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August 2011
Working Paper No. 2011/12

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August 2011

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Abstract: This paper examines the impact of the Australia-Thailand free trade agreement (TAFTA) on bilateral trade between the two countries, paying attention to the implications of rules of origins (RoO) and the utilization of tariff preferences. It is found that trade has expanded faster following TAFTA came into effect, but the impact has heavily concentrated in a few product lines in Australian imports from Thailand, reflecting the influence of commodity specific, supply-side factors which have a bearing on the rate of preference utilization. The findings, *inter alia*, suggest that the use of officially announced preference rates in trade flow modeling is likely to exaggerate trade flow effects of FTAs.

Key words: free trade agreement, rules of origin, production fragmentation, Thailand, Australia

JEL Classifications: F13, F14, F15, F53

25 August 2011

Forthcoming in *Australian Economic Review*

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1. Introduction

In this paper, we examine emerging trends and patterns of Australia's trade with Thailand, with a focus on the impact of the free trade agreement (FTA) between the two countries. In addition to broadening our understanding of the trade relations between the two countries, the paper aims to contribute to the sparse literature on the trade flow effects of FTAs. Proliferation of FTAs over the past two decades has sparked a policy debate both in Australian and in international policy forums about their implications for the operation of the global trading system and finding ways of mitigating their likely discriminatory effects on both partners and outside countries. In order to inform this policy debate it is vital to explore the behavior of trade flows under FTAs which have already been implemented, paying attention to the possible discriminatory effects of the eligibility criteria (rules of origins, RoOs) which accompany tariff preferences (Lloyd and Maclaren 2004).

The paper is structured as follows. Section 2 provides an overview of the Thailand-Australia FTA (TAFTA) paying attention to the nature and extent of tariff concession offered under TAFTA and the accompanying Rules of Origin (RoO). Section 3 probes the extent to which trade preferences have so far been used by traders using a new data set compiled from the administrative records of the relevant government bodies in Thailand. Section 4 examines the impact of TAFTA on Australia-Thailand trade by linking preference utilization patterns observed

in Section 3 with a pre- and post-TAFTA comparison of trade flows. Some general conclusions are drawn in the final section.

2. Australia-Thailand FTA

Over the past two decades FTAs have become an integral and enduring part of the global trading system. The number of FTAs notified to the World Trade Organization (WTO) almost quadrupled from around 110 in 1990 to 400 in 2010 and currently all member countries of WTO other than Mongolia are members of at least one FTA. Australia and Thailand (and other Asian countries) embraced the new-found FTA enthusiasm with a considerable time lag: until about the beginning of the last decade they continued to maintain long-standing commitment to non-discriminatory unilateral liberalization, reinforced by the WTO commitments. Since then both countries have caught up rapidly with the global trends.

Australia is now party to seven FTAs: New Zealand (1983), Singapore (2003), the USA (2005), Thailand (2005), Chile (2009) and ASEAN (together with New Zealand) (2010). In addition, Australia is currently negotiating bilateral FTAs with China, Japan, Malaysia and the Republic of Korea (DFAT 2010, PC 2010). A joint feasibility study of a possible FTA with Indonesia has been finalized and a similar study is underway relating to a possible FTA with India. Thailand has entered into 8 FTAs and another 13 agreements are under negotiation (Kohpaiboon 2010, Saly 2006).

a. Tariff preferences

The Thailand-Australia Free Trade Agreement (TAFTA) came into effect on January 1, 2005.¹ The agreement is reasonably comprehensive in its coverage of trade in goods. However, unlike in the other four FTAs signed by Australia in the last decade, TAFTA's liberalisation commitments relating to investment and services and other commercial practices impacting on international trade (eg. intellectual property, government procurement and competition policy) are rather thin. In this paper we, therefore, focus solely on goods trade.

By the time of signing the agreement Australia's tariffs had come down to the average level of the other developed countries, thanks to unilateral tariff reforms over the previous three decades. Nearly half of the tariff lines at the 6-digit level of the Harmonized System (HS) of product classification² were free of duty and the simple average most-favoured-nation (MFN) tariff was 3.4 per cent. However, there were moderate tariff peaks relating to motor vehicles and parts (6.8 per cent), textiles (9.7 per cent), wearing apparel (19.1 per cent) and leather products (6.5 per cent) in which Thailand had considerable export potential (CIE 2004, Table A-1). Under TAFTA, an additional 33.2 percent of tariff lines became duty free for Thailand with immediate effect. All HS-6digit items belonging to the product category of completely-built up (CBU) vehicles (Australia's most important export to Australia) were in the additional duty free list, giving Thailand a 'preference margin' (the difference between the MFN rate and the preference rate) of about 10 percent for these items. The other products in this list included fresh fruit, vegetables, canned pineapple and pineapple juice, processed foods, small passenger vehicles and pick-up trucks, gems and jewelry. The average preference rate offered by Australia was 1.6 per cent compared to the average MFN rate in 2004 of 3.9 per cent. Give Australia's

¹ The full text of the agreement is available at www.dfat.gov.au/trade/negotiations/aus-thai/

² The harmonized commodity and coding system (HS) is an internationally standardised system for classifying traded products developed by the World Customs Organization (WCO).

initial low tariffs, the preference margins for the bulk of product lines were below 5 percent (Table 1). A further 13 per cent of tariff lines, comprising plastic products, rubber and rubber products became duty free in 2010. The remaining items including textiles (HS52-60), garments (HS61-62), household textiles (e.g. carpets, curtain) (HS63), footwear (HS64) and some electrical appliances (HS85) will become duty free by 2015.

[Table 1 about here]

Thailand's average tariff in 2004 was around 12 per cent and the tariff structure had 46 different slabs, with high tariff peaks ranging from 30 to 50 per cent for a number of dairy, meat and other agricultural products imported from Australia (CIE 2004, Table A-1). Only about 4.2 per cent of total tariff lines were free of duty. Under the agreement the duty-free percentage for Australia was increased to 49.2 per cent. The zero-duty list is dominated by raw materials such as mineral ore, fuel, and chemicals, as well as raw and tanned hides. Duties on another 45 per cent were removed in 2010 and the remaining 5 per cent of items comprising dairy and meat products (beef, pork, milk and cheese, tea, and coffee) will be removed by 2015. The average preferential tariff offered by Thailand to Australia was around 6 per cent, with an average preference margin of about 10 per cent. For about a fifth of total tariff lines the preference margin exceeded 20 per cent (Table 1).

A comparison of the structure of preferential tariffs with trade patterns in the lead up to the signing of TAFTA³ suggests that products with large preference margins were mostly manufactured goods which are hardly imported from Australia. Agricultural products with

³ The trade data are not reported here because of the space constraint. They are available from the authors on request.

considerable market potential in Thailand for Australian exporters, like fresh milk and milk products⁴ and meat, are subject to tariff-quotas and the preferential quota levels and rates offered to Australia are rather small. For instance, for fresh milk the MFN import quota was 2,400 tons, with in- and out-quota tariff rates of 20 per cent and 41 per cent, respectively. Under TAFTA the two rates for milk product within and outer quota rates applicable to imports from Australia are set at 15 per cent and 20 per cent respectively, but the former rate is applicable for only 120 tons (or just 5 per cent of the MFN quota). Bovine meat is subject to preferential tariff of 41 per cent compared to a MFN rate of 50 per cent. This rate is applicable for the first 776 metric tons of imports. Beyond this, the MFN tariff rate (50 per cent) is applicable. Tariff concessions for agricultural products under TAFTA are also subject to safeguard provisions. That is, the member countries can suspend the offered preferential tariffs and return to the MFN tariff if import quantity reaches certain trigger levels.

b. Rules of Origin

In an FTA, the participant countries maintain their own external tariffs, which usually differ between member countries, while offering concessional tariffs to the member countries. Thus, it is necessary to combine tariff concessions offered to member countries with rules of origins (RoO) to prevent 'trade deflection' –imports from non-member countries into the member with the lowest most favoured tariffs for transshipment to other FTA members. If eligibility criteria imposed for the identification of the true 'originating status' of products are stringent and the related administrative mechanism is cumbersome, RoO can diminish, or even render worthless,

⁴ Between 2005 and 2010, Australia accounted for 57.6 per cent of total milk imports (HS 040110-040130) and 14 per cent for milk powder imports (HS 040221).

the preference margin offered to traders (Krishna 2006). Therefore, how the RoO are designed and implemented matter a lot if we are to understand how much market access an FTA really confers.

The RoO are set based on three main criteria: regional value content (RVC), change of tariff classification (CTS), specificities about the production process (SPP). The RVC criterion requires that the cost of material and processing cost within the FTA member countries represents a set minimum proportion of the value of the final product. The CTS criterion requires that the 'non-originating material' (that is, intermediate inputs imported from non-member countries) used in the production process belongs to a different commodity code (category) of the Harmonized System.. The SPP criterion requires non-originating material to undergo a specified manufacturing or processing operation. Until recently, the CTS criterion was by far the dominant norm in setting RoO in FTAs. Designing and application of RoOs have, however, become increasingly complicated in recent years by the rapid growth of international fragmentation of production: the geographic separation of activities involved in producing a good (or service) across two or more countries within vertically integrated production systems. It is difficult to apply the standard value added criteria in a context where trade in parts and components, and final assembly occur in different countries, so that assembly in a given location has a very thin value-added content (Lloyd 2001, Athukorala 2005). For this reason, most FTAs now use a mixture of the three criteria, with CTC as the basic norm.

For a product to become eligible for tariff concessions, material (intermediate inputs) used in producing it must have come from a different HS code. In applying the CTC criterion, the shifting of HS classifications is usually expressed at the Chapter (2 digit), Heading (4 digit) or Sub-heading (6 digit) level of the HS system of classification. The particular level of

classification chosen makes a significant difference in the case of manufactured goods as the good is usually 'made' from the other items in the given chapter or the heading to which it belongs. Specification of the 'HS change level' by chapter is more restrictive than a change at the heading level, which in turn is more restrictive than a change at the subheading level (Productivity Commission 2009, p. 135).

Like in the case of the other four recent Australian FTAs, CTC is the main (base) criteria used in TAFTA (DFAT 2010, pp. 79-80). Approximately 80 per cent of HS products are subject to CTC rules alone, 17 per cent to CTC and RVC, and 3 per cent to CT and SP. Of the products for which CTC is the only criterion used, about 17 per cent are subject to HS shifting at the HS 2-digit level, 35 per cent at the HS 4-digit level and the balance of 28 per cent at the 6 digit level.

For processed agricultural goods, meat and fish products, RoO are generally a combination of CTC and SPP. For example, RoO for processed fish (HS 0303) requires that freezing, cleaning, gutting, removing of gills must be undertaken in addition to shifting from any other HS heading. For motor vehicles RoO require HS shifting at the sub-heading level and a minimum RVC of 40 per cent. For highly sensitive manufacturing products such as textiles, wearing apparel and footwear, RoO are a combination of all three criteria. For example, a Thai firm exporting men or boys' overcoats, fur-coats, capes, cloaks etc. (HS 6101) is eligible for tariff preference only if the product is a change to heading 6101 from any other Chapter and the good is both cut (or knit to shape) and sewn or otherwise assembled in one or both countries and has a regional value content of not less than 55 per cent. In some cases specific requirements are added even at the sub-heading level. For example, in the case of TV sets (HS 852821) RoO require a change to that subheading from any other subheading, except from subheadings 701120 (cathode-ray tubes), 854011 (cathode-ray picture tubes) and 854091 (parts of cathode-ray tubes).

This implies that an exporting firm would become eligible for tariff concessions only if these three inputs are sourced locally. But this is not a viable option for the firm: it is not possible to be internationally competitive unless these components are procured from advanced countries (currently most of these components come from Japan).

3. Utilization of tariff preferences

As a prelude to analysing the impact of TAFTA on trade flows, in this section we examine the actual utilization of trade preferences offered under the agreement.. For this purpose the preference utilization rate is estimated as the percentage share of trade accounted for by RoO certificates issued by the Thai Bureau of Preferential Trade and the actual trade of products eligible for trade preferences computed using Customs records.

For total exports from Thailand (Australian imports), during the period from 2005 to 2010 the weighted average preference utilization rate ranged between 60 to 70 per cent (Table 2). The utilization rates are highly concentrated: the top ten products of over 5000 products at the 6-digit-HS level accounted for more than 60 per cent of total exports taking place under trade preferences. The figure for the top-20 was 70 per cent. The average preference utilization rate of Thai imports (Australian export to Thailand) was much lower: less than 15 per cent of eligible imports actually took place under trade preferences. The degree of concentration of preference utilization was higher for Thai imports than for exports in the early years but by 2010 the concentration levels were similar.

[Tables 2 about here]

Assuming that producers and traders are fully aware of the tariff concessions offered under an FTA, the utilization rates of tariff concessions depend largely on the margin between the general and preferential tariff rates offered and cost involved in meeting RoO requirements (which together determine the net preference margin) and the degree of restrictiveness of RoO (Carrer and de Melo 2006). In addition to these main factors, some firms might be reluctant to share details of their production process because of the fear of leakage of vital information on production process to competitors or income/cost details to the tax authorities. Administrative delays involved in obtaining RoO certification which could disrupt trade flows are another possible reason to shun preferences. Disentangling these influences is not possible without undertaking a systematic firm-level study. However, an inspection of the distribution of preference margins and preference utilization patterns across products/product groups suggest that both the cost of RoO compliance and, more importantly, restrictiveness of RoO do have a significant impact on the actual trade effect of TAFTA.

According to the findings of Kohpaiboon (2010) the cost of RoO compliance under TAFTA is not very high: it ranges from 5 to 8 per cent of the tax concession (preference margin). However even this small cost can be a significant consideration for traders because, as we have already noted, a significant percentage of tariff lines cluster at the lower end, particularly for Thai exports to Australia.

The data reported in Tables 3 and 4 on FTA utilization information on the top ten exports and imports help us gain some insights into the commodity specific nature of preference utilization. On the import side, fully-built motor vehicles (HS 870421, HS870323, HS 870431,

and HS 870322) come first on the list of the top ten products. From the late 1980s, the export-oriented motor vehicle industry has grown rapidly and a strong domestic parts and component supply network has evolved side by side with final assembly (Athukorala & Kohpaiboon (2010)). Hence, the exporters can easily meet the RVC criteria. Interestingly, among electrical and electronics goods which together ranked next to automobiles in Thailand's export structure, only air-conditioning systems(HS841510) appears among the top ten users of tariff preferences, although all these products are eligible to similar preference margins (around 5 per cent). The eligibility of this product for tariff preferences depends on a straight forward CTC criterion; non-originating material used must have come from any other HS category than HS841510 By contrast, as already noted, for many other HS-6 digit products belonging to this product group there are more complex RoO criteria.

On the import side, the top-10 items on the import side include primary products like wheat (HS100190), malt (HS 110710), zinc (HS 260800) and aluminum (HS 760110) (Table 7). All these items are natural resource based products which naturally qualify as originating within the FTA region without any need for satisfying any additional test. Interestingly, none of the 6-digit HS products belonging to the commodity categories of milk and milk products, and meat appear on this list, presumably reflecting the impact of more restrictive RoOs which combine CTC and SPP criteria.

[Tables 3 and 4 about here]

4. Australia-Thailand trade

There has been a notable increase in Australia-Thailand bilateral trade following 2005 when the TAFTA came into effect (Table 5). Between 2004 and 2010, total merchandise trade (exports + import) between Australia and Thailand increased from US\$ 5 billion to US\$ 15.1 billion at an annual rate of 20.2 per cent. In contrast, Australia's total world merchandise trade increased only by 12.0. Consequently, the share of bilateral trade in total trade increased from 2.6 per cent to about 4.0 per cent between these two years. Trade with Australia as a share of total Thai trade amounted to 3.5 per cent during 2005-10, up from 2.3 per cent during 2000-04.

[Table 5 about here]

The total trade figures, however, hide a notable asymmetry in growth of imports and exports: trade expansion has occurred predominantly on the import side (Table 5). The share of imports from Thailand increased from 2.8 per cent in 2004 to 5.2 per cent in 2010, where as the share of exports to Thailand in total Australian exports varied mildly around an annual average of 3.5 per cent during this period. During 2005-10, the annual average growth rate of exports to Thailand (9.1 per cent) was in fact slightly lower than the comparable figure for total exports (14.2 per cent). Comparison of pre- and post-FTA trade performance is of course a weak basis for drawing inferences because many factors other than FTA could have affected trade performance over this period. Disentangling the effect of TAFTA from the other events is difficult through a systematic econometric analysis is not possible given the short time period, but the strong positive impact on the import side certainly is too strong to be discounted by any other factors.

[Tables 6 and 7 about here]

On the Australian import side, the most striking development is a sharp increase in road vehicle imports (Table 6). Australian imports of road vehicles (including parts and components) increased at an annual rate of 164 per cent during 2005-10, up from 21 per cent during 2000-04. Between these two periods motor vehicle share in total imports from Thailand and total Australian vehicle imports increased from 29.4 per cent to 40.9 per cent, and 5.8 per cent to 13.2 per cent respectively. The market share of Australia in total motor vehicles exported from Thailand increased from 13.8 per cent in 2000-04 to 17.4 per cent in 2010. As already noted the emergence of Thailand as a global automobile assembly hub predates the signing of TAFTA. By the time of TAFTA negotiation, there was already a 1.5 million unit motor vehicle industry producing vehicles with a high local content which was well above the RVC limit (40%) set by the FTA. By 2004 Australia was the major market for motor vehicle assembled in Thailand, accounting for 25.8 per cent of total vehicles exports. TAFTA seems to have played a pivotal role in strengthening this maker link and creating a more competitive and stable environment for further expansion.

During 2000-04, Thailand (market share: 5.4 per cent) was the fourth largest source country of automobile imports to Australia, after Japan (55.9 per cent), Germany (11.9 per cent), Korea (6.1 per cent). In 2010 it was the second largest source country (17.2 per cent) after Japan 38.8 per cent.⁵ An inspection of time-series data on market share change suggests that Thailand's market share gains largely mirror market share losses of Japan. The upshot is that,

⁵ Market shares reported here were computed from the Comtrade data base (using export values), but use of quantity data does not change the patterns.

given the tariff preferences, Japanese car producers have opted to meet part of the demand in Australia by expanding their assembly operations in Thailand instead of directly exporting from Japan. Notwithstanding the same tariff preferences offered to the US under the Australia-USA free trade agreement which came into effect in the same year as TAFTA, there has not been a noticeable market share gain by US automakers in the Australian market. There is evidence that the two major US automakers, GM and Ford, are expanding their production bases in Thailand to serve the Australian and other regional markets.⁶

The bulk of other product categories listed in the table of Australian imports have also recorded faster growth with notable increase in their share in total imports during the post-TAFTA years. However, import growth rates of apparel and other miscellaneous products (SITC 8), textiles (SITC 64) in which high-duty sensitive imports are concentrated have shown much slower growth compared to the average performance. Thai data for exports to all countries show that food and beverages (in particular fish and fish products, chicken meat, canned fruits), and electrical goods and electronics have been the most dynamic export products after automobiles over the past ten years. These products, however, still account for a much smaller share in Australia imports from Thailand, although most of these products are at the upper end of the distribution of FTA tariff preferences. At least part of the explanation seems to lie in the relatively more restrictive RoO discussed in the previous section: we have also already observed that the preference utilization rates in these products are low.

On the export side (Table 7), the share of manufacturing in total exports has declined from 42.5% to 36.1 per cent between 2000-04 and 2005-10, even though most of the tariff concessions offered by Thailand are concentration in this product category and these concessions

⁶ Some CGE-model based studies of the likely impact of AUSFTA predicted significant increase in the share of US automobile imports in Australia at the expense of imports from Japan! (See Stoler 2004 for a survey of these studies)

are much larger in magnitude compared to those on the import side. Interestingly, the share of exports to Thailand in some manufacturing product categories has recorded a decline between the two periods. The post-TAFTA average annual growth rates have been negative in some product categories. One notable development on the export side has been a dramatic increase in the share of unclassified exports (which mostly comprises non-monetary gold) in recent years, but this has nothing to do with the trade concessions under the agreement. All in all, data on exports from Australia to Thailand reported here (or the more disaggregated data not reported for lack of space) do not permit any inference about the relative importance of the impact of restrictive RoO. The only tentative inference we can make from these data (combined with those relating to preference utilization patterns discussed in the previous section) is that the degree of penetration of Australian products in the Thai market is fundamentally determined by supply-side factors rather than tariff concessions offered under FTAs.

5. Concluding remarks

TAFTA has contributed to a notable expansion of trade between Thailand and Australia. However, the expansion has occurred predominantly on the import side; there is no discernable deviation from the pre-TAFTA trends and patterns on the export side. The expansion of imports are predominantly accounted for by motor vehicles, with only few other products showing faster growth. All in all, the evidence harnessed in the paper suggest that commodity specific supply-side factors and RoO set at the individual commodity level in discriminatory fashion determine the rate of rate of preference utilization and hence the actual trade flow effect of the TAFTA. Further research is of course needed to delineate the effects of the cost and technical problems involved in RoO compliance from other influences impacting on trade flows.

The findings of this paper caution against the use of officially announced preference tariff rates for quantifying the trade flow effects of FTAs as is commonly done in computable general equilibrium modeling exercises. The notable expansion of automotive imports to Australia from Thailand at the expense of major traditional source countries points to the importance of taking into account the growing role of international production fragmentation and the resultant shifts in export locations in analyzing the trade flow effects of FTA.

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Table 1: Australia-Thailand free-trade agreement: Average tariff and preference margins

		Australia (2006) (%)	Thailand (2009) (%)
Average MFN rate ¹ :	2004	3.9	15.0
Average TAFTA rate ¹ :	2006	1.6	6.2
Distribution of preference margin (2006)			
Preference margin (Δt) ²		Tariff lines ³ (%)	Tariff lines ³ (%)
$\Delta t = 0$		49.8	4.3
$0 < \Delta t \leq 5$		50.1	56.5
$5 < \Delta t \leq 10$		0.1	15.2
$10 < \Delta t \leq 20$		0	6.2
$20 < \Delta t \leq 30$		0	12.1
$30 < \Delta t$		0	5.7
Number of Tariff lines		5,218	5,050

Note: (1). Simple (un-weighted) average.; 2. Difference between the TAFTA rate and the MFN rate; (3) Percentage distribution of tariff lines at the 6 digit level of the Harmonized System (HS)

Source: Compiled from official tariff schedules.

Table 2: Utilization of trade preferences under TAFTA by Thai traders, 2005-2010 (%)

	2005	2006	2007	2008	2009	2010
(a) Exports to Australia						
Average utilization rate	67.1	62.8	70.8	62.5	50.3	60.2
The share of top 10 items in total preferential exports	75.7	65.0	69.1	62.3	63.7	62.4
The share of top 20 items in total preferential exports	80.9	72.5	75.9	72.0	71.5	71.6
(b) Imports from Australia						
Average utilization rate (%)	14.7	13.7	14.0	10.4	10.8	10.4
The share of top 10 items in total preferential imports	87.5	81.5	87.5	81.5	63.7	60.1
The share of top 20 items in total preferential imports	93.7	89.9	93.7	89.9	74.5	70.7

Source: Compiled from official FTA administration data provided by Bureau of Preferential Trade, Department of Foreign Trade, Ministry of Commerce., Thailand.

Table 3: Thailand: Top-10 ten products (at the 6-digit HS) exported to Australia under TAFTA preferences, 2005- 2010

HS	Description	RoO criteria ¹	Share in total exports to Australia (%)		Share in total preferential exports (%)	Preference utilization rate (%)
			2000-04	2004-2010	2005-2010	2005-2010
870421	Pick-up vehicles (Diesel Engine) with less than 5 tons	HS subheading level CTC + RVC 40%	9.8	11.9	24.3	100.0
870323	Passenger vehicles with engine less than 1,500 cc.	HS Subheading level CTC + RVC 40%	3.8	8.0	12.3	94.2
870431	Other pick-up vehicles	HS Sub-heading level CTC + RVC 40%	11.5	3.7	11.6	100.0
870322	Passenger vehicles with engine from 1,500 cc. to 2,400 cc.	HS Subheading level CTC + RVC 40%	0.0	2.1	2.8	89.0
841510	Air-conditioning systems	HS subheading level CTC	5.5	3.4	4.9	84.4
160414	Canned Tuna	HS chapter level CTC	3.2	2.0	3.3	99.1
711319	Precious metal jewelry parts	HS subheading level CTC	0.8	0.9	1.4	98.9
711311	Silver jewelry parts	HS subheading level CTC	0.4	0.7	1.2	100.0
730690	Iron pipe	HS heading level CTC	0.1	0.2	1.2	100.0
390760	Polyethylene in primary forms	HS heading level CTC + RVC 40%	0.1	0.6	0.8	96.7

Note: (1) CTC: change of tariff classification; RVC: Regional value content.

Source: Compiled from official FTA administration data provided by Bureau of Preferential Trade, Department of Foreign Trade, Ministry of Commerce, Thailand.

Table 4: Thailand: Top-10 ten products (at the 6-digit HS) imported from Australia under TAFTA preferences, 2005- 2010 (%)

HS	Description ¹	Share in total imports from Australia		Share in total preferential imports from Australia	Preference utilization rate
		2000-04	2005-2010	2005-2010	2005-2010
760110	Aluminum, not alloyed, unwrought	2.0	1.87	15.8	22.9
100190	Wheat and muslin (excl. durum wheat)	0.9	0.58	15.3	109.9
110710	Malt (excl. roasted)	0.3	0.32	9.1	85.5
760120	Unwrought aluminum alloys	1.2	0.80	5.9	22.2
260800	Zinc ores and concentrates	0.1	0.32	5.3	62.8
510121	Shorn wool, degreased, non-carbonized , neither carded nor combed	0.4	0.17	5.0	103.8
760612	Plates, sheets and strip, of non-alloy aluminum, of a thickness of > 0.2 mm	0.1	0.21	4.2	33.1
320611	Pigments and preparations based on titanium dioxide	0.4	0.18	3.6	71.3
190190	Malt extract	0.1	0.12	2.1	23.6
270112	Bituminous coal	0.1	0.76	2.1	18.7

Note: (1) RoOs for all items are based on the CTC change of tariff classification applied at the HS heading or chapter level.

Source: Compiled from official FTA administration data provided by Bureau of Preferential Trade, Department of Foreign Trade, Ministry of Commerce., Thailand.

Table 5: Australia's merchandise trade with Thailand, 2000-2010

	2000	2004	2005	2006	2007	2008	2009	2010	2000-04 ²	2005-2010 ²
Thailand (exports + imports) US\$b	2.8	5.0	6.8	7.9	10.2	13.1	12.5	15.1	3.5 (17.1)	11.0 (20.2)
Exports (US\$b)	1.1	2.3	3.1	3.2	3.7	4.5	3.3	5.2	1.5 (20.2)	3.8 (9.1)
Imports (US\$b)	1.6	2.8	3.7	4.7	6.5	8.6	9.2	9.9	2.0 (16.0)	7.1 (27.7)
Thailand's share of Australia's trade(%)	2.1	2.6	3.0	3.1	3.5	3.5	4.0	3.8	2.3	3.5
Exports	1.8	2.6	3.0	2.6	2.6	2.4	2.2	2.5	2.1	2.6
Imports	2.4	2.7	3.1	3.6	4.2	4.5	5.8	5.2	2.5	4.4
Trade balance ¹ (%)	-44.0	-23.2	-16.9	-46.5	-78.6	-91.7	-177.3	-88.3	-34.0	-83.2
Australia's share in Thailand's trade (%)	2.1	2.4	2.8	3.0	3.3	3.7	4.3	4.0	2.3	3.5
Export	2.4	2.6	2.9	3.3	3.7	4.5	5.6	4.8	2.4	4.1
Imports	1.9	2.3	2.7	2.7	2.7	2.9	2.8	3.2	2.2	2.9

Note: (1) Trade balance as a percentage of exports

(2) Annual average growth rates are given in brackets.

Source: Compiled from UN Comtrade database.

Table 6: Australian imports from Thailand, 2000-2010¹ (%)

SITC code	Products	Composition		Share in total Australian imports		Growth		Share in export increment
		2000-04	2005-10	2000-04	2005-10	2000-04	2005-10	
	PRMAR PRODUCTS	15.6	11.8	2.7	2.3	6.6	85.6	7.5
0 and 1	Food, beverages and tobacco	11.1	8.1	7.6	8.0	2.8	75.0	6.6
2	Crude material except fuel	1.1	0.4	2.1	1.4	5.4	-19.2	-0.2
3	Oil and gas	3.3	3.2	0.9	0.9	93.7	213.1	0.9
4	Animal and vegetable oils, fats and waxes	0.1	0.1	0.5	1.5	4.3	337.9	0.2
	MANUFACTURED GOODS	83.5	85.6	2.6	4.4	18.0	119.9	93.0
5	Chemicals and related products	4.6	4.0	1.1	1.4	18.9	96.6	4.9
6	Manufactured goods classified by material (excl SITC 65)	10.6	8.1	2.7	3.2	16.3	73.1	7.2
65	Textile yarn and fabrics	1.8	1.0	2.6	3.1	3.2	30.5	0.5
7	Machinery and transport equipment	56.9	65.4	3.2	6.2	20.1	138.5	73.7
74	General industrial machinery	11.9	11.8	5.6	8.6	24.7	247.2	11.0
75	Office machines and automatic data processing machines	4.2	3.4	1.9	2.7	11.5	87.5	2.7
76	Telecommunication and sound recording equipment	6.5	3.1	2.8	2.3	18.3	18.3	1.3
77	electrical machinery	3.4	4.5	1.7	3.6	22.7	164.2	5.5
78	Road vehicles (including parts and components)	29.4	40.9	5.8	13.2	21.0	164.1	52.0
79	Other transport equipment	0.0	0.1	0.0	0.1	175.8	195.9	0.0
8	Miscellaneous manufactured articles	9.5	7.0	1.7	2.1	15.3	77.6	6.6
84	Apparel	1.5	0.8	1.5	1.3	15.6	32.8	0.4
9	Commodities and transactions not classified elsewhere	7.0	5.4	2.2	2.8	14.5	83.2	5.1
	TOTAL	100	100.0	2.6	3.9	15.5	115.2	100.0

Note: 1. Gross trade flows at current US\$.

Source: Compiled from UN Comtrade database.

Table 7: Australia's exports to Thailand, 2000-2010¹ (%)

SITC code	Products	Composition		Share in total Australian exports		Growth		Share in export increment
		2000-04	2005-10	2000-04	2005-10	2000-04	2005-10	2004-2010
	PRMAR PRODUCTS	32.9	37.5	1.4	1.4	20.3	86.9	57.4
0 and 1	Food, beverages and tobacco	9.1	7.2	0.9	1.7	1.9	103.6	8.1
2	Crude material except fuel	15.2	7.2	1.7	0.7	8.0	-5.8	1.7
3	Oil and gas	8.4	19.9	3.9	5.0	134.4	139.1	43.0
4	Animal and vegetable oils, fats and waxes	0.1	0.1	0.4	0.5	2.4	88.4	0.1
	MANUFACTURING	42.5	36.1	3.5	4.1	17.6	42.5	13.0
5	Chemicals and related products	9.0	6.6	4.7	4.1	19.9	36.8	3.8
6	Manufactured goods classified by material (excl SITC 65)	23.6	23.9	5.7	7.3	19.9	63.8	7.4
65	Textile yarn, fabrics (SITC 65)	0.4	0.3	1.3	4.2	0.8	172.5	0.2
7	Machinery and transport equipment	6.8	4.3	1.6	1.5	16.8	6.8	1.3
74	General industrial machinery	1.4	1.2	2.5	3.4	16.2	82.7	0.9
75	Office machines and automatic data processing machines	0.4	0.1	0.5	0.5	-9.3	37.5	0.0
76	Telecommunication and sound recording equipment	0.8	0.2	0.7	0.9	18.0	73.5	0.2
77	electrical machinery	1.2	0.6	3.5	1.6	59.3	-33.2	-0.6
78	Road vehicles (including parts and components)	1.1	0.4	0.5	0.6	-0.8	-16.1	-0.1
79	Other transport equipment	0.1	0.1	0.3	0.4	27.8	67.2	0.1
8	Miscellaneous manufactured articles	2.6	1.0	1.3	1.0	10.6	10.9	0.2
84	Apparel	0.1	0.0	0.7	0.6	25.5	-55.1	0.0
9	Commodities and transactions not classified elsewhere ²	14.1	22.9	3.9	4.9	67.0	186.7	35.5
	TOTAL	100.0	100.0	2.6	2.5	22.5	61.9	100.0

Note:

1. Gross trade flows at current US\$.

2. Non-monetary gold (including gold plated with platinum) account for over 90% of this commodity category.

Source: Compiled from UN Comtrade database

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