

## ADB Working Paper Series on Regional Economic Integration



### ASEAN–China Free Trade Area and the Competitiveness of Local Industries: A Case Study of Major Industries in the Lao People’s Democratic Republic

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Leebeer Leebouapao, Sthabandith Insisienmay, and Vanthana Nolintha  
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## Abstract

This paper provides an evaluation of the impact of the ASEAN–China Free Trade Agreement (ACFTA) on industries in the Lao People’s Democratic Republic (Lao PDR).<sup>1</sup> In general, the paper finds that price competitiveness in the three industries under review falls substantially if tariffs are completely removed. However, the degree of impact varies substantially across industries. In the wood processing and cement industries, of which the latter benefits from import substitution policies, competitiveness based on both price and product quality will be affected by the removal of tariffs. Ensuring product quality in the face of increased competition from neighboring countries will be crucial for both industries in order to maintain domestic market share and expand into ASEAN and People’s Republic of China (PRC) markets. For a foreign direct investment (FDI)-led industry such as motorcycle assembly, the concern over price competitiveness seems to be less significant. However, strengthening product quality and brand reputation should be high on the agenda of Lao People’s Democratic Republic motorcycle assemblers as they seek to penetrate the neighboring Thai market. This paper concludes by recommending a package of industry-specific policy interventions to prepare Lao People’s Democratic Republic industries for increased competition in domestic markets and possible expansion into the more competitive regional markets of ASEAN and the People’s Republic of China.

*Keywords:* ACFTA, FTA, Laos, Lao People’s Democratic Republic, ASEAN, People’s Republic of China, Free Trade Area

*JEL Classification:* F15

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<sup>1</sup> ASEAN = Association of Southeast Asian Nations

## 1. Introduction

Trade liberalization has been pursued by the governments of both developed and developing countries for many years. The motives for liberalization vary from one country to another. In general, trade liberalization is driven by preferential trade agreements (PTAs), including the establishment of free trade areas (FTAs) and multilateral trade agreements (MTAs) such as those under the World Trade Organization (WTO). When countries establish an FTA, the tariffs applied to goods coming from member countries are lower than those applied to non-members (Krugman and Obstfeld 2003). With FTAs, countries can accelerate their economic integration by forming strategic and preferential relationships among a smaller group of countries to permit deeper market access, give an edge over rivals in penetrating export markets, and allow faster liberalization in new and sensitive areas.

Following the usual patterns of trade liberalization, the Lao People's Democratic Republic (Lao PDR) first opened its doors to the world in 1986 and has since undertaken major economic reforms, including trade liberalization, simplification of tariffs, and elimination of most quantitative restrictions. The Lao People's Democratic Republic has also been very active in sub-regional and regional integration programs.<sup>2</sup> The Lao People's Democratic Republic was accepted as a full member of ASEAN in 1997 and joined the ASEAN Free Trade Area (AFTA) in 1998, under which all members have agreed to gradually remove tariffs under the Common Effective Preferential Tariff (CEPT) scheme, which includes a timeframe extending through 2015. The Lao People's Democratic Republic's external trade has increased since joining ASEAN, reaching 70% of gross domestic product (GDP) in 2008. This increase has been led by mineral and hydropower exports. Lao People's Democratic Republic–People's Republic of China bilateral trade has increased significantly from 3.7% of the smaller economy's GDP in 2001 to 7.6% in 2008. The share of these bilateral trade flows to Lao People's Democratic Republic total trade also increased from about 6% to 10% over the same period. In addition, foreign direct investment (FDI) approvals increased rapidly from a marginal level of US\$300 million before joining ASEAN to over US\$4 billion in 2009.

At the 10th ASEAN Summit in Vientiane in November 2004, economic ministers from ASEAN member countries and the People's Republic of China signed the Agreement on Trade in Goods (TIG) of the Framework Agreement on the Comprehensive Economic Cooperation between ASEAN and the People's Republic of China. A key feature of the TIG is the non-maintenance of quantitative restrictions and elimination of non-tariff barriers. The Lao People's Democratic Republic, as an ASEAN member, is subject to commitments made under the ACFTA.

Effective 1 January 2010, the ACFTA called for the elimination of all tariffs on 6,682 tariff posts in 17 sectors: 12 in manufacturing and 5 in the agriculture, mining, and maritime sectors. The ACFTA envisages all tariff barriers being lowered and eliminated by dividing them into either a Normal Track or a Sensitive Track. The Normal Track is

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<sup>2</sup> Some of the main cooperation frameworks include ASEAN, Cambodia–Lao PDR–Viet Nam Development Triangle, Greater Mekong Subregion (GMS), and Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy (ACMECS).

further divided into two models (Normal Track I and Normal Track II), while Sensitive Track is also divided into two models (Sensitive List and High Sensitive List). In principle, the Lao People's Democratic Republic and other ASEAN members are subject to all commitments made under the ACFTA. For the Normal Track, the original six members of ASEAN (Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Brunei Darussalam), known as ASEAN-6, and the People's Republic of China were to gradually reduce tariff rates to between zero and 5% by 2005. The newer ASEAN members (Cambodia, the Lao People's Democratic Republic, Myanmar, and Viet Nam) will reduce Normal Track tariff rates to between zero and 5% by 2010, and complete their removal by 2015. For the Sensitive Track, ASEAN-6 and the People's Republic of China will reduce tariff rates to 20% by 2012 and to between zero and 5% by 2018. The Sensitive Track schedule for the Lao People's Democratic Republic and other newer ASEAN members designates 2015 and 2020 as targets for tariff reduction to rates of 20% and between zero and 5%, respectively.

At the macro level, the ACFTA is likely to bring both opportunities and challenges to Lao People's Democratic Republic's industries. The government of Lao People's Democratic Republic expects the country to benefit from the ACFTA mainly in terms of the expansion of export markets. The combined ASEAN–People's Republic of China market is already the largest market for Lao People's Democratic Republic exports. However, an expanded market size alone is not sufficient and thus Lao People's Democratic Republic exporters need to improve their competitiveness abroad while preparing for increased competition in domestic markets by maximizing the expected benefits from the ACFTA.

The objective of this paper is to analyze the impact of the ACFTA on Lao People's Democratic Republic industries. Section 2 discusses theoretical debates and presents the analytical framework for the impact evaluation. Impacts at the industry level, based on three case studies, are discussed in Section 3. The last section concludes the paper and provides policy recommendations.

## **2. Theoretical Debates and Analytical Framework**

The question of how the formation of PTAs affects domestic industries has long been an important, yet inconclusive, one for trade and political economy theorists. Viner (1950; cited in Ornelas 2005), a pioneer of the static analysis of PTAs, argued that a PTA could have negative effects on both the member countries and world welfare. Viner explains that the effects of a PTA depend on whether it leads to trade diversion or trade creation. Moreover, Krugman (1989) developed a model to analyze regional trade agreements (RTAs) at a time when there was concern that the rapid spread of RTAs could hinder multilateral trade liberalization and reduce global welfare. Krugman concluded that RTAs consolidate the world into many small trading blocs and reduces welfare even though each bloc aims to maximize the welfare of its members. These concepts have become important tools for many subsequent studies on the costs and benefits of forming RTAs.

Another group of economists in the 1960s and 1970s built upon Vinerian theory to attest to the importance of PTAs and contribute to the understanding of their formation. Kemp



and Wan (1976; cited in Richardson 1995) argued that it is possible to formulate a customs union that leads to improvements in the welfare of member countries while leaving the welfare of non-members unchanged. Similarly, Bhagwati (1968; cited in Bhagwati and Panagariya 1996) asserted that a customs union could be developed to minimize the costs of industrialization. Later, Krishna and Bhagwati (1997) showed that this proposition is a modification of the theory of Kemp and Wan (1976). Decades later, Krishna (1995; cited in Bhagwati and Panagariya 1996) used political economy theory to examine why forming a PTA has become popular and concluded that trade diversion is the main motive for their formation.

In addition to the debate on the formation of PTAs in general, there has been extensive research and debate *ex post* and *ex ante* surrounding the formation of specific new trading blocs such as the ACFTA. Tang and Wang (2006) used a gravity model to test the effectiveness of the AFCTA in increasing trade in goods.<sup>3</sup> First, the authors applied an Export Similarity Index to assess the People's Republic of China's export potential within ASEAN-6 markets by comparing the People's Republic of China with other major trade partners of ASEAN-6. The authors set up the gravity model to provide a benchmark for bilateral trade flows by relating them to GDP, distance, language, and other characteristics of each trading partner. After controlling for size and distance effects, the ACFTA was found to have a statistically significant effect on bilateral trade volumes.

Park, Park, and Estrada (2008) constructed a computer general equilibrium (CGE) model to quantify the potential welfare and output gains of the ACFTA on the region and on individual countries. The study finds that in general the ACFTA will lead to positive net trade creation and higher output and welfare for the region. However, countries with higher levels of pre-existing regional integration and more advanced economies are likely to gain more. In addition, the study finds that the ACFTA is expected to increase trade among member countries, but divert trade away from non-member countries. The model predicted a larger increase in exports from ASEAN to the People's Republic of China than in the opposite direction. For instance, exports from the CLMV countries (Cambodia, the Lao People's Democratic Republic, Myanmar, and Viet Nam) are expected to increase by more than 50%, while imports from the People's Republic of China will fall by 12%. This is contrary to the usual perception that the ACFTA could lead to a flood of People's Republic of China exports to ASEAN members.

However, there are still some concerns over the potential negative effects of the AFCTA. Gradziuk (2010), who supported the formation of the AFCTA, argued that the agreement could have sizable effects on the newer ASEAN members. The surge of imports of cheap and low-value-added manufacturing products from the People's Republic of China could adversely affect the domestic industries of countries that are still relying on low-value-added and labor-intensive industries. Similarly, Thangavelu (2010) asserted that the short-run displacement effects of the AFCTA could be severe for small and medium-sized enterprises (SMEs) in ASEAN's most advanced economies, domestic industries in emerging economies such as Indonesia and the Philippines, and the CLMV economies

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<sup>3</sup> Robert (2004) also uses the gravity model to explain trade flows within the ACFTA and argues that the trading partners are likely to gain from this agreement by 2010.

that are dominated by labor-intensive industries. The CGE model of Park, Park, and Estrada (2008) discussed above also highlighted the challenges for less developed member countries of the ACFTA.

In considering data limitations, the timeframe of Lao People's Democratic Republic commitments under the ACFTA, and Lao People's Democratic Republic economic characteristics, this paper will evaluate the potential impacts of the ACFTA on the Lao People's Democratic Republic economy by conducting case studies on three affected industries.<sup>4</sup> Based on trade patterns between the Lao People's Democratic Republic and ASEAN members, and between the Lao People's Democratic Republic and the People's Republic of China, the authors decided to examine the impacts of the ACFTA on the competitiveness of the motorcycle assembly, cement, and wood processing industries. These three industries represent FDI-led, import-substituted, and domestic industries, respectively. The simulation of the price competitiveness of all three local industries after 2015 is the common evaluation technique. The motorcycle assembly and wood processing industries were also subjected to Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis to provide qualitative insights on their competitiveness under the ACFTA. Before moving to the evaluation of the ACFTA's impacts at the industry-specific level, the following section will present a broad assessment of the Lao People's Democratic Republic's trade performance as it might be affected by the ACFTA.

### **3. Potential Impacts of the ACFTA on Selected Industries**

It is too early to evaluate the actual impact of the ACFTA at the industry level since its full implementation is yet to come. Therefore, the paper will evaluate the impacts of the ACFTA by examining case studies of three industries that represent FDI-led (motorcycle assembly), import substitution (cement), and domestic (wood processing) industries.

#### **3.1 Motorcycle Assembly**

##### **3.1.1 Industry Overview**

The development of the Lao People's Democratic Republic motorcycle assembly industry was initiated in the early 1990s. The two premier assemblers are Honda and Suzuki. In 2003, a number of Chinese companies and Kolao, a giant company based in the Republic of Korea, also began assembling motorcycles in the Lao People's Democratic Republic. In addition to these large motorcycle assemblers, there are dozens of smaller Chinese motorcycle assembly companies across the country providing a variety of motorcycles to meet domestic demand, often by assembling motorcycles that imitate popular Japanese models.

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<sup>4</sup> Plummer, Cheong, and Hamanaka (2010) comprehensively document all methodologies for the economic impact assessment of FTAs. The ex ante methods include the use of trade indicators, estimation of potential markets in individual markets, and development of the CGE model. The ex post method includes FTA preference indicators, FTA trade and welfare indicators, and the gravity model.

Initially, Honda and Suzuki assembled motorcycles under the Complete Knock Down (CKD) system before Honda shifted its production to the Incomplete Knock Down (IKD) system in response to competition from newly arrived Chinese and Korean assemblers. At present, Honda, Kolao, and most Chinese assemblers operate under the IKD system, while Suzuki and a smaller number of Chinese assemblers have stuck with the CKD system. The assemblers' local content is about 40% for Honda, 20% for Kolao, and 60% for most Chinese firms. However, the gradual increase of domestic demand and the shift of production systems have led to a declining trend in imported motorcycles and a substantial increasing trend in imported parts. Motorcycles with engine displacements of 110 cubic centimeters (cc) and 115 cc comprise the majority of motorcycles sold in the Lao People's Democratic Republic, with a smaller amount of 125 cc models being sold.

### **3.1.2 The ACFTA's Impacts on the Industry**

The Lao People's Democratic Republic motorcycle assembly industry is relatively small and young compared with the same industries in other ASEAN countries such as Thailand, Malaysia, Indonesia, and even Viet Nam. When tariffs and non-tariff barriers are removed across ASEAN and the People's Republic of China, the Lao People's Democratic Republic motorcycle industry will be left competing against imports in domestic markets while enjoying expanded opportunities in overseas markets. To measure the competitiveness of the industry, this study compared current and future price differences between motorcycles assembled in the Lao People's Democratic Republic and imported motorcycles.

The simulations of price changes under the ACFTA employ two scenarios. The first scenario represents tariff changes according to the ACFTA scheme, which would lead to a reduction in the price of imported motorcycles (Table 1). The second scenario attempts to examine the competitiveness of Lao People's Democratic Republic motorcycles in a third country (Table 2). In this scenario, Lao People's Democratic Republic motorcycle assemblers try to penetrate a major neighboring motorcycle market like Thailand's.

With regard to the first scenario, our analysis shows that the price competitiveness of motorcycle assemblers varies substantially. Kolao motorcycles, Chinese motorcycles assembled in Lao People's Democratic Republic, and locally assembled Suzuki motorcycles remain competitive in domestic markets after the ACFTA has been fully implemented. On the other hand, locally assembled Honda motorcycles become uncompetitive. However, the territorial restrictions of their parent companies—such as a ban on sales in foreign markets in which Honda manufactures motorcycles locally—would protect them for a number of years. Finally, 125 cc motorcycles seem to be relatively more competitive than 110 cc and 115 cc models.

Regarding competition in a third market such as Thailand, there is room for Kolao and Chinese motorcycles assembled in the Lao People's Democratic Republic to enter the market. However, the price gap between Lao People's Democratic Republic and Thai motorcycles is rather small, while the (real and perceived) gap in quality tends to be quite high. Only after these brands have established sound reputations, improved their research and development (R&D) capacities, and invested more in product development than in product imitation will such price differences help them gain market share in

Thailand. Therefore, the infant motorcycle industry in the Lao People's Democratic Republic needs to be developed through policies that enhance labor productivity and provide clear incentives for local industries to invest in R&D and train their workforces; the enforcement of standards for quality, safety, environment, and intellectual property rights; and by raising awareness of commitments under the ACFTA and their potential impacts on the industry. Moreover, the industry should be forward-looking to exploit openings in potential markets such as Thailand, Viet Nam, and the People's Republic of China. Procedures and costs related to the import–export process need to be reduced and the Lao Automotive Association strengthened.

**Table 1: Prices of Lao People's Democratic Republic Motorcycles in the Lao People's Democratic Republic and Thai Markets (110 cc, Thai baht)**

Manufacturer	Brand	Engine Displacement (cc)	Local Assembly or Imported	Price in Lao People's Democratic Republic Market			Price in Thai Market		
				2010	2015	2020	2010	2012	2018
Honda	Wave 110	110	Local	65,500	65,500	65,500	120,620	94,420	84,595
	Click	110	Thai	80,000	70,940	64,040	44,000	44,000	44,000
	Scoopy-i	110	Thai	77,000	68,322	61,677	44,300	44,300	44,300
	Wave 110i	110	Thai	65,500	58,000	52,403	36,000	36,000	36,000
	Air Blade i	110	Thai	92,320	81,720	73,770	53,000	53,000	53,000
	Air Blade i	110	Thai	97,540	86,340	77,940	56,000	56,000	56,000
Yamaha	Fino	115	Thai	72,000	68,630	61,955	44,500	44,500	44,500
	Mio	115	Thai	77,000	64,010	57,785	41,500	41,500	41,500
	Nouvo MX 2009	115	Thai	85,360	75,560	68,210	49,000	49,000	49,000
Suzuki	Smash Revolution	110	Thai	63,610	56,310	50,835	36,500	36,500	36,500
	Smash Junior	110	Local	42,000*	42,000*	42,000*	77,380	60,580	54,280
	Smash Revolution	110	Local	52,000*	52,000*	52,000	95,780	74,980	67,180
	Smash Unlimited	110	Local	44,500*	44,500*	44,500*	81,980	64,180	57,505
Kolao	Sonata	110	Local	19,900*	19,900*	19,900*	36,716*	28,756*	25,771*
	My Love	110	Local	27,900*	27,900*	27,900*	51,436	40,276*	36,091*

cc = cubic centimeters.

Notes:

1. Prices of imported motorcycles are estimated based on current retail prices in Thailand, duty tax under the ACFTA, Lao People's Democratic Republic domestic excise tax of 20%, Lao People's Democratic Republic domestic value-added tax (VAT) of 10%, transportation costs of THB100 per unit, and administration cost of 4%.

2. The prices of locally assembled motorcycles and imported motorcycles are the retail prices at motorcycle shops in Vientiane. Prices of local motorcycles are assumed to remain constant from 2010 to 2020.

3. \* indicates that the product is price competitive with the nearest competitor.

Source: National Economic Research Institute (NERI) interviews with motorcycle shop owners in Vientiane in 2010, and <http://www.motorcycle.in.th/>

**Table 2: Prices of Lao People's Democratic Republic Motorcycles in the Lao People's Democratic Republic and Thai Markets (125 cc, Thai baht)**

Motorcycle	Brand	Engine Displacement (cc)	Local Assembly or Imported	Price in Lao People's Democratic Republic Market			Price in Thai Market		
				2010	2015	2020	2010	2012	2018
Honda	Wave 125	125	Local	75,000	75,000	75,000	138,100	108,100	96,850
	Dream 125	125	Local	63,900*	63,900	63,900	117,676	92,116	82,531
	Wave 125	125	Thai	74,920	66,320	59,870	43,000	43,000	43,000
	Wave 125	125	Thai	85,360	75,560	68,210	49,000	49,000	49,000
Yamaha	Mio GT 125	125	Thai	76,660	67,860	61,260	n.a.	n.a.	n.a.
	Nouvo	115	Thai	85,360	75,560	68,210	n.a.	n.a.	n.a.
	MX 2009								
Suzuki	Jelato 3-Star	125	Thai	79,966	70,786	63,901	44,000	44,000	44,000
	Step New Color (UY125S-G)	125	Thai	71,440	63,240	57,090	45,900	45,900	45,900
	Smash Step Automatic	125	Local	54,000*	54,000*	54,000*	41,000	41,000	41,000
Koloa	My Love	125	Local	29,700*	29,700*	29,700*	99,460	77,860	69,760
	Veracruz	125	Local	32,700*	32,700*	32,700*	51,778	45,838	41,383*
	Sorento	125	Local	28,900*	28,900*	28,900*	56,998	50,458	45,553
Chinese	Fekon	125	Local	22,500*	22,500*	22,500*	50,386	44,606	40,271*
	Longsin	125	Local	21,500*	21,500*	21,500*	41,500	32,500*	29,125*
	Fino Haobo	125	Local	37,500*	37,500*	37,500*	39,660*	31,060*	27,835*
	Hongxin	125	Local	19,000*	19,000*	19,000*	69,100	54,100	48,475
	Dafeng	125	Local	26,000*	26,000*	26,000*	33,160*	29,360*	26,510*
	Shinery	125	Local	23,000*	23,000*	23,000*	45,340	40,140*	36,240*

cc = cubic centimeters; n.a. = not applicable.

Notes:

1. Prices of Lao People's Democratic Republic motorcycles exported to Thailand are based on the current retail price in Vientiane, tariff rates under the ACFTA, Thai excise and multiple taxes of 13%, value-added tax (VAT) in Thailand of 7%, transportation costs of THB100 per unit, and administration cost 4%.

2. The prices of motorcycle in Thailand are the retail prices and are assumed to be constant from 2010 to 2018.

3. \* indicates that the product is price competitive with the nearest competitor.

Source: National Economic Research Institute (NERI) interviews with motorcycle shop owners in Vientiane in 2010, and <http://www.motorcycle.in.th/>

## 3.2 Wood Processing

### 3.2.1 Industry Overview

The Lao People's Democratic Republic wood processing industry is at an early stage of development. In 2009, there were 1,089 furniture factories in total: 621 were medium- and large-scale factories, and 468 were micro-scale, which are family-owned cottage industries that serve the domestic market. Of the total, there were 251 factories with both primary and secondary wood processing operations. Feeding into the production process, raw materials management and allocation are based on a government quota system. Factories' current raw log quota allocation for production is insufficient to meet actual demand. In terms of labor, the industry is characterized by low-skilled workers and seasonal shortages of labor, particularly during the rice planting and harvesting seasons when the workforce can be reduced by as much as 50%. Product design is rather traditional and characterized by bulky and material-consuming products.

Lao People's Democratic Republic export and import markets for wooden products are determined largely by geographic and logistical conditions. Wood product exports from northern Lao People's Democratic Republic are mainly destined for Chinese markets, while those from central and southern Lao People's Democratic Republic are more likely to go to fellow ASEAN countries. Imported wood products mainly come from Thailand, the People's Republic of China, and Viet Nam.

The export share of high-value-added wooden products, such as wooden furniture (HS 9403), remains relatively low compared with other exported wood products, while the import share of wooden furniture is comparatively higher than other imported wooden products. However, due to the government's policy banning the export of raw logs and primary wood processing products, exports of high-value-added products like wooden furniture are gradually increasing, with the major importers being the People's Republic of China, Thailand, and Viet Nam (Table 3).

**Table 3: Lao People's Democratic Republic Exports and Imports of Wood Products, 2001–2008 (% of total)**

Item	2001	2002	2003	2004	2005	2006	2007	2008
Total Lao People's Democratic Republic exports ('000 \$)	316,858	325,408	352,430	426,447	593,707	1,069,817	1,140,705	1,052,220
Exports of wood and wood products (HS 44)	37.40	38.92	42.74	38.77	28.71	18.72	18.02	24.17
Exports of wooden furniture (HS 940330_60)	0.01	0.04	0.04	0.05	0.11	0.09	0.09	0.14
Total Lao People's Democratic Republic imports ('000 \$)	635,526	629,621	758,516	960,635	1,145,979	1,471,327	1,870,155	2,279,254

**Table 3: Continued**

Item	2001	2002	2003	2004	2005	2006	2007	2008
Imports of wood and wood products (HS 44)	0.09	0.06	0.08	0.22	0.09	0.07	0.14	0.11
Imports of wooden furniture (HS 940330_60)	0.04	0.02	0.03	0.07	0.04	0.04	0.05	0.04

Source: International Trade Center ([www.trademap.org](http://www.trademap.org)).

### 3.2.2 The ACFTA's Impacts on the Industry

The Lao People's Democratic Republic's wood processing industry presently enjoys government protections through import tariffs ranging from the lowest rate of 8% for fuel wood, wood in chips or particles, sawdust, and wood waste and scrap (HS 4401) to the highest rate of 25% for wooden furniture (HS 9403).<sup>5</sup> As a result, the industry's competitiveness, particularly in terms of prices, is impacted. Wood products are classified in the Normal List I of goods under the ACFTA scheme. By 2016, the tariffs on these goods will be eliminated. The commitment to eliminate these tariffs may put some pressure on the domestic wood processing industry since the Lao People's Democratic Republic still imports a relatively large amount of high-value-added wood products, particularly from the People's Republic of China, which ranks second among global exporters of high-value-added wood products and the fourth among exporters of wood furniture (UN COMTRADE 2001).

For an evaluation of the ACFTA's impacts on the wood product industry, Table 4 compares the prices of domestic and imported furniture from the People's Republic of China before and after 2015. Due to current tariff restrictions, the Lao People's Democratic Republic's furniture industry can compete with imported furniture fairly well. For example, in 2009, the retail price of a bed made of teak wood was LAK4,200,000 compared with LAK5,095,000 for a similar bed from the People's Republic of China. However, when the ACFTA's tariff reductions are fully implemented, the price competitiveness of Lao People's Democratic Republic furniture will change significantly as furniture imported from the People's Republic of China will be less expensive than domestically produced furniture.

More than 400 small furniture factories serving the domestic market will soon face increased competition from firms in other ASEAN countries and the People's Republic of China that are known for having well-designed, higher-quality furniture. In general, the demand for furniture is unlikely to be determined by prices, but rather by product design, customer satisfaction, and personal tastes. Laotians seem to prefer furniture made of hard wood. This shields a particular segment of the Lao People's Democratic Republic furniture market from lower-priced imported products that are made of non-hard wood. However, imported products cover a wider range of product design and are of better

<sup>5</sup> Between these low and high tariff rates, the rate is 15% for fiberboard of wood or other ligneous materials (HS 4411); 15% for wooden frames for paintings, photographs, mirrors, and similar objects (HS 4414); 20% for plywood, veneered panels, and similar laminated wood (HS 4412); and 20% for tableware and kitchenware (HS 4419).

quality, making possible changes in the preferences of Laotian consumers. From interviews with the owners and managers of many small furniture factories, it was learned that sale volumes are already decreasing due to more imported furniture, particularly from the People's Republic of China and Thailand, even though the prices of imports are higher than those for domestic products. Therefore, under the ACFTA scheme, small domestic furniture factories will soon face the challenge of price competition in addition to competition with respect to quality and design.

**Table 4: Prices of Domestic and Imported Furniture in Lao People's Democratic Republic, 2009 and 2015 (LAK)**

Item	2009 Prices with Imported Furniture Subject to a 40% Tariff Rate	2015 Prices with Imported Furniture Not Subject to a Tariff under the ACFTA Scheme	Is the Furniture Price Competitive?	
			2009	2015
Teak bed (Lao People's Democratic Republic)	4,200,000	4,200,000	Yes	Yes*
Bed (People's Republic of China)	5,095,000	3,057,000	No	Yes
Round table with 4 seats (Lao People's Democratic Republic)	3,000,000	3,000,000	Yes	No
Round table with 4 seats (People's Republic of China)	3,035,000	1,821,000	Yes	Yes

ACFTA = Association of Southeast Asian Nations (ASEAN)–China Free Trade Agreement.

Notes:

1. Expected prices are based on current market prices and the tariff reduction schedule.
2. Conclusions on price competitiveness in 2009 and 2015 compare the price of Lao People's Democratic Republic furniture with comparable imports.
3. \* denotes a weak conclusion.
4. This comparison only provides an approximation of price differentials and cannot account for potential consumer bias in terms of materials used to make furniture. Imported furniture products, in general, are made from non-hard wood and other non-wood materials, and are segmented to mass market demand. On the other hand, Lao People's Democratic Republic furniture products are mostly made from hard wood and target high-end markets.

Source: Authors' estimates based on field survey.

Table 5 shows a SWOT analysis for the Lao People's Democratic Republic wood processing industry based on interviews with wood processing companies. Although the Lao People's Democratic Republic benefits from strengths such as natural resource endowment (forests) and low labor costs, these strengths are not sustainable in the long-term. With regard to opportunities, the market for wood products and furniture is expected to grow; the ASEAN and People's Republic of China markets are already open to Lao People's Democratic Republic exports of wooden furniture. Weaknesses and threats exist in terms of quality, design, and other fundamental problems within the Lao People's Democratic Republic industry itself.



**Table 5: Lao People's Democratic Republic Wood Product Industry  
SWOT Analysis**

<b><u>Strengths</u></b>	<b><u>Weaknesses</u></b>
<i>Business environment:</i> higher forest coverage than in neighboring countries.  <i>Production:</i> low labor costs.	<i>Production:</i> low product quality, unattractive product design, especially for European customers; low labor productivity; low management skills; high level of waste; huge volumes of valuable raw materials not utilized; lack of working capital; old machinery and little reinvestment.  <i>Business environment:</i> high electricity costs; high transport costs; lack of skilled workers; logging under government direction (e.g., quotas, state-owned companies).
<b><u>Opportunities</u></b>	<b><u>Threats</u></b>
<i>Production:</i> unused capacity in saw mills; pulp and paper industry to expand; development of big plantations.  <i>Demand:</i> increasing domestic demand for construction products; international niche markets such as eucalyptus wood; domestic and international tourism industry (hotels, resorts); benchmarking and best practices from major competitors (Philippines, Viet Nam).	Increasing labor costs.  New competitors (e.g., the People's Republic of China and Thailand).  Deforestation for agricultural use due to increasing population.

Source: Authors' compilation.

### 3.3 Cement Industry

#### 3.3.1 Industry Overview

The Lao People's Democratic Republic cement industry has been gradually developing since the 1990s to the point where it can nearly meet domestic demand. At the same time, the demand for cement in Lao People's Democratic Republic has increased substantially since the 1990s and might even double from its current level by 2015. On the supply side, the industry is able to respond to almost 70% of total domestic demand and is expected to meet an increased share of domestic demand by 2015 after the construction of several new cement plants.

The Lao People's Democratic Republic cement industry produces two types of cement and has gradually won the trust of local consumers. The distribution of cement is concentrated in only a few provinces located in close proximity to the plants. Due to domestic transportation constraints, areas located far from the plants rely on imported cement from neighboring countries, especially Thailand and to a lesser extent Viet Nam and the People's Republic of China. This means that Lao People's Democratic Republic cement is able to compete with imported cement only in areas where domestic infrastructure is well developed such as in the central region and its surroundings. This will be one of the key challenges facing the cement industry under the ACFTA scheme.

The Lao People's Democratic Republic cement industry enjoys protections from the government through tariffs and, more importantly, quantitative restrictions. Table 6 shows the importance of the quantitative restrictions and how these will continue to play an important role in protecting the Lao People's Democratic Republic cement industry until the quota on cement is completely eliminated under the ACFTA.

**Table 6: Lao People's Democratic Republic Cement Production and Imported Cement, 2002–2009 (tons)**

Item	HS 252329 (Portland Cement)							
	2002	2003	2004	2005	2006	2007	2008	2009
Total Production	238,453	324,707	331,868	467,387	563,599	788,448	889,025	1,156,000
Total Imports	277,775	225,042	249,826	219,698	378,261	258,739	378,865	395,377

Source: Production data is from the Lao People's Democratic Republic Cement Industry Group. Import data taken from [www.trademap.org](http://www.trademap.org)

### 3.3.2 The ACFTA's Impacts on the Industry

ACFTA commitments as they apply to the Lao People's Democratic Republic cement industry include both reductions in tariffs and the removal of quantitative restrictions. Cement falls within Normal Track I, under which the tariff has to be completely removed within 5 years. Currently, the tariff rate on the types of imported cement that are also produced domestically (HS 252329) is 8%, which is a recent reduction from the longstanding rate of 10%. In 2011, the rate was scheduled to be cut to 5% before being reduced to zero by 2015. For other types of cement that are not domestically available, such as hydraulic cement, the tariff rate will remain at 5% until 2014 before falling to zero in the following year.

The evaluation of the impacts of the ACFTA on the Lao People's Democratic Republic cement industry employs a simple comparison of prices between domestic cement and imported cement from Thailand, the People's Republic of China, and Viet Nam before and after the imposition of tariff reductions. The comparison of prices only covers cement that is available in private markets; that is, imported cement allowed by the government for large construction projects is not included. The selected areas of comparison cover the home provinces of the cement plants and provinces bordering countries that are the main exporters of cement to Lao People's Democratic Republic.

The comparison results in Table 7 show that Lao People's Democratic Republic cement can compete with imported cement on a price basis fairly well, especially in provinces in close proximity to cement plants. Specifically, the Lao People's Democratic Republic cement industry can compete with Thai cement in all major provinces, except in provinces that are far from the cement plants and closer to bordering countries. Second,

the price competitiveness of Lao People's Democratic Republic cement will fall substantially when tariffs are fully eliminated. This effect will be particularly severe in the provinces that are far removed from domestic plants. Third, Lao People's Democratic Republic cement will have difficulty competing with imports in terms of quality. While some Lao People's Democratic Republic cement products have improved in quality since the 1990s, in general the quality of domestic cement is lacking when compared to the quality of imported cement, especially with regard to cement used heavy construction.

In addition to actual differences in quality between domestic and imported cement, Lao People's Democratic Republic producers also face problems with perceptions about the low quality of their products. As price differences become less favorable to Lao People's Democratic Republic cement under the ACFTA scheme, the gap in quality perceptions will play a much stronger role in the decision-making of domestic consumers. Knowing this, it is possible that Thai cement producers will increase their prices in Lao People's Democratic Republic markets where domestic producers are located in order to seize higher profits. They might be able to do so based on the reputations of their brands; if the prices for Thai cement are not much higher than those for Lao People's Democratic Republic cement, consumers are likely to choose Thai cement based on the perception of superior quality. Finally, the expected increase in the production and capacity of Lao People's Democratic Republic cement producers could be either an opportunity to meet increased domestic demand or a challenge in terms of downward pressure on prices (and profits) from an oversupply of cement.

**Table 7: Prices of Domestic and Imported Cement by Province**  
(LAK/ton)

Location	Type of Cement	2009 Prices (imported cement subject to 8% tariff rate)	2014 Prices (imported cement subject to 5% tariff rate)	2015 Prices (imported cement not subject to a tariff rate)	Is Lao People's Democratic Republic Cement Competitive?	
					2009	2015
Vientiane	Lao P525 Red (Bull)	800,000		800,000	Yes*	No
	Lao P425 Blue (Bull)	750,000		750,000	Yes	No
	Lao P425 Green (Bull)	730,000		730,000	Yes	No
	Thai Portland (Elephant)	800,000	776,000	737,200	n.a.	n.a.
	Thai Mix	680,000	659,600	626,620	n.a.	n.a.
Khammouan	Lao P525 Red (Lion)	665,000		665,000	Yes	Yes
	Lao P425 Green (Lion)	600,000		600,000	Yes	Yes
	Lao P425 Blue (Bull)	700,000		700,000	Yes	Yes
	Thai Portland (Elephant)	810,000	785,700	746,415	n.a.	n.a.

**Table 7: Continued**

Location	Type of Cement	2009 Prices (imported cement subject to 8% tariff rate)	2014 Prices (imported cement subject to 5% tariff rate)	2015 Prices (imported cement not subject to a tariff rate)	Is Lao People's Democratic Republic Cement Competitive?	
					2009	2015
Savannakhet	Thai Mix (Tiger)	765,000	742,050	704,948	n.a.	n.a.
	Thai Mix (Bird)	735,000	712,950	677,303	n.a.	n.a.
	Thai Portland (Diamond)	800,000	776,000	737,200	n.a.	n.a.
	Lao P525 Red (Bull)	720,000		720,000	Yes	Yes
	Lao P425 Blue (Bull)	640,000		640,000	Yes	Yes
Champasak	Thai Mix <sup>#</sup> (Tiger)	787,000		724,000	n.a.	n.a.
	Lao P425 Green (Bull)	680,000		680,000	Yes	Yes*
	Lao P425 Red (Bull)	740,000		740,000	Yes*	No
	Thai Portland (Elephant)	750,000	727,500	691,125	n.a.	n.a.
	Thai Mix (Bird)	740,000	717,800	681,910	n.a.	n.a.
Luang Prabang	Thai Portland (TPI Red)	790,000	766,300	727,985	n.a.	n.a.
	Thai Mix (TPI Green)	700,000	679,000	645,000	n.a.	n.a.
	Lao P525 Red (Deer)	730,000		730,000	Yes	Yes*
	Lao P425 Green (Deer)	690,000		690,000	Yes*	No
	Lao P525 Red (Bull)	830,000		830,000	Yes	No
Oudomxay	Lao P425 Blue (Bull)	760,000		760,000	Yes	No
	Thai Portland (Elephant)	860,000	834,200	792,490	n.a.	n.a.
	Thai Portland (Red Bull)	920,000	892,400	847,780	n.a.	n.a.
	Vietnamese Portland	690,000	669,300	635,835	n.a.	n.a.
	Lao P525 Red (Bull)	910,000		910,000	Yes	No
	Lao P425 Blue (Bull)	780,000		780,000	Yes	No
	Thai Portland	980,000	950,600	903,070	n.a.	n.a.
	Chinese Portland	700,000	679,000	645,050	n.a.	n.a.

ACFTA = Association of Southeast Asian Nations (ASEAN)–China Free Trade Agreement, n.a. = not applicable.

Notes:

1. Expected prices are based on current market prices and the ACFTA tariff reduction schedule.
2. Price competitiveness in 2009 and 2015 compares the price of Lao People's Democratic Republic cement with comparable imports of similar quality.
3. \*denotes a weak conclusion.
4. Because of the lack of data, the price of Thai mix (Tiger) cement in Savannakhet is estimated to be about 3% higher than the same cement sold in Khammuane (Leebouapao 2008).

Source: Authors' estimates based on current retail price data from the Ministry of Industry and Commerce and the Cement Producers Group.

## 4. Conclusion and Policy Recommendations

In general, the evaluation of the three industries under this study shows that price competitiveness will fall substantially in all cases after tariffs have been completely removed under the ACFTA. However, the degree of impact varies substantially across industries. For domestic and import-substituted industries, such as wood products and cement, both price competitiveness and product quality will become issues when tariffs are removed. Ensuring product quality in the face of increased competition from neighboring countries will be crucial for both industries in order to maintain domestic market share and expand into ASEAN and People's Republic of China markets. For an FDI-led industry such as motorcycle assembly, the concern over price competitiveness seems to be less significant across all motorcycle brands. However, product quality and reputation will be a very important issue for Lao People's Democratic Republic motorcycle assemblers, particularly Kolao and Chinese brands, if they hope to penetrate the neighboring Thai market. The findings of these industry level case studies are complimentary to many of the conventional arguments found in the theoretical and empirical literature on the potential negative impacts of regional FTAs on domestic industries.<sup>6</sup> This paper supports the conclusion that negative adjustments are likely to be short-term in nature. Yet, the findings suggest the importance of beginning preparations to adapt to the ACFTA scheme prior to the full implementation of the agreement.

In response to these challenges, this paper proposes the following policy recommendations specific to each industry. For the wood processing industry, measures should be taken to ensure clear policies that promote higher-value-added wood processing, a fair allocation of the quota of raw logs that is consistent with factories' prior performances, and the enforcement of reforestation policy. Moreover, in order to market Lao People's Democratic Republic wood products better both domestically and internationally, there is a need to create more modern product designs—emphasizing efficient raw material use, lighter weight, and higher value-added—and incorporate international designs according to ever-changing global trends and fashions.

For the cement industry, the government should continue supporting a more favorable business environment, especially with respect to competitiveness. An assessment of domestic demand for cement and raw material availability should be conducted in order to prevent cement shortages that could lead to unnecessarily high prices. Other areas to be addressed include the improvement of infrastructure and logistics systems to reduce transportation costs, and the bolstering of the reputation of Lao People's Democratic Republic cement products. Moreover, given that future demand is promising, active investment in the cement industry should be considered in the context of economies of scale.

The infant motorcycle assembly industry needs to be supported through policies that enhance labor productivity and secure the enforcement of standards for quality and safety, and environment and intellectual property rights. Moreover, policies should facilitate potential expansion into neighboring markets in Thailand, Viet Nam, and the

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<sup>6</sup> Particularly, the findings support the arguments of Gradziuk (2010) and Park, Park, and Estrada (2008), which are discussed in length in section 2.

People's Republic of China. To do so, the government should provide more attractive incentives for local industries to invest in R&D and training for their workforces. Awareness of ACFTA commitments and their potential impact on the industry should be raised, together with a strengthening of the nation-wide motorcycle association. In addition, procedures and costs related to the import–export process need to be simplified and reduced, respectively.

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<sup>7</sup> ADB recognizes this member by the name People's Republic of China.

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## **ASEAN–China Free Trade Area and the Competitiveness of Local Industries**

A Case Study of Major Industries in the Lao People's Democratic Republic

This paper provides an assessment of the effect of the ASEAN–China Free Trade Agreement (ACFTA) on three industries—wood processing, cement, and motorcycle assembly—in the Lao People's Democratic Republic. The paper finds that the ACFTA will have sizable but varying degrees of impact on the three industries. Prices in the three industries become less competitive when tariffs are completely removed. Early preparations to adapt to the ACFTA scheme prior to the full implementation of the agreement are necessary. Improving product quality will be crucial for all of the three industries under review, while brand reputation building is especially a priority for the motorcycle assemblers.

### **About the Asian Development Bank**

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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