ASEAN–People's Republic of 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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Abstract

This paper provides an evaluation of the impact of the Association of Southeast Asian Nations (ASEAN)–People's Republic of China (PRC) Free Trade Agreement (ACFTA) on industries in the Lao People's Democratic Republic (Lao PDR). 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 cement 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 PRC markets. For an industry led by foreign direct investment, 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 PDR 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 industries in the Lao PDR for increased competition in domestic markets and possible expansion into the more competitive regional markets of ASEAN and the PRC.

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Introduction

The governments of both developed and developing countries has pursued trade liberalization 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. When countries establish an FTA, the tariffs applied to goods coming from member countries are lower than those applied to nonmembers (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 PDR has also been very active in subregional and regional integration programs.[1] The country was accepted as a full member of the Association of Southeast Asian Nations (ASEAN) in 1997 and joined the ASEAN Free Trade Area in 1998, under which all members have agreed to gradually remove tariffs under the Common Effective Preferential Tariff scheme, which includes a time frame extending through 2015. The Lao PDR'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. Bilateral trade between the Lao PDR and the People's Republic of China (PRC) has increased significantly from 3.7% of the Lao PDR economy's GDP in 2001 to 7.6% in 2008. The share of these bilateral trade flows to the Lao PDR's 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 $300 million before joining ASEAN to more than $4 billion in 2009.

At the 10th ASEAN Summit in Vientiane in November 2004, economic ministers from ASEAN member states and the PRC signed the Agreement on Trade in Goods of the Framework Agreement on Comprehensive Economic Co-operation between ASEAN and the PRC. A key feature of the Agreement on Trade in Goods is the non-maintenance of quantitative restrictions and the elimination of nontariff barriers. The Lao PDR, as a member of ASEAN, is subject to commitments made under the ASEAN–PRC Free Trade Agreement (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 the lowering and elimination of all tariff barriers by dividing them into either a Normal Track or a Sensitive Track. The Normal Track is further divided into two models (Normal Track I and Normal Track II), while the Sensitive Track is also divided into two models (Sensitive List and Highly Sensitive List). In principle, the Lao PDR and other ASEAN members are subject to all commitments made under the ACFTA. For the Normal Track, the original six members of ASEAN (Brunei Darussalam, Indonesia, Malaysia, the Philippines,

[1] Some of the main cooperation frameworks include the Association of Southeast Asian Nations (ASEAN), the Cambodia–Lao PDR–Viet Nam Development Triangle, the Greater Mekong Subregion, and the Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy.

Singapore, and Thailand), known as ASEAN-6, and the PRC were to gradually reduce tariff rates to between 0% and 5% by 2005. The newer ASEAN members (Cambodia, the Lao PDR, Myanmar, and Viet Nam) will reduce Normal Track tariff rates to between 0% and 5% by 2010, and will complete their removal by 2015. For the Sensitive Track, ASEAN-6 and the PRC will reduce tariff rates to 20% by 2012, and to between 0% and 5% by 2018. The Sensitive Track schedule for the Lao PDR and other newer ASEAN members designates 2015 as a target for tariff reduction to rates of 20% and 2020 as the target for reductions to between 0% and 5%.

At the macro level, the ACFTA is likely to bring both opportunities and challenges to Lao PDR industries. The Government of the Lao PDR expects the country to benefit from the ACFTA mainly through export market expansion. The combined ASEAN–PRC market is already the largest market for Lao PDR exports. However, an expanded market size alone is not sufficient and thus Lao PDR 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 PDR industries. The second section discusses theoretical debates and presents the analytical framework for the impact evaluation. Based on three case studies, impacts on industry are then discussed. The last section concludes the paper and provides policy recommendations.

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. He concluded that RTAs consolidate the world into many small trading blocs and reduce 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 nonmembers 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.[2] First, the authors applied an Export Similarity Index to assess the PRC's export potential within ASEAN-6 markets by comparing the PRC 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 computable general equilibrium 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 preexisting 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 members, but divert trade away from nonmembers. The model predicted a larger increase in exports from ASEAN to the PRC than in the opposite direction. For instance, exports from Cambodia, the Lao PDR, Myanmar, and Viet Nam (CLMV) are expected to increase by more than 50%, while imports from the PRC will fall by 12%. This is contrary to the usual perception that the ACFTA could lead to a flood of PRC 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 PRC 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 in ASEAN's most advanced economies, domestic industries in emerging economies such as Indonesia and the Philippines, and the CLMV economies that are dominated by labor-intensive industries. The model of Park, Park, and Estrada (2008) discussed earlier also highlighted the challenges for less developed members of the ACFTA.

In considering data limitations, the time frame of the Lao PDR's commitments under the ACFTA, and the country's economic characteristics, this paper will evaluate the potential impacts of the ACFTA on the Lao PDR economy by conducting case studies on three affected industries.[3] Based on trade patterns between the Lao PDR and ASEAN members, and between the Lao PDR and the PRC, the authors decided to examine the impacts of the ACFTA on the competitiveness of motorcycle assembly, an FDI-led industry; cement, an import-substituted industry; and wood processing, a domestic industry. 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 a 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 PDR's trade performance as it might be affected by the ACFTA.

[2] Robert (2004) also uses the gravity model to explain trade flows within the ACFTA and argues that the trade partners are likely to gain from this agreement by 2010.

[3] 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 computable general equilibrium model. The ex post method includes FTA preference indicators, FTA trade and welfare indicators, and the gravity model.

Potential Impacts of the ACFTA on Selected Industries

It is too early to evaluate the actual impact of the ACFTA at the industry level given that 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.

Motorcycle Assembly

Industry overview

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

Initially, Honda and Suzuki assembled motorcycles under the complete knock down system before Honda shifted its production to the incomplete knock down system in response to competition from newly arrived PRC and Korean assemblers. At present, Honda, Kolao, and most PRC assemblers operate under the incomplete knock down system, while Suzuki and a smaller number of PRC assemblers have stuck with the complete knock down system. The assemblers' local content is about 40% for Honda, 20% for Kolao, and 60% for most PRC 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 PDR, with a smaller number of 125 cc models being sold.

The ACFTA's impacts on the industry

The Lao PDR motorcycle assembly industry is relatively small and young compared with the same industries in other ASEAN countries such as Indonesia, Malaysia, Thailand, and even Viet Nam. When tariffs and nontariff barriers are removed across ASEAN and the PRC, the Lao PDR motorcycle industry will be left competing against imports in domestic markets while enjoying expanded opportunities in overseas markets. To measure the competiveness of the industry, this study compared current and future price differences between motorcycles assembled in the Lao PDR 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 PDR motorcycles in a third country (Table 2). In this scenario, Lao PDR motorcycle assemblers try to penetrate a major neighboring motorcycle market such as that of Thailand.

Under the first scenario, our analysis shows that the price competitiveness of motorcycle assemblers varies substantially. Kolao motorcycles, PRC motorcycles assembled in the Lao PDR, and locally assembled Suzuki motorcycles remain competitive in domestic markets

Table 1: Prices of Lao PDR Motorcycles in the Lao PDR and Thai Markets (baht)

Manufacturer	Brand	Engine Displacement (cc)	Local Assembly or Imported	Price in Lao PDR 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 centimeter, Lao PDR = Lao People's Democratic Republic.

Notes:

1. Prices of imported motorcycles are estimated based on current retail prices in Thailand, duty tax under the Association of Southeast Asian Nations–People's Republic of China Free Trade Agreement, Lao PDR domestic excise tax of 20%, Lao PDR domestic value-added tax of 10%, transport costs of B100 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.

Sources: National Economic Research Institute interviews with motorcycle shop owners in Vientiane in 2010; and http://www.motorcycle.in.th/

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.

Under the scenario of competition in a third market such as Thailand, there is room for Kolao and PRC motorcycles assembled in the Lao PDR to enter the market. However, the price gap between Lao PDR and Thai motorcycles is 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 capacities, and invested more in product development than in

Table 2: Prices of Lao PDR Motorcycles in the Lao PDR and Thai Markets (baht)

Manufacturer	Brand	Engine Displacement (cc)	Local Assembly or Imported	Price in Lao PDR 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	...	...	...
	Nouvo MX 2009	115	Thai	85,360	75,560	68,210	...	...	...
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
PRC	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*

... = not applicable, cc = cubic centimeter, PRC = People's Republic of China, Lao PDR = Lao People's Democratic Republic.

Notes:

1. Prices of Lao PDR motorcycles exported to Thailand are based on the current retail price in Vientiane, tariff rates under the Association of Southeast Asian Nations–People's Republic of China Free Trade Agreement, Thai excise and multiple taxes of 13%, value-added tax in Thailand of 7%, transport costs of B100 per unit, and administration cost of 4%.
2. The prices of motorcycles 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 interviews with motorcycle shop owners in Vientiane in 2010; and http://www.motorcycle.in.th/

product imitation will such price differences help them gain market share in Thailand. Therefore, the infant motorcycle industry in the Lao PDR needs to be developed through policies that enhance labor productivity and provide clear incentives for local industries to invest in research and development and train their workforces; through 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 the PRC, Thailand, and Viet Nam. Procedures and costs related to the import–export process need to be reduced and the Lao Automotive Association strengthened.

Wood Processing

Industry overview

The Lao PDR wood processing industry is at an early stage of development. In 2009, there were 1,089 furniture factories: 621 were medium- or large-scale factories and 468 were micro-scale, which are family-owned cottage industries serving 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. 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 traditional and characterized by bulky and material-consuming products.

Lao PDR export and import markets for wooden products are determined largely by geographic and logistical conditions. Wood product exports from northern Lao PDR are mainly destined for PRC markets, while those from central and southern Lao PDR are more likely to go to fellow ASEAN members. Imported wood products mainly come from the PRC, Thailand, 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 such as wooden furniture are gradually increasing, with the major importers being the PRC, Thailand, and Viet Nam (Table 3).

Table 3: Lao PDR Exports and Imports of Wood Products, 2001–2008

Item	2001	2002	2003	2004	2005	2006	2007	2008
Total Lao PDR 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 PDR imports ($ '000)	635,526	629,621	758,516	960,635	1,145,979	1,471,327	1,870,155	2,279,254
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

Lao PDR = Lao People's Democratic Republic.

Source: International Trade Center www.trademap.org

The ACFTA's impacts on the industry

The Lao PDR's wood processing industry currently enjoys government protections through import tariffs ranging from the lowest rate of 8% for fuelwood, wood in chips or particles, sawdust, and wood waste and scrap (HS 4401) to the highest rate of 25% for wooden furniture (HS 9403).[4] 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 given that the Lao PDR still imports a relatively large amount of high-value-added wood products, particularly from the PRC, which ranks second among global exporters of high-value-added wood products and fourth among exporters of wood furniture (UN Comtrade 2001).

To evaluate the ACFTA's impacts on the wood product industry, Table 4 compares the prices of domestic and imported furniture from the PRC before and after 2015. Due to current tariff restrictions, the Lao PDR'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 KN4,200,000 compared with KN5,095,000 for a similar bed from the PRC. However, when the ACFTA's tariff reductions are fully implemented, the price competitiveness of Lao PDR furniture will

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

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 four seats (Lao People's Democratic Republic)	3,000,000	3,000,000	Yes	No
Round table with four seats (People's Republic of China)	3,035,000	1,821,000	Yes	Yes

ACFTA = Association of Southeast Asian Nations–People's Republic of China Free Trade Agreement.

* denotes a weak conclusion.

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 furniture made in the Lao People's Democratic Republic with comparable imports.
3. 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-hardwood and other non-wood materials, and are segmented to mass market demand. On the other hand, furniture products from the Lao People's Democratic Republic are mostly made from hardwood and target high-end markets.

Source: Authors' estimates based on field survey.

[4] 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).

change significantly as furniture imported from the PRC 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 PRC that are known for producing 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 hardwood. This shields a particular segment of the Lao PDR furniture market from lower-priced imported products that are made of non-hardwood. However, imported products cover a wider range of product design and are of better 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 because more furniture is being imported, particularly from the PRC 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 5 shows a SWOT analysis for the Lao PDR wood processing industry based on interviews with wood processing companies. Although the Lao PDR 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 PRC markets are already open to Lao PDR exports of wooden furniture. Weaknesses and threats exist in terms of quality, design, and other fundamental problems within the Lao PDR wood product industry.

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

Strengths	Weaknesses
Business environment: higher forest coverage than in neighboring countries Production: low labor costs	Production: 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 Business environment: high electricity costs; high transport costs; lack of skilled workers; logging under government direction (e.g., quotas, state-owned companies)
Opportunities	**Threats**
Production: unused capacity in saw mills, pulp and paper industry to expand, development of big plantations Demand: 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

SWOT = strengths, weaknesses, opportunities, and threats.
Source: Authors' compilation.

Cement Industry

Industry overview

The demand for cement in the Lao PDR has increased substantially since it began to develop in 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 PDR 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 close to the plants. Due to domestic transport constraints, areas located far from the plants rely on imported cement from neighboring countries, especially Thailand and, to a lesser extent, the PRC and Viet Nam. This means that Lao PDR 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 PDR 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 a major role in protecting the Lao PDR cement industry until the quota on cement is completely eliminated under the ACFTA.

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

	Portland Cement (HS 252329)							
Item	**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 are from the Lao People's Democratic Republic Cement Industry Group. Import data taken from www.trademap.org

The ACFTA's impacts on the industry

ACFTA commitments as they apply to the Lao PDR 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 0% 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 and will fall to 0% in 2015.

The evaluation of the impacts of the ACFTA on the Lao PDR cement industry employs a simple comparison of prices between domestic cement and imported cement from the PRC, Thailand, and Viet Nam before and after the imposition of tariff reductions. The comparison of

prices only covers cement that is available in private markets. 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 the Lao PDR.

The results in Table 7 show that Lao PDR cement can compete with imported cement on a price basis fairly well, especially in provinces close to cement plants. Specifically, the Lao PDR cement industry can compete with Thai cement in all major provinces, except those that are far from the cement plants and closer to bordering countries. Second, the price competitiveness of Lao PDR 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 PDR cement will have difficulty competing with imports in terms of quality. While some Lao PDR 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 in heavy construction.

In addition to actual differences in quality between domestic and imported cement, Lao PDR producers also face problems with perceptions about the low quality of their products. As price differences become less favorable to Lao PDR 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 PDR 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 PDR 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 PDR 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.

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 industries, such as wood products, and import-substituted industries, such as 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 PRC markets. For an industry led by foreign direct investment, 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 PDR motorcycle assemblers, particularly Kolao and PRC brands, if they hope to penetrate the neighboring Thai market. The findings of these industry case studies complement many of the conventional arguments found in the theoretical and empirical literature on the potential negative impacts of regional free trade agreements on domestic industries.[5] This

[5] Particularly, the findings support the arguments of Gradziuk (2010) and Park, Park, and Estrada (2008), which are discussed in length on p. 24 of this paper.

Table 7: Prices of Domestic and Imported Cement by Province (KN/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	...	...
	Thai Mix	680,000	659,600	626,620	...	...
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	...	...
	Thai Mix (Tiger)	765,000	742,050	704,948	...	...
	Thai Mix (Bird)	735,000	712,950	677,303	...	...
	Thai Portland (Diamond)	800,000	776,000	737,200	...	...
Savannakhet	Lao P525 Red (Bull)	720,000		720,000	Yes	Yes
	Lao P425 Blue (Bull)	640,000		640,000	Yes	Yes
	Thai Mix# (Tiger)	787,000		724,000	...	...
Champasak	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	...	...
	Thai Mix (Bird)	740,000	717,800	681,910	...	...
	Thai Portland (TPI Red)	790,000	766,300	727,985	...	...
	Thai Mix (TPI Green)	700,000	679,000	645,000	...	...
Luang Prabang	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
	Lao P425 Blue (Bull)	760,000		760,000	Yes	No
	Thai Portland (Elephant)	860,000	834,200	792,490	...	...
	Thai Portland (Red Bull)	920,000	892,400	847,780	...	...
	Vietnamese Portland	690,000	669,300	635,835	...	...
Oudomxay	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	...	...
	PRC Portland	700,000	679,000	645,050	...	...

... = not applicable, PRC = People's Republic of China.

* denotes a weak conclusion.

Notes:

1. Expected prices are based on current market prices and the tariff reduction schedule of the Association of Southeast Asian Nations–People's Republic of China Free Trade Agreement.
2. Price competitiveness in 2009 and 2015 compares the price of Lao People's Democratic Republic cement with comparable imports of similar quality.
3. 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.

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

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 before the agreement is fully implemented.

In response to these challenges, the 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 PDR 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 to support 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 improving infrastructure and logistics systems to reduce transport costs, and bolstering the reputation of Lao PDR 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 environmental and intellectual property rights. Moreover, policies should facilitate potential expansion into neighboring markets in the PRC, Thailand, and Viet Nam. To do so, the government should provide more attractive incentives for local industries to invest in research and development 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 nationwide motorcycle association. In addition, procedures and costs related to the import–export process need to be simplified and costs reduced.

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