect their automotive industries at the multilateral level with high tariffs and, particularly in the case of Malaysia, regulatory barriers. Thailand liberalized investment in the sector and moved into global exports but has opened or protected the sector in FTAs depending on the partner involved. In contrast, the low international competitiveness of PROTON and the inward strategies of PERODUA and foreign OEMs in Malaysia have meant that the Malaysian automotive sector remains domestically-oriented.

Despite these differences in their policy environment and in outcomes, both case studies yield similar findings and confirm the hypotheses. Most global first-tier suppliers and carmakers are *already* established across ASEAN, including in Thailand and Malaysia. Still, this research found that these firms have lobbied for (and later exploited) specific configurations in Thai and Malaysian FTAs to create asymmetric rents that discriminate not only against firms outside the FTA area (e.g., classical trade diversion) but also with respect to other firms that are already inside (e.g., procurement, reverse import and/or restructuring rents). At the same time, as the ultimate initiators and signatories to international agreements, the Thai and Malaysian governments have used FTAs to pursue their national interests not only vis-à-vis other states but also in relation to multinationals lead firms like those in the

automotive production network. Lastly, local suppliers have resisted FTA liberalization of the automotive industry and have to rely on the institutional framework to derive leverage in their relation with OEMs.

8.1 FTAs and lead firms

In production networks, where production is fragmented and inputs cross several borders, lead firms are not only interested to expand access for their final goods abroad but also to reduce the costs of imported inputs. During the last three decades, automotive OEMs in ASEAN have lobbied for liberalization for raw materials and APCs either via unilateral liberalization—in complementation sourcing programs or as part of export-promoting schemes (e.g. DES/DDS, export processing zones)—or, of late, through AFTA and bilateral FTAs.

Naturally, OEMs seek to increase not only their absolute competitiveness but also relative to other firms within the country and the production network. Although the automotive sector is moving toward shared inter-brand and inter-model platforms, when compared to other industries, there is low standardization of intermediate inputs, especially functional APCs, which remain highly specific to OEM and model. As a result, procurement of a particular item by an OEM in a given country is often limited to a few suppliers, sometimes to a subsidiary, or to a long-term supplier back home. By liberalizing particular trade flows, a bilateral FTA could selectively benefit OEMs that depend on inputs from the FTA partner. Research for this paper found that whenever an FTA offered possibilities for asymmetric rents, potential beneficiary firms pressured governments to capture them.⁸⁰

⁸⁰ It is worth noting that selectivity of rents meant that lobbying pressures during FTA policymaking originated from individual firms and not only (and sometimes rather than) business associations.

FTA liberalization of the automotive sector in East Asia has disproportionately favored Japanese OEMs over those of other nationalities because their longest, largest, and deepest presence in the region. Nevertheless, case studies showed that procurement rents not only (and also not necessarily) accrued to OEMs with home in one of the FTA partners, and that these rents could be firm-specific. For instance, some American firms (e.g., Ford, which shares production platforms in Thailand with Mazda) benefit from cheaper Japanese inputs through JTEPA, but Japanese Mitsubishi hardly uses this FTA.⁸¹ Meanwhile, given its sourcing pattern, GM in Thailand would not only profit the most from a bilateral FTA between Thailand and Korea (arguably, the most undesirable FTA for all other OEMs in Thailand), but would do to a greater extent than it would through an FTA with the US.⁸² Lower standardization and greater specificity of intermediate inputs in the automotive industry generates more possibilities for differentially exploiting procurement patterns among carmakers in FTAs.

FTAs allow firms to progressively restructure their scales and production from the national to the bloc level while still being protected behind external tariffs and ROOs (Chase, 2005). It is contended here that the benefits from restructuring have been often asymmetrically distributed, having been capitalized mainly by firms with investments across the FTA bloc. For example, as AFTA was being implemented, most OEMs have restructured their supply-chains and production plants but Japanese firms, with the largest network, have profited the most. In anticipation of or following TAFTA, Japanese and American OEMs—but not European's—and Australian suppliers reorganized their division of labor across Thailand and Australia. Nevertheless, as illustrated by the case studies selected here,

⁸¹ In another example that the selective rents of FTAs may not necessarily accrue to OEMs with home in the FTA partners, Japanese Toyota, rather than Indian OEMs, has been the largest beneficiary of TIEHS that connects its subsidiaries in both countries.

⁸² The ASEAN-Korea FTA barely liberalizes the sector (Medalla, 2011).

consolidation of all production at a single location within the FTA it is unlikely to be fully realized for several reasons. First, governments could change their regulatory framework rapidly, so OEMs prefer spreading risks across several countries. Second, large sunk investments and difficult to transfer assets in the automotive industry plus long implementation periods in most FTAs also mean that restructuring in response to a new FTA could take several years.⁸³ Consequently, global OEMs and suppliers have not only adapted their strategies *ex post-facto* to the implementation of FTAs, but they often first developed their business plans for ASEAN, India, Australia, etc. and only later pressured governments for FTAs that support their *ex-ante* strategies (e.g., Toyota in TIEHS, Japanese OEMs in early complementation programs or in AFTA, JTEPA and MJEPA or GM and Toyota in TAFTA).⁸⁴ Finally, my field research also found that restructuring of production within an FTA bloc has been dictated not only by production strategies and agglomeration economies but also by political sensitivities. Even though Japanese OEMs could now serve the Malaysian market from more efficient plants in Thailand or Japan using AFTA and MJEPA, respectively, Toyota and Honda are staying in Malaysia. This is not only related to the Malaysian regulatory system, which penalizes foreign content, or to average future risks but also to the marketing advantages and political clout that firms can only derive from their physical presence in the country.

In sum, lead firms could seek FTAs for different objectives, some more amenable to selectivity than others, that allow us to distinguish at least three types of FTAs. A first group of FTAs aimed chiefly at expanding markets for final goods (e.g., TAFTA). Although there is scope to generate selective benefits from restructuring production blocks across the FTA

⁸³ Given the slow response of the automotive industry to regulatory changes, the entire range of impacts of FTA liberalization could span over long periods, which for some cases may be outside the scope of this research project.

⁸⁴ As an OEM executive indicated, “firms cannot predict policy [...] nor are [they] certain that they would be able to influence it”.

area, these are lower. In a second group of FTAs, OEMs primarily endeavored to extract procurement rents through liberalization—in the most firm-specific manner—of APCs from subsidiaries or long-term suppliers (e.g., ASEAN complementation programs, TIEHS, JTEPA, MJEPA). Although MJEPA and, to a very limited extent, JTEPA also liberalized vehicle imports, field research found that the main goal of Japanese OEMs in both FTAs was to save on input costs (procurement rents) and gain future flexibility (restructuring rents) vis-à-vis Western carmakers. Lastly, in other FTAs, both expanding markets and facilitating procurement have been equally important (e.g., AFTA). In line with my argument above, while AFTA/ATIGA does not involve foreign OEMs’ home countries and is a regional FTA—therefore less amenable to selective rents—, AFTA has generated selective market and procurement rents for Japanese carmakers. In the case studies analyzed here, there was no room for reverse import rents for Japanese OEMs because Japan does not impose tariffs on automotive products and exports of vehicles from ASEAN back to Japan are low.

Arguably, the same way firms outside an FTA could neutralize market rents from trade diversion by investing inside the bloc, procurement or restructuring rents asymmetrically distributed among firms within an FTA area could also be neutralized by the formation of other FTAs. This highlights the importance to OEMs of not only securing selective rents that may be available in FTAs, but also locking them in for the future. This was illustrated by Japan’s request to add into the JTEPA treaty the Thai commitment not to extend better FTA concessions in the automotive sector to other countries.⁸⁵

⁸⁵ See two additional working papers by the Author: the one referred in footnote 33 as well as another published in this series under the title “Creation and Shifting of Rents within Bilateral Free Trade Agreement Blocs. Firms, States and the Redistribution of Power within Production Networks under Regionalism”.

8.2 FTAs and the state

Countries have used bilateral FTAs, especially in North-South FTAs, to impose on other nations trade and regulatory reforms that are more difficult to extract at the multilateral level (Shadlen, 2005; Pekkanen et al., 2007). Pending of the negotiations for FTAs with the United States (in the TPP) and the European Union, none of the developed FTA partners of Thailand and Malaysia had introduced significant regulatory reforms beyond some changes in the investment regime.

Although globalization has reduced the power of states with respect to multinationals, states control the regulatory framework over the right of investment and tax and incentives systems. It was argued here that FTAs offer states additional sources of power over lead firms. States could leverage their prerogative to negotiate and eventual include in an FTA selective rents that would benefit some companies over others. Through FTAs, states could facilitate or restrict the operations of lead firms within production networks by selectively liberalizing or excluding specific tariff lines and by fostering procurement and technical linkages with local suppliers through ROOs and cooperation chapters.

Empirical data showed that the Thai and Malaysian governments were well aware of these options in FTAs, having later on identified some of them as explicitly stated policy goals. To pursue their national interests and accommodate those of OEMs and suppliers based in the country, both governments have made ample use of GATT/WTO flexibilities regarding FTAs to introduce exclusions or long tariff phase-out periods (Hypothesis 3). Compared to multilateral liberalization, the greater selectivity and flexibility offered by FTAs for liberalization coverage and sequencing enhanced the leverage of the state over OEMs lobbying for/against liberalization (Hypothesis 3). For instance, Malaysia temporarily

excluded its automotive sector from AFTA, Thailand's maintained protection of most vehicle segments in JTEPA and both Thailand and India limited liberalization of the automotive sector in TIEHS to just five items.

Thailand's main goal for the automotive industry has been to expand export-oriented investment and production by foreign OEMs and global suppliers, using a relatively liberal regulatory regime, while shielding the industry from external competition through high tariffs. This research found that Thailand's early use of LCRs was intended as much to create backward linkages as to reduce trade deficits. Certainly, Thai policymakers strive to strengthening the local supply base, but they are not necessarily concerned about the nationality of its ownership. Increased localization in the Thai automotive industry has occurred mainly through the market forces of agglomeration. Meanwhile, for the Malaysian government, establishment of the National Car Project was largely a means to develop a Malaysian- (and bumiputera-) owned APC industry. Accordingly, Malaysia not only extended LCRs beyond the original WTO's deadline, but still uses its domestic regulatory framework to increase procurement linkages with local suppliers (e.g., linking excise duties and tax incentives to local content). These diverging objectives have been reflected in the way both countries used ROOs in FTAs. Despite high content in Thailand-made vehicles, the Thai government has favored procurement flexibility for OEMs, and has not requested overly strict ROOs for the automotive sector in its bilateral FTAs. In contrast, in line with Hypothesis 4, Malaysia succeeded in introducing strict ROOs of 60% of value content for vehicles in MJEPAs to foster procurement linkages.

However, it is equally true that, for the FTAs analyzed herein, neither government was entirely successful (or skillful) at exploiting some of the possibilities offered to them by

FTAs in terms of policy tools. Enforcing and monitoring technological transfer from multinationals to local firms is a difficult task for most developing countries. As part of JTEPA and MJEPA, Japan offered training of local suppliers, but arguably, Thailand and Malaysia did not maximize their options during negotiations. Cooperation provisions in both FTAs were vaguely defined and implementation targets were only detailed in separate protocols once the agreements had been signed, which left no room for Thailand and Malaysia to link Japanese technical assistance to reciprocal concessions in market access. However, to the extent that FTAs establish periodic reviews, developing countries still maintain a bargaining chip to ensure they received the anticipated assistance. It is worth remarking that the possibility of using cooperation chapters in FTAs to upgrade the local supply base and foster its integration into international production networks has been now incorporated into Malaysia's National Automotive Policy (Hypothesis 5) (MITI, 2009).

Obviously, this is not to say that developing countries enter FTAs only for the above reasons. But just as they surrender some policy instruments in North-South FTAs, FTAs could still potentially offer them other options to regulate some of the activities of firms and production networks. Whether developing countries actualize these possibilities during negotiations is a different matter.

8.3 FTAs and suppliers

Although most trade in key functional APCs is accounted for by OEMs, global first-tier suppliers have also benefited from the procurement and restructuring rents generated by bilateral FTAs. In contrast, indigenous Thai and Malaysian suppliers, particularly lower-tier ones, not only had less political clout to influence FTA formulation, but they have also made little use of FTAs once implemented due to insufficient knowledge about them and/or lack of

administrative expertise to handle applications for their utilization. Even among Thai and Malaysian first-tier suppliers, utilization of bilateral FTAs has been limited because of the logistical reasons in the industry referred to in previous sections. Instead, local suppliers were more familiar with the use of DES/DDS and AFTA, which have been in place for long time.

In Thailand, most benefits to suppliers from FTAs have come indirectly through the increased vehicle production they fostered (e.g., AFTA, TAFTA). Suppliers have not always consolidated their production in response to FTAs. For instance, Thai and Malaysian first-tier suppliers, with presence in each other's country did not merge production in their home base as result of AFTA.⁸⁶ Likewise, many independent Indian and Australian suppliers opened operations in Thailand, instead of trading APCs through TIEHS and TAFTA, to benefit from agglomeration economies near their OEM customers and to qualify for ROOs in multiple Thai FTAs.

Many FTAs signed by the United States or the European Union restrict or prohibit that their partners grant DES/DDS on inputs from outside the bloc that are later incorporated into goods traded within the FTA. Banning DES/DDS in FTAs further reinforces diversion in favor of suppliers inside the bloc. No such provisions exist in any of the Thai or Malaysian FTAs currently in force.⁸⁷

Trends in the automotive industry and their interplay with the ongoing proliferation of FTAs are affecting lead firm-suppliers relations in multiple, even opposing, directions. The industry is moving toward more relational and modular linkages between OEMs and first-tier

⁸⁶ As of April 2013, first-tier suppliers like Thai Summit (Thailand) or Ingress (Malaysia) maintain operations in other ASEAN countries.

⁸⁷ Up to date, none of the FTAs implemented in East Asia incorporate clauses to outlaw DES/DDS. Interviews in Thailand and Malaysia also revealed that elimination of DES/DDS was never requested by any party involved in FTA negotiations. This could be reasoned because multinationals in East Asia production networks depend on a wider geographical area for their procurement than those operating elsewhere. In any case, banning DES/DDS as part of FTAs could have a complementary backward linking effect with ROOs, fostering the use of inputs from within the FTA area in the share of value content not required by ROOs.

suppliers. In turn, liberalization tends to foster market-driven linkages as mutually captive relations developed under import substitution are dissolved. Liberalization could also promote regional clustering of first-tier suppliers around specialized OEM plants, thus reinforcing asymmetric relations, especially once suppliers have sunk their investments. Lastly, field research indicated that most of the use of FTAs for input procurement involved trade among OEM subsidiaries (hierarchical relations) or between OEMs and long-term suppliers (captive, relational).

8.4 Concluding Remarks

Institutions serve and reproduce the interests of those that created them in the first place (North, 1990). FTAs have become arenas for cooperation and competition between and among firms and states providing frameworks to regulate the distribution of power within production networks. As far as the automotive sector is concerned, Thai and Malaysian FTAs have primarily served OEMs, especially Japanese firms and particularly Toyota, which have leveraged their power to affect FTA formulation in their favor at the expense of competing OEMs, local suppliers and states.

At the state level, neither Japan nor Australia used FTAs to extract significant regulatory concessions from developing partners. However, if the FTAs of the United States and the European Union with Korea and Singapore serve as indication, future East Asian FTAs involving these Western powers may include demands for reforms that could undermine some of the policy space ASEAN states still maintain for regulating firms and production networks.

Following the Asian crisis, Thailand and Malaysia deepened their integration into production networks as a mean to foster industrial development. FTAs could reinforce these

efforts by increasing investment, production and exports, and by indirectly enhancing local technological capabilities. On the other, by reducing the cost of high-technology finished products and inputs imported from developed partners, FTAs may potentially lock, and even downgrade, indigenous firms into low value-added production.⁸⁸ Whether the impact of existing and future FTAs goes in one or the other direction would largely depend on the domestic and international political economies that shape FTAs negotiations. The ability of developing firms and nations to use some of the options available in FTAs described here could contribute to enhance their leverage within production networks in their pursue to catch up with advanced economies.

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⁸⁸ Our research could not find evidence that liberalization of high-technology APCs from Japan could act as a disincentive for Thai and Malaysian suppliers to upgrade. Still, several Thai and Malaysian suppliers expressed concern about this possibility.

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