**Working Paper** (WP/25-07)

# Lao PDR's Competitiveness in the Global Goods Export Market

Naoaki Inayoshi

**May 2025**

[This page is intentionally left blank]

# Lao PDR's Competitiveness in the Global Goods Export Market

Prepared by Naoaki Inayoshi[1,2]

Reviewed by Sumio Ishikawa (Lead Economist)

Approved by Hoe Ee Khor (Chief Economist)

May 2025

## Abstract

Despite geographical disadvantages, Lao PDR demonstrated remarkable growth in goods exports from 2010 to 2021. However, to survive and thrive in the rapidly changing, complex global goods export landscape, a well-thought-out export promotion strategy would be critical, based on a clear understanding of the economy's current market position. This paper reviews the export performance of Lao PDR from 2010 to 2021 and identifies its comparative advantages in the global goods export market at the detailed Standard International Trade Classification four-digit product level. The paper assesses the competitiveness of each type of goods that Lao PDR exports, using the Revealed Symmetric Comparative Advantage methodology. The study reveals that Lao PDR has increasingly exported competitive goods, primarily in lower-value-added groups such as food and live animals, beverages and tobacco, crude materials, and minerals and fuels. Yet, a closer analysis reveals that the economy's export competitiveness remains fragile, even for lower-value-added products. The paper offers preliminary policy insights and aims to spark further strategic discussions on how Lao PDR can sustain and enhance its export growth trajectory.

JEL classification:      F11, F13, F14, O24

Keywords:      Competitiveness; Comparative advantage; International trade; Trade policy; Export promotion; Lao PDR

## Abbreviations

| | |
|---|---|
| AMRO | ASEAN+3 Macroeconomic Research Office |
| ASEAN | Association of Southeast Asian Nations |
| ASEAN+3 | ASEAN Plus China (including Hong Kong), Japan, Korea |
| BEC | Broad Economic Categories |
| CAGR | Compounded Annual Growth Rate |
| GVC | Global Value Chain |
| HS | Harmonized System |
| OECD | Organisation for Economic Co-operation and Development |
| RCA | Revealed Comparative Advantage |
| RSCA | Revealed Symmetric Comparative Advantage |
| SITC | Standard International Trade Classification |
| UN | United Nations |

# Contents

## Figures

## Tables

*"No nation was ever ruined by trade, even seemingly the most disadvantageous."*
*Benjamin Franklin*
*United States Founding Father, 1774*

## I.  Introduction

**1.      Participation in international trade benefits economies in multiple ways.** Economic theory underscores the role of international trade as a powerful catalyst for economic growth and better living standards. By engaging in global markets, economies can generate foreign currencies, acquire new technologies, and access a broader range of goods and services unavailable domestically. This dynamic interaction not only creates new economic opportunities but also sets in motion a virtuous cycle of prosperity and development.

**2.      Comparative advantage is one of the most critical concepts in explaining the trade patterns of an economy.** First introduced by Ricardo (1817), this concept has been fundamental to international trade theory for more than two centuries, such as the Hecksher-Ohlin model (1919, 1933), which examined how factor endowments like land, capital, and labor affected trade patterns. The concept of comparative advantage continues to be a pillar of subsequent trade theories, including the flying geese model by Akamatsu (1961, 1962) and the Krugman model (1980).[3]

**3.      Despite geographical disadvantage, Lao PDR saw its goods exports proliferate in the 12 years to end-2021.** As the only landlocked economy in Southeast Asia, Lao PDR lacks direct access to maritime trade, which carries 90 percent of the global goods trade, making the economy geographically disadvantaged in expanding its trade partners compared to other economies in the region.[4] Yet, Lao PDR has demonstrated rapid export growth over the years. By 2021, the economy was exporting USD7.2 billion of goods globally, more than triple the 2010 exports of USD1.9 billion (Figure 1).[5] Lao PDR's export growth over the 12 years has been rapid, even when compared with its neighboring emerging economies. The compounded annual growth rate (CAGR) of Laotian exports from 2010 to 2021 reached 12.8 percent, the second fastest among the 10 ASEAN economies (Figure 2).

**4.      The Laotian government aims to accelerate its export growth momentum with structural reforms.** Under the 9th Five-year National Socio-economic Development Plan from 2021 to 2025, the government prioritizes regional and international integration as a key strategy for sustainable development. Lao PDR became a member of the World Trade Organization in 2013 and now has preferential trade agreements with 22 economies and nine regional trade bodies. The government is actively working on implementing these agreements effectively, focusing on improving regulatory frameworks, such as streamlining licensing processes and upgrading infrastructure. The development of the Laos-China Railway, dry

---

[3] Widodo (2009) provides a comprehensive review of the development of the comparative advantage concept in international trade theories.

[4] Maritime transport accounts for about 11 billion tonnes of cargo per year and is the main transport mode of the global goods trade (World Bank 2021; OECD 2022).

[5] The UN Comtrade Database is the primary data source of this paper. As such, the export values applied herewith could differ from those of the Laotian authorities. However, the UN Comtrade Database is used for its comprehensive coverage of trade data by product and trading partner, allowing the paper to compute Lao PDR's competitiveness in the global goods export market.

ports, and logistics parks exemplifies the government's firm commitment to transforming its transport landscape and enhancing trade activities.[6]

**Figure 1. Export Value by Product Group**
*(USD billion)*
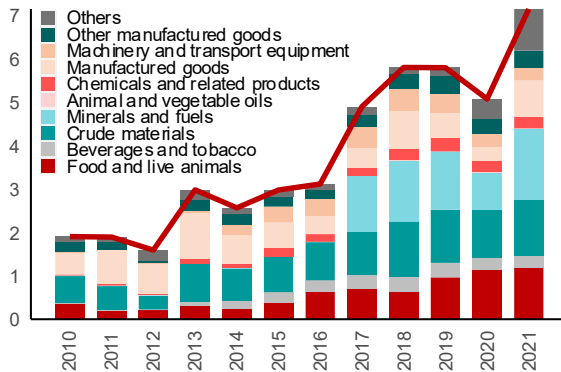


Source: UN Comtrade; AMRO staff calculations

**Figure 2. ASEAN: Goods Export Growth**
*(Percent)*
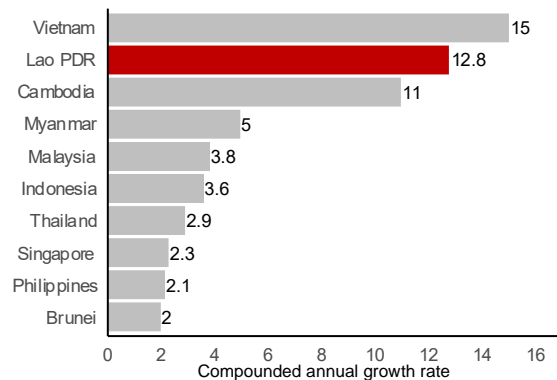


Source: UN Comtrade; AMRO staff calculations
Note: Figures show the compounded annual growth rate from 2010 to 2021.

5.      **However, Lao PDR's presence in the global goods export market is still minimal, implying the need for a well-thought-out strategy to strengthen its export growth momentum.** Despite impressive growth, Lao PDR remains the smallest exporter among the 10 ASEAN economies, contributing a mere 0.03 percent to global goods trade in 2021 (Figure 3). In the increasingly competitive global marketplace amid growing global uncertainties, such as tariff escalations across major economies, developing a sophisticated and adaptive export promotion strategy is crucial for Lao PDR to maintain its growth trajectory and expand its international economic footprint.

**Figure 3. ASEAN: Goods Export Value, 2021**
*(USD billion)*
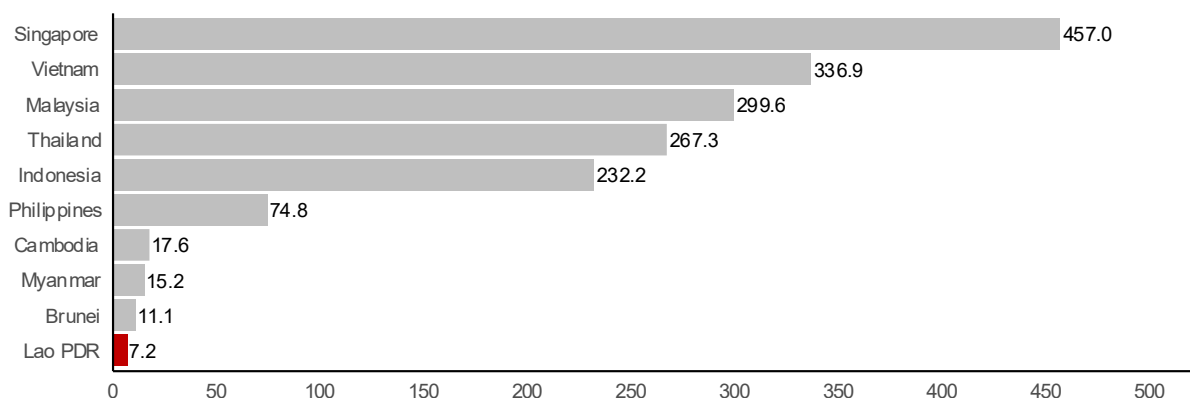


Source: UN Comtrade; AMRO staff calculations

---

[6] The 1,035km, USD5.9 billion Laos-China Railway connects the Laotian capital of Vientiane and Kunming in southwest China's Yunnan province. The Laotian section of the railroad runs for about 400km between Vientiane and Boten, a border city in northern Lao PDR. The Chinese section runs about 600km between Kunming and Mohan, a city bordering Lao PDR. Both sections started commercial operations in December 2021. For Lao PDR, this mega-infrastructure project was built in cooperation with China as part of the Belt and Road Initiative. According to China Railway, the railway carried over 50 million passengers by end-March 2025, and the total cargo volume surpassed 50 million tons, with 11.58 million tons of cross-border goods transported, as of January 2025.

**6.** **This paper aims to clarify Lao PDR's current position in the global goods export market and identify potential areas of focus by revealing the economy's comparative advantages.** An understanding of the economy's competitive landscape is crucial to formulating an effective export promotion strategy. This paper analyzes Lao PDR's export competitiveness from 2010 to 2021 using trade data and the detailed Standard International Trade Classification (SITC) four-digit product level. By singling out the strengths, weaknesses, and opportunities in Lao PDR's export portfolio, the research provides a foundational framework for strategic policy discussions and future economic prioritization.

**7.** **This paper consists of four sections.** Section 2 reviews Lao PDR's historical export performance from 2010 to 2021. Section 3 explains the methodology used to measure the economy's comparative advantages. Section 4 presents the results and assesses Laotian export competitiveness. Finally, Section 5 concludes with several policy implications.

## II. Lao PDR's Export Performance from 2010 to 2021

**8.** **Between 2010 and 2021, the types of exported Laotian goods increased.** Export diversity expanded significantly, growing from 367 different types of goods to 529 at the SITC four-digit level (Figure 4). Manufactured goods and machinery and transport equipment dominated the export portfolio, while notable expansion was observed in both chemicals and machinery and transport equipment.[7] Particularly impressive was the increase in chemical product coverage, rising from 16.7 percent to 47.0 percent overall across the 132 products classified as chemical and related products under the SITC (Figure 5). By comparison, the growth of lower-value-added products, such as food, crude materials, and minerals and fuels, remained modest. The diversification of certain product groups signaled Lao PDR's evolving industrial capabilities, as evident from its improved economic complexity index, though it remained in the low-complex zone (Figure 6).[8]

**Figure 4. Types of Exported Goods**
*(Types of goods)*
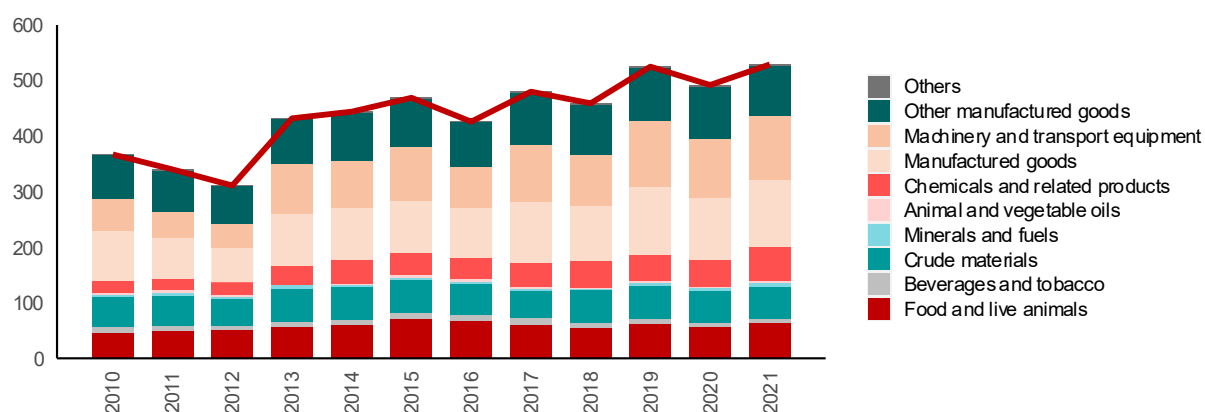


Source: UN Comtrade; AMRO staff calculations

---

[7] See Appendix 1 for the list of product groups and the corresponding SITC four-digit codes.
[8] The economic complexity index (ECI) measures the level of know-how in an economy to produce a wide variety of goods, including sophisticated products requiring specialized knowledge (Hidalgo and Hausmann 2009). An economy with a positive value is considered to be more complex, while a negative value is less complex. The higher the ECI, the more complex the economy is.

**Figure 5. Product Coverage by Group**
*(Percent)*
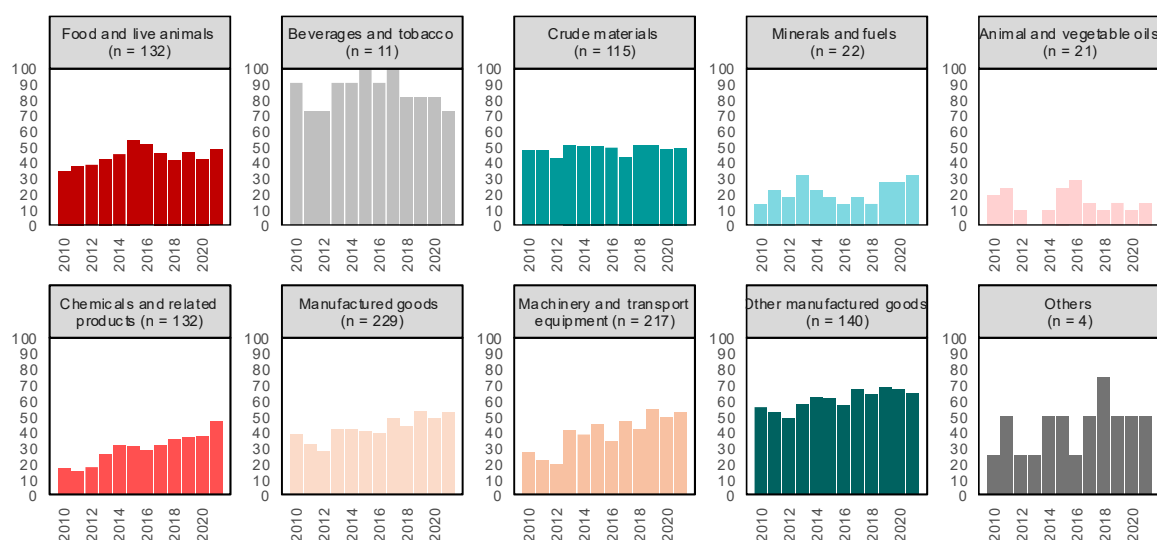


Source: UN Comtrade; AMRO staff calculations
Note: "n" represents the total number of products under each product group according to SITC classification.

**9.      Yet, Lao PDR's export value is mostly concentrated on only a few lower-value-added products.** Food and live animals, crude materials, and minerals and fuels comprise the bulk of Lao PDR's export value, which aligns with the specialization pattern of economies in the early stage of development, as Akamatsu's (1961, 1962) flying geese model suggests (Figure 1). Among these product groups, food and live animals demonstrated consistent export growth in the 12 years to 2021 (Figure 7). Meanwhile, the export value of minerals and fuels suddenly increased in 2017 due to the large electricity exports starting that year, though such exports have been less dynamic than some of the other product groups in the five years to 2021.[9] Furthermore, despite efforts to diversify, the top five exported goods still accounted for 52.1 percent of Lao PDR's total export value in 2021 (Figure 8).[10] While the concentration has slightly decreased over time, Laotian exports remain heavily reliant on a handful of low-value-added products.

**Figure 6. Economic Complexity**
*(Index)*
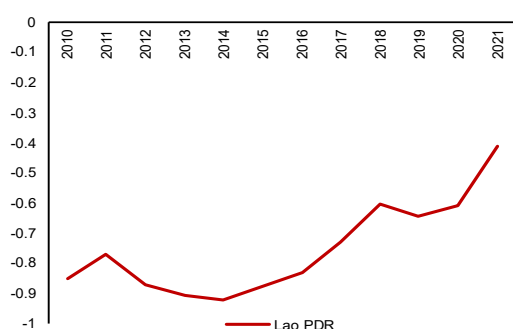


Source: Harvard University Growth Lab

**Figure 7. Export Growth by Product Group**
*(Percent)*
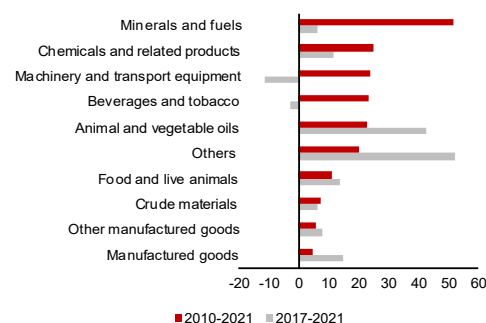


Source: UN Comtrade; AMRO staff calculations
Note: The figure illustrates the compounded annual growth rate of each product group's exports at two different time frames: 12 years (2020-2021) versus five years (2017-2021).

---

[9] Although the Laotian authorities had recorded electricity exports before 2017, the data is reflected in the UN Comtrade Database only after 2017. The author acknowledges this discrepancy but continues to use the original UN Comtrade data for the reasons previously described in footnote 5.

[10] See Appendix 2 for a list of Lao PDR's top 10 exported goods from 2010 to 2021.

10.     **Lao PDR's trade network has expanded in the 12 years since 2010.** In 2021, Lao PDR exported goods to 95 economies, increasing from 74 economies in 2010 (Figure 9). While most of the economy's trading partners are in Asia and Europe, Lao PDR has broadened its exports to other regions, such as Africa and the Americas. Food and live animals, crude materials, and minerals and fuels were mainly exported to Asia (Figure 10).[11] Other manufactured goods, such as apparel-related products, were mostly exported to Europe and the Americas. Products to Africa, Oceania and the "Others" category vary by year since exports to those regions are still limited.

**Figure 8. Share of Top Five Exported Goods**
*(Percent)*
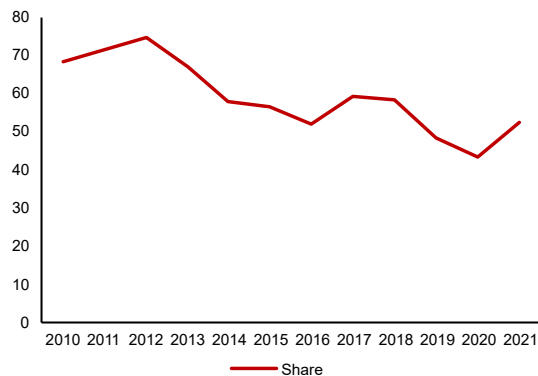


Source: UN Comtrade; AMRO staff calculations
Note: The figure illustrates the share of top five exported goods' value in Lao PDR's total goods export value.

**Figure 9. Trading Partners by Region**
*(Number of economies)*
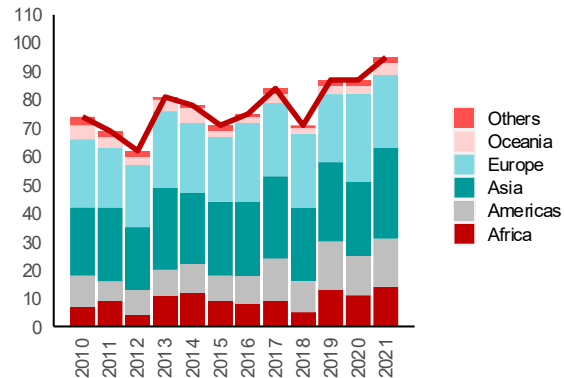


Source: UN Comtrade; AMRO staff calculations

**Figure 10. Share of Exported Goods by Region**
*(Percent)*
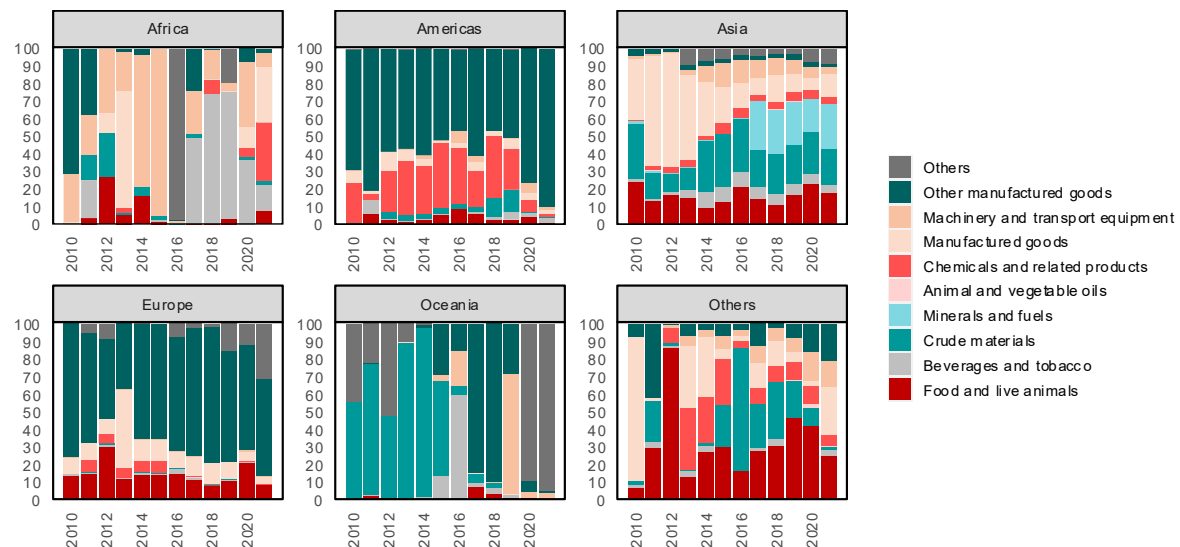


Source: UN Comtrade; AMRO staff calculations
Note: The figure illustrates the share of each product group's value in Lao PDR's total export value by region.

11.     **However, Lao PDR's exports are dependent on a few neighboring economies.** Despite expanding the export destinations over the years, most Laotian exports are directed to Thailand, China, and Vietnam. In 2021, the value of Lao PDR's exports to these top three trading partners accounted for nearly 80 percent of total exports (Figure 11).[12] Furthermore,

---

[11] See Appendix 3 for a list of Lao PDR's top 10 exported goods by region in 2021.
[12] See Appendix 4 for a list of Lao PDR's top 10 export destinations from 2010 to 2021.

the three destinations were economies where Lao PDR had strengthened its exports from 2010 to 2021 compared with the other trading partners (Figure 12). Despite an expansion of the trade network, Lao PDR had bolstered its trade relationship with only limited economies.

**Figure 11. Share of Top Three Export Destinations**
*(Percent)*
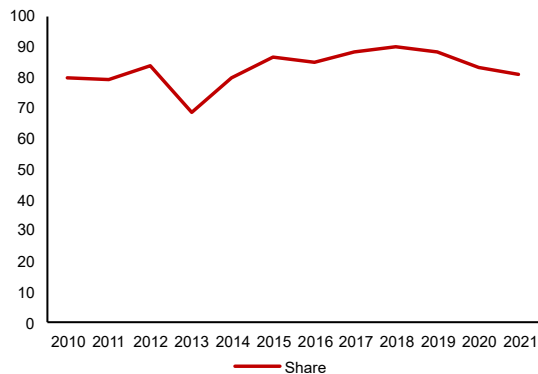


Source: UN Comtrade; AMRO staff calculations
Note: The figure illustrates the share of top three export destinations' value in Lao PDR's total goods export value.

**Figure 12. Changes in Export Value by Trading Partner, 2010-2021**
*(USD billion)*
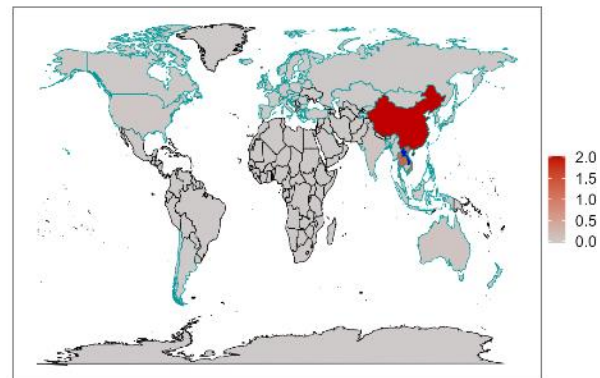


Source: UN Comtrade; AMRO staff calculations
Note: Economies surrounded by green lines have a trade agreement with Lao PDR, which is marked in blue.

**12.     Lao PDR's participation in global value chains (GVCs) has also been limited.** The GVC participation rate measures the extent to which an economy takes part in the multistage value-addition process of specific goods or industries. Since Lao PDR's primary exported goods are lower-value-added products, its participation in global trade in terms of value addition has been weak (ASEAN Promotion Centre on Trade, Investment and Tourism 2021). Although the economy has somewhat diversified its exported goods and trade network, it is still at an early stage of GVC participation.

**13.     Overall, Lao PDR has room for improvement to unlock its export growth potential.** Various factors, such as global demand for a certain product, trade policies across the world, and the business environment of the importing economy, could affect the types of exported goods and the number of their destinations. Without a doubt, Lao PDR has broadened its exported goods and trade network over the 12 years to 2021, suggesting a growing export performance. Yet, the data also revealed structural vulnerabilities, notably its reliance on a few low-value-added products and trading partners.

## III.   Measuring Competitiveness

**14.     The revealed comparative advantage (RCA), or Balassa index, is a widely used measurement of competitiveness in global trade.** This index is based on the concept that the relative export performance of an economy in a particular product would "reveal" its comparative advantage over other economies, assuming that the trade patterns reflect relative costs and non-price factors such as quality.[13] RCA is defined as follows:

---

[13] Vollrath (1991) compared the theoretical foundations of RCA and other export performance indices and concluded that RCA was the most satisfying measure.

$$RCA_{i,j} = \frac{(\frac{X_{i,j}}{X_{i,p}})}{(\frac{X_{w,j}}{X_{w,p}})} \tag{1}$$

where the subscripts $i$, $w$, $j$, and $p$ denote economy, world, the specific exported product, and all exported products. As such, the numerator $(\frac{X_{i,j}}{X_{i,p}})$ shows the share of economy $i$'s product $j$'s export value in its total goods export value. Similarly, the denominator $(\frac{X_{w,j}}{X_{w,p}})$ represents the share of the world's product $j$'s export value in the world's total goods export value. The economy $i$ is considered to have a comparative advantage in product $j$'s exports when $RCA_{i,j} > 1$. In contrast, $RCA_{i,j} < 1$ implies the economy $i$'s disadvantage in exporting product $j$.

**15.     This paper adopts revealed symmetric comparative advantage (RSCA), which is a simple transformation of RCA, as the primary indicator of competitiveness.** One of the criticisms of RCA is in the asymmetric value it produces. RCA would take a value of 1 to infinity $(1 < RCA_{i,j} \leq \infty)$ when the economy is competitive, and a value of 0 to 1 in the case of disadvantage ( $0 \leq RCA_{i,j} < 1$ ). These asymmetric values complicate the meaningful comparison across products. To overcome this issue, Dalum et. al. (1998) and Laursen (1998) transformed RCA into RSCA:

$$RSCA_{i,j} = \frac{(RCA_{i,j} - 1)}{(RCA_{i,j} + 1)} \tag{2}$$

In this form, the value could range from -1 to 1 $(-1 \leq RSCA_{i,j} \leq 1)$. When $0 < RSCA_{i,j} \leq 1$, the economy $i$ is considered to be competitive in product $j$'s exports. On the other hand, the economy $i$ is disadvantaged in exporting product $j$ when $-1 \leq RSCA_{i,j} < 0$. Due to its simplicity, RSCA has been widely applied in recent studies measuring an economy's competitiveness in international trade (Widodo 2009a, 2009b; Shohibul 2013; Torok and Jambor 2016; U.S. International Trade Commission 2021). Furthermore, RSCA was found to be the best measure of comparative advantage relative to other international trade specialization measures (Laursen 2015).

**16.     This paper makes two contributions in clarifying Lao PDR's competitiveness in the global goods export market.** First, the paper references recent trade data from 2010 to 2021 and identifies Lao PDR's current export competitiveness. While past studies on this topic are limited, Hara and Shuto (2005) and Vixathep (2011), for example, used trade data from the 1980s to early 2000s, which do not overlap with this paper's studied period. Second, the paper assesses Lao PDR's competitiveness in a granular manner by using the detailed SITC four-digit product level. The analysis of Hara and Shuto (2005) made use of the two-digit product level of the Harmonized System (HS) code, while Vixathep (2011) employed the SITC three-digit product level.[14] These product levels are less differentiated than the SITC four-digit product level.

---

[14] Trade data comes under three major commodity classifications: HS, SITC and Broad Economic Categories (BEC) codes. HS codes were developed and administered by the World Customs Organization to streamline global trade and allow customs authorities around the world to assess duties and taxes on products more easily. On the other hand, SITC and BEC codes are managed by the United Nations. STIC groups commodities based on several aspects, including the product's processing stage. BEC is broader than the SITC's grouping and classifies products based on their main end use, such as intermediate or final consumption. The UN Comtrade

## IV. Lao PDR's Export Competitiveness from 2010 to 2021

**17.    Lao PDR has consistently been competitive in exporting lower-value-added goods.** In 2021, seven out of the top 10 competitive goods were food and live animals and crude materials (Table 1). [15] These product groups have consistently maintained competitiveness since 2010, outperforming most other ASEAN economies (Figure 13). However, Lao PDR has been less competitive in higher-value-added goods, such as chemicals and related products, manufactured goods, and machinery and transport equipment. This situation is similar to past studies by Hara and Shuto (2005) and Vixathep (2011), suggesting that Lao PDR's areas of export competitiveness have not changed for more than a decade.

**Table 1. Top 10 Competitive Goods, 2021**

| SITC Code | Product Group | Exported Goods | RSCA | Trade Value (USD mn) |
|---|---|---|---|---|
| 2513 | Crude materials | Chemical wood pulp, dissolving grades | 0.987 | 269.8 |
| 548 | Food and live animals | Vegetable products, roots and tubers | 0.987 | 285.0 |
| 2311 | Crude materials | Natural rubber latex | 0.978 | 65.7 |
| 3510 | Minerals and fuels | Electric current | 0.976 | 1,633.1 |
| 11 | Food and live animals | Bovine animals, live | 0.976 | 222.3 |
| 6415 | Manufactured goods | Paper and paperboard | 0.973 | 525.2 |
| 573 | Food and live animals | Bananas | 0.966 | 238.3 |
| 2923 | Crude materials | Vegetable materials primarily for plaiting, such as bamboo | 0.964 | 3.8 |
| 5623 | Chemicals and related products | Mineral or chemical fertilizers | 0.962 | 138.6 |
| 2312 | Crude materials | Natural rubber | 0.962 | 214.4 |

Source: UN Comtrade; AMRO staff calculations
Note: SITC = Standard International Trade Classification; RSCA = Revealed Symmetric Comparative Advantage. Goods are deemed competitive when the RSCA is closer to 1.

**18.    Despite an increase in export portfolio, Lao PDR's export competitiveness—at individual product level—remains concentrated in a few key products.** The number of competitive Laotian goods ($0 < RSCA_{i,j} \leq 1$) increased from 83 types to 98 between 2010 and 2021 (Figure 14). Yet, the proportion of competitive goods in the total types of goods exported from Lao PDR has consistently dropped since 2010 and was at 18.5 percent in 2021—a trend that diverges from other ASEAN economies—as Lao PDR continued to broaden the types of export goods (Figure 15). Furthermore, most of its exported goods remain uncompetitive across product groups (Figure 16). For instance, only 25 were deemed competitive among the 64 types of food and live animal products that Lao PDR exported in 2021. Moreover, Lao PDR's overall competitiveness in the food and live animal product group is primarily supported by only the top three competitive goods—vegetables, live bovine animals and bananas—which constitute 62.7 percent of the product group's total export value.[16]

---

Database reports trade data in all three codes.
[15] See Appendix 5 for a list of Lao PDR's top 10 competitive exports from 2010 to 2021.
[16] See Appendix 6 for a list of the top 10 competitive goods in each product group and their share in the trade value within the corresponding group in 2021.

**Figure 13. ASEAN: Competitiveness by Product Group**
*(Index)*
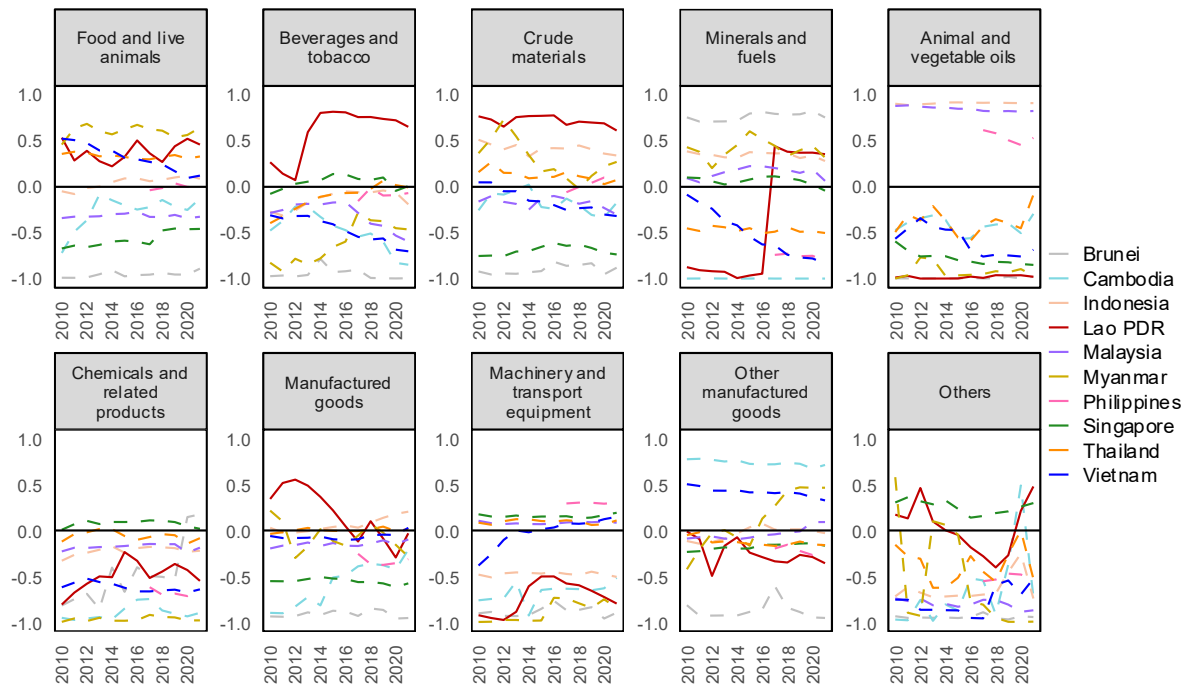


Source: UN Comtrade; AMRO staff calculations
Note: Competitiveness is measured by computing the RSCA. An economy is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive when it is negative, between -1 and 0. Data for the Philippines is available only from 2017.

**Figure 14. Competitive Goods**
*(Types of goods)*
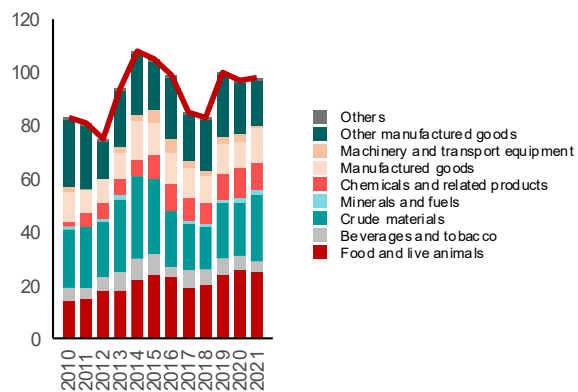


Source: UN Comtrade; AMRO staff calculations
Note: Competitiveness is measured by computing the RSCA. A product is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive if it is negative, between -1 and 0.

**Figure 15. ASEAN: Share of Competitive Goods in Total Types of Exported Goods**
*(Percent)*



Source: UN Comtrade; AMRO staff calculations
Note: Competitiveness is measured by computing the RSCA. A product is deemed competitive when the RSCA value is positive, between 0 and 1. Data for the Philippines is available only from 2017.

**Figure 16. Distribution of Exported Goods' Competitiveness by Product Group**
*(Index)*



Source: UN Comtrade; AMRO staff calculations
Note: Competitiveness is measured by computing the RSCA. A product is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive if it is negative, between -1 and 0. The boxes and lines illustrate the distribution of each product's RSCA value in the same product group. The length of each box shows the range of the central 50 percent of the RSCA values, with the central horizontal line indicating the median value. Lines extending from the box show the range of remaining RSCA values: the lower end denotes the minimum RSCA value, and the upper end denotes the maximum RSCA value. Dots beyond the lines are outliers.

**19.    Competitive goods serve as crucial pathfinders into new markets.** Thailand, China and Vietnam are the primary destinations of Lao PDR's competitive goods. Notably, the types of competitive Laotian goods exported to China rapidly increased from 35 in 2010 to 62 in 2021, which covered about two-thirds of Lao PDR's total types of competitive goods (Figure 17).[17] However, this growth primarily reflects broader export expansion rather than improved competitiveness, as the proportion of competitive goods to total types of goods exported to China remained stable or even declined in some years (Figure 18). On the other hand, it is important to note that Lao PDR's exported goods to non-major trading partners, such as Brazil and other Latin American economies, consist predominantly of competitive goods, demonstrating that competitiveness is essential for market diversification by penetrating new markets.

---

[17] See Appendix 7 for a list of Lao PDR's top 10 export destinations of competitive goods from 2010 to 2021.

**Figure 17. Competitive Goods' Destinations, 2010 vs 2021**
*(Types of goods)*
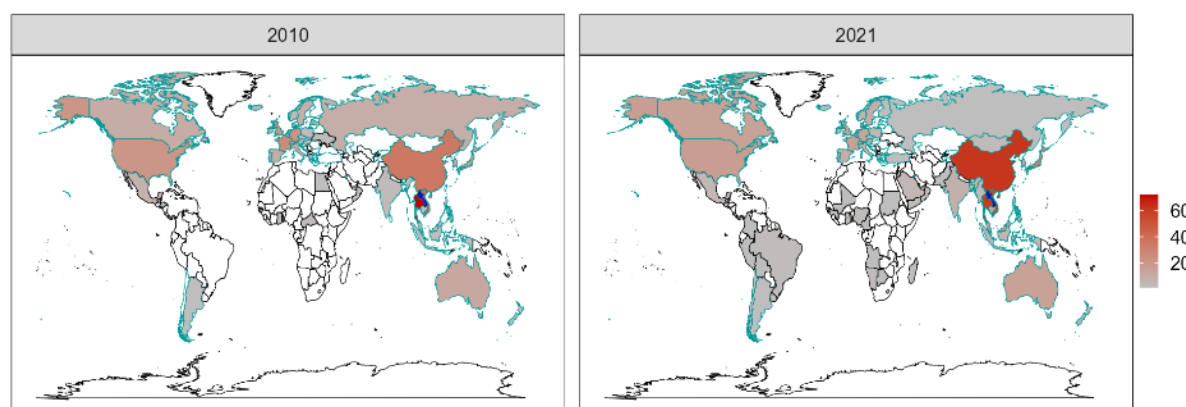


Source: UN Comtrade; AMRO staff calculations
Note: Economies surrounded by green lines have a trade agreement with Lao PDR, which is marked in blue. The red shading indicates the number of types of competitive goods exported.

**Figure 18. Share of Competitive Goods in Total Types of Exported Goods by Trading Partner**
*(Percent)*
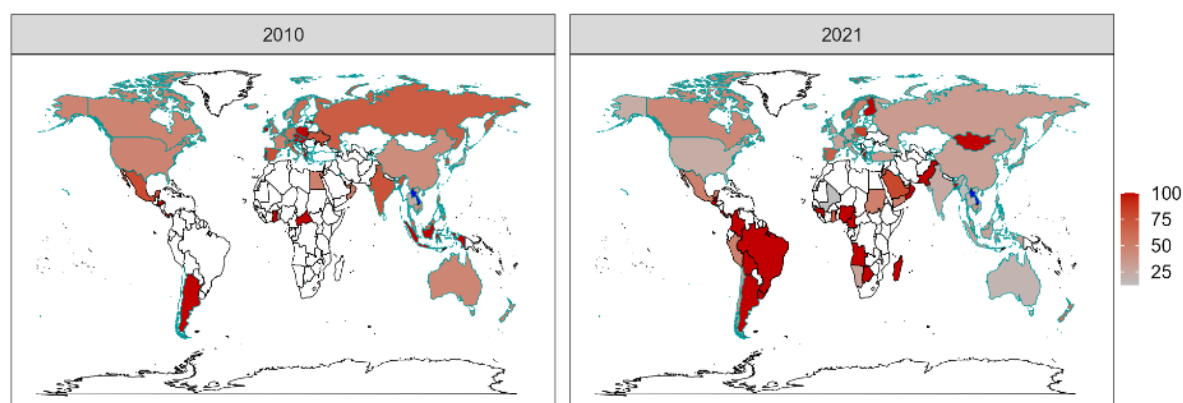


Source: UN Comtrade; AMRO staff calculations
Note: Economies surrounded by green lines have a trade agreement with Lao PDR, which is marked in blue. The red shading indicates the percentage share of competitive goods.

## V. Conclusion

**20.     Lao PDR's export growth momentum faces significant risks due to its concentrated and under-diversified trade structure.** While Lao PDR successfully expanded both its export portfolio and trading network between 2010 and 2021, its exports continue to be heavily dependent on a narrow range of lower-value-added products and a limited number of trading partners. This high concentration makes the economy particularly vulnerable to external shocks, whether from fluctuations in global demand or changes in trading partners' policies.

**21.     Laotian export competitiveness is primarily concentrated in lower-value-added products with a structural vulnerability.** While Lao PDR demonstrates strong comparative advantages in product groups such as food and live animals, beverages and tobacco, crude materials, and minerals and fuels, it struggles to compete in higher-value-added product groups, like machinery and transport equipment (Appendix 5). Even within its competitive product groups, Lao PDR's strengths are narrowly concentrated in a few specific products, as most individual products within the same product group lack competitiveness (Appendix 6).

**22.** **Moving forward, a strategic export promotion strategy focused on product-specific interventions is imperative for sustaining and enhancing Lao PDR's export growth trajectory.** Export competitiveness depends on multiple determinants, including macroeconomic stability, the business and regulatory environment, human capital, and performance relative to other economies. Furthermore, the global goods export landscape can evolve rapidly, as exemplified by the increasing global uncertainties from the US tariff announcement in early April 2025. This complexity and dynamism of the global export marketplace necessitate a systematic approach that aligns with Lao PDR's current market position to arrive at an effective export promotion strategy. The strategy could begin by mapping the exported goods according to two critical dimensions: competitiveness, measured by RSCA, and export value. This creates a matrix with four distinct quadrants, each calling for tailored policy approaches (Figure 19):

**Figure 19. Exported Goods' Competitiveness and Export Value by Product Group, 2021**
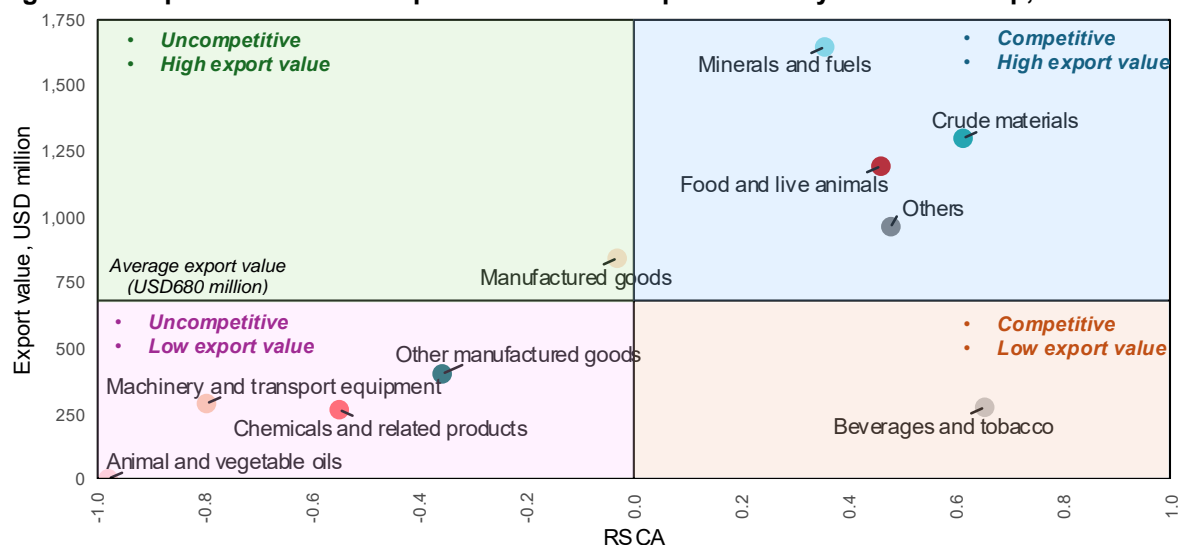


Source: UN Comtrade; AMRO staff calculations
Note: The figure illustrates product group's competitiveness on the x-axis and export value on the y-axis. Competitiveness is measured by computing the RSCA. A product group is deemed competitive when the RSCA value is positive, between 0 and 1, and uncom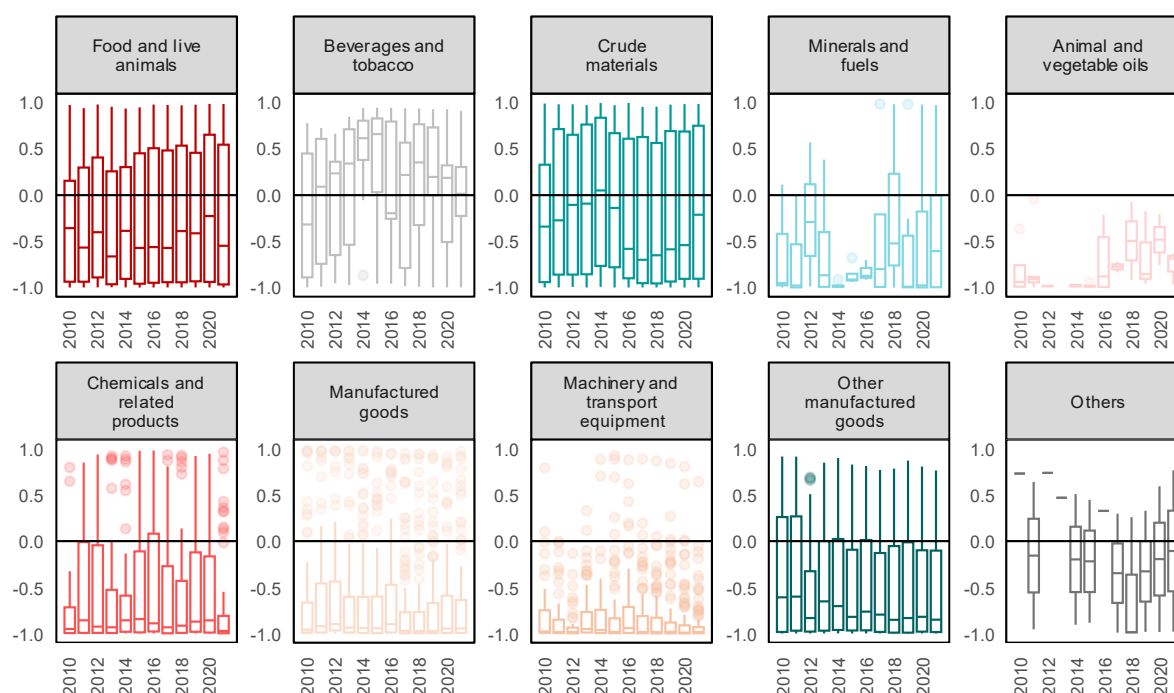petitive when it is negative, between -1 and 0. The average export value is proxied for the threshold of export value. This is weighted by the number of Standard International Trade Classification four-digit level products categorized under each group, which was USD680 million.

1) *Competitive products with high export value (top-right area).* Products in this quadrant represent those that could enhance the export growth momentum. Policy priorities for these products include maintaining the existing competitiveness while leveraging their comparative advantage to identify areas of further diversification in terms of product coverage and export destinations.

2) *Competitive products with low export value (bottom-right area).* This quadrant contains products where an economy has demonstrated competitiveness but has not yet translated this advantage into substantial export earnings. For such items, policies should prioritize increasing export value through greater domestic production capacity or market expansion. Specific interventions could include leveraging trade agreements for market access or providing credit facilities for capital investments.

3) *Uncompetitive products with high export value (top-left area).* These products bring in high export revenue despite lacking a clear comparative advantage, either from temporary market conditions favorable to that economy or untapped potential for competitiveness development. For these products, quality improvements and other

competitive-enhancing measures, rather than further value expansion, should be prioritized. Effective intervention might include facilitating knowledge transfers among similar industries or products with characteristics similar to existing competitive exports, creating certification standards, and investing in targeted vocational training.

4) *Uncompetitive products with low export value (bottom-left area).* Products in this quadrant require comprehensive intervention strategies or strategic decisions about resource allocation. Some products may possess opportunities worth pursuing through significant interventions, while others may consume resources better directed elsewhere. Furthermore, meaningful improvements for these products may require strategic planning and implementation over a longer term compared to the products in other quadrants.

**23.    The strategy could focus on expanding the portfolio of competitive and high export value products.** Currently, such products in the case of Lao PDR are comprised mostly of raw materials or minimally processed goods, particularly food and live animals, crude materials, minerals and fuels, and others including gold (Figure 19). [18] The Laotian policymakers are advised to adjust their approach through targeted policy interventions appropriate to each product's current position in the matrix.[19]

**24.    In parallel, addressing fundamental structural challenges through comprehensive reforms would be key to building a resilient export structure.** Potential interventions could include upgrading workforce skills through enhanced vocational training, improved transport infrastructure, and a transparent and business-friendly regulatory framework. These foundational improvements would strengthen individual product competitiveness and help domestic industries develop expertise in higher-value-added products, which are now significantly underperforming. Such systematic enhancements would also facilitate trade network diversification, ultimately creating a more robust and sustainable export ecosystem in the medium to long term.

**25.    Last but not least, several limitations in this paper's assessment warrant further study.** First, the analysis of competitiveness using RSCA does not capture Lao PDR's industrialization progress. As an economy goes up the industrialization ladder and starts manufacturing a new product, the competitiveness of this new type of goods may be less than other economies that have been producing the same goods for a longer time. This may explain why Lao PDR remains uncompetitive in exporting higher-value-added products despite an increase in the types of higher-value-added export products. Second, this paper did not analyze the determinants of competitiveness, as limited data was available to distinguish the characteristics of SITC four-digit level products. Thus, future studies clarifying the relationship between industrialization and competitiveness using alternative, dynamic measurements of competitiveness rather than static indices such as RSCA, as well as identifying the drivers of competitiveness, would provide further valuable input to Lao PDR in formulating an effective export promotion strategy.

---

[18] See Appendix 8 for a detailed list of Lao PDR's competitive and high export value products in 2021.
[19] At the granular individual products level, products within the same group may occupy different quadrants of the matrix. For example, while the food and live animals product group is generally competitive with high export value, specific products within this group may be uncompetitive with low export value. Therefore, combining industry-level analysis with product-specific interventions is also essential.

**Appendix 1. Product Groups and the Corresponding SITC Four-digit Codes**

| Product Group | STIC Four-digit Codes |
|---|---|
| Food and live animals | 0000 – 0999 |
| Beverages and tobacco | 1000 – 1999 |
| Crude materials | 2000 – 2999 |
| Minerals and fuels | 3000 – 3999 |
| Animal and vegetable oils | 4000 – 4999 |
| Chemicals and related products | 5000 – 5999 |
| Manufactured goods | 6000 – 6999 |
| Machinery and transport equipment | 7000 – 7999 |
| Other manufactured goods | 8000 – 8999 |
| Others | 9000 – 9999 |

Source: Standard International Trade Classification (SITC), Revision 4; AMRO staff compilation

## Appendix 2. Lao PDR's Top 10 Exported Goods

| 2010 | | | | 2011 | | | | 2012 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) |
| 2831 | Copper ores and concentrates | 485.8 | 25.4 | 6821 | Copper, refined and unrefined | 59.6 | 34.8 | 6821 | Copper, refined and unrefined | 603.4 | 37.8 |
| 6821 | Copper, refined and unrefined | 379.5 | 19.9 | 2831 | Copper ores and concentrates | 425.5 | 22.4 | 9710 | Gold | 239.4 | 15.0 |
| 449 | Other maize, unmilled | 228.8 | 12.0 | 9710 | Gold | 114.4 | 6.0 | 2831 | Copper ores and concentrates | 216.6 | 13.6 |
| 9710 | Gold | 123.4 | 6.5 | 6825 | Copper plates, sheets and strips | 80.8 | 4.3 | 711 | Coffee | 69.8 | 4.4 |
| 6825 | Copper plates, sheets and strips | 84.7 | 4.4 | 711 | Coffee | 75.4 | 4.0 | 6825 | Copper plates, sheets and strips | 66.2 | 4.1 |
| 577 | Edible nuts | 71.8 | 3.8 | 611 | Sugars | 40.4 | 2.1 | 449 | Other maize, unmilled | 48.0 | 3.0 |
| 2225 | Sesame seeds | 70.6 | 3.7 | 449 | Other maize, unmilled | 34.9 | 1.8 | 611 | Sugars | 31.3 | 2.0 |
| 8414 | Trousers | 39.4 | 2.1 | 8414 | Trousers | 34.5 | 1.8 | 8414 | Trousers | 14.4 | 0.9 |
| 711 | Coffee | 24.9 | 1.3 | 2484 | Wood | 20.6 | 1.1 | 2484 | Wood | 14.4 | 0.9 |
| 8454 | T-shirts | 24.9 | 1.3 | 5222 | Other chemical elements | 18.8 | 1.0 | 5243 | Salts | 14.3 | 0.9 |
| 2013 | | | | 2014 | | | | 2015 | | | |
| SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) |
| 6821 | Copper, refined and unrefined | 970.1 | 32.5 | 6821 | Copper, refined and unrefined | 615.2 | 23.9 | 2831 | Copper ores and concentrates | 621.8 | 20.8 |
| 2831 | Copper ores and concentrates | 650.8 | 21.8 | 2831 | Copper ores and concentrates | 501.1 | 19.5 | 6821 | Copper, refined and unrefined | 514.4 | 17.2 |
| 9710 | Gold | 230.6 | 7.7 | 9710 | Gold | 138.0 | 5.4 | 7648 | Telecommunications equipment | 255.1 | 8.5 |
| 449 | Other maize, unmilled | 75.8 | 2.5 | 7648 | Telecommunications equipment | 122.0 | 4.7 | 9710 | Gold | 152.3 | 5.1 |
| 711 | Coffee | 74.3 | 2.5 | 1110 | Non-alcoholic beverages | 105.6 | 4.1 | 1110 | Non-alcoholic beverages | 144.0 | 4.8 |
| 8414 | Trousers | 64.5 | 2.2 | 8414 | Trousers | 72.7 | 2.8 | 5243 | Salts | 113.7 | 3.8 |
| 573 | Bananas | 61.6 | 2.1 | 711 | Coffee | 63.3 | 2.5 | 8414 | Trousers | 61.4 | 2.1 |
| 1222 | Cigarettes | 43.8 | 1.5 | 7649 | Apparatus parts | 53.5 | 2.1 | 1222 | Cigarettes containing tobacco | 57.0 | 1.9 |
| 5222 | Other chemical elements | 38.3 | 1.3 | 1222 | Cigarettes | 51.3 | 2.0 | 711 | Coffee | 57.0 | 1.9 |
| 5243 | Salts | 34.2 | 1.1 | 2484 | Wood | 48.6 | 1.9 | 573 | Bananas | 54.8 | 1.8 |

Source: UN Comtrade; AMRO staff calculations
Note: SITC = Standard International Trade Classification

| 2016 | | | | 2017 | | | | 2018 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) |
| 2831 | Copper ores and concentrates | 728.0 | 23.3 | 3510 | Electric current | 1,283.6 | 26.1 | 3510 | Electric current | 1,398.4 | 24.0 |
| 6821 | Copper, refined and unrefined | 376.7 | 12.1 | 2831 | Copper ores and concentrates | 769.0 | 15.7 | 6821 | Copper, refined and unrefined | 749.7 | 12.9 |
| 573 | Bananas | 197.8 | 6.3 | 6821 | Copper, refined and unrefined | 376.9 | 7.7 | 2831 | Copper ores and concentrates | 707.5 | 12.2 |
| 7648 | Telecommunications equipment | 168.1 | 5.4 | 7648 | Telecommunications equipment | 262.7 | 5.4 | 2515 | Chemical wood pulp | 284.7 | 4.9 |
| 1110 | Non-alcoholic beverages | 155.8 | 5.0 | 1110 | Non-alcoholic beverages | 215.5 | 4.4 | 7648 | Telecommunications equipment | 254.2 | 4.4 |
| 9710 | Gold | 129.8 | 4.2 | 9710 | Gold | 178.3 | 3.6 | 1110 | Non-alcoholic beverages | 246.2 | 4.2 |
| 5243 | Salts | 123.0 | 3.9 | 573 | Bananas | 167.9 | 3.4 | 7641 | Telephone sets | 159.2 | 2.7 |
| 548 | Vegetable products | 81.4 | 2.6 | 2312 | Natural rubber (other than latex) | 126.8 | 2.6 | 9710 | Gold | 155.6 | 2.7 |
| 7641 | Telephone sets | 78.4 | 2.5 | 548 | Vegetable products | 97.6 | 2.0 | 2312 | Natural rubber (other than latex) | 145.3 | 2.5 |
| 1222 | Cigarettes containing tobacco | 72.3 | 2.3 | 7641 | Telephone sets | 94.0 | 1.9 | 573 | Bananas | 112.2 | 1.9 |
| 2019 | | | | 2020 | | | | 2021 | | | |
| SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) |
| 3510 | Electric current | 1,326.9 | 22.8 | 3510 | Electric current | 830.9 | 16.3 | 3510 | Electric current | 1,633.1 | 22.8 |
| 2831 | Copper ores and concentrates | 589.4 | 10.1 | 9710 | Gold | 457.1 | 9.0 | 9710 | Gold | 961.6 | 13.4 |
| 6821 | Copper, refined and unrefined | 434.0 | 7.5 | 2831 | Copper ores and concentrates | 436.7 | 8.6 | 6415 | Paper and paperboard | 525.2 | 7.3 |
| 1110 | Non-alcoholic beverages | 229.2 | 3.9 | 11 | Bovine animals, live | 250.1 | 4.9 | 2831 | Copper ores and concentrates | 331.0 | 4.6 |
| 11 | Bovine animals, live | 226.7 | 3.9 | 573 | Bananas | 227.4 | 4.5 | 548 | Vegetable products | 285.0 | 4.0 |
| 7648 | Telecommunications equipment | 210.2 | 3.6 | 1110 | Non-alcoholic beverages | 213.1 | 4.2 | 2513 | Chemical wood pulp, dissolving grades | 269.8 | 3.8 |
| 573 | Bananas | 193.9 | 3.3 | 548 | Vegetable products | 210.6 | 4.1 | 2815 | Iron ores and concentrates | 246.0 | 3.4 |
| 9710 | Gold | 192.3 | 3.3 | 6821 | Copper, refined and unrefined | 205.5 | 4.0 | 573 | Bananas | 238.3 | 3.3 |
| 2312 | Natural rubber (other than latex) | 165.1 | 2.8 | 2312 | Natural rubber (other than latex) | 147.3 | 2.9 | 11 | Bovine animals, live | 222.3 | 3.1 |
| 2515 | Chemical wood pulp | 121.8 | 2.1 | 7648 | Telecommunications equipment | 146.3 | 2.9 | 1110 | Non-alcoholic beverages | 216.8 | 3.0 |

Source: UN Comtrade; AMRO staff calculations
Note: SITC = Standard International Trade Classification

## Appendix 3. Lao PDR's Top 10 Exported Goods by Region in 2021

| Africa | | | | Americas | | | | Asia | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) |
| 6415 | Paper and paperboard | 1.1 | 29.3 | 8514 | Other footwear | 22.4 | 28.7 | 3510 | Electric current | 1,633.1 | 25.7 |
| 5751 | Polymers of propylene | 1.0 | 27.4 | 8484 | Headgear | 13.1 | 16.8 | 6415 | Paper and paperboard | 523.4 | 8.2 |
| 1211 | Tobacco | 0.5 | 14.2 | 8212 | Mattress support | 12.3 | 15.8 | 9710 | Gold | 514.8 | 8.1 |
| 11 | Bovine animals, live | 0.3 | 7.6 | 8131 | Lamps | 5.4 | 7.0 | 2831 | Copper ores and concentrates | 330.9 | 5.2 |
| 7436 | Filtering or purifying machinery | 0.2 | 6.4 | 8942 | Tricycles, similar wheeled toys | 2.7 | 3.4 | 548 | Vegetable products | 285.0 | 4.5 |
| 5721 | Polystyrene | 0.2 | 5.8 | 1222 | Cigarettes | 2.2 | 2.9 | 2513 | Chemical wood pulp | 269.8 | 4.2 |
| 6552 | Other knitted fabrics | 0.1 | 2.0 | 8414 | Trousers | 2.2 | 2.8 | 2815 | Iron ores and concentrates | 246.0 | 3.9 |
| 2479 | Wood | 0.1 | 1.8 | 8458 | Other garments | 2.0 | 2.6 | 573 | Bananas | 238.3 | 3.7 |
| 8426 | Trousers | 0.1 | 1.5 | 8454 | T-shirts | 1.9 | 2.5 | 11 | Bovine animals, live | 222.1 | 3.5 |
| 7449 | Machinery parts | 0.1 | 1.5 | 8437 | Shirts | 1.8 | 2.3 | 1110 | Non-alcoholic beverages | 216.3 | 3.4 |
| Europe | | | | Oceania | | | | Others | | | |
| SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) | SITC Code | Product | Trade Value (USD mn) | Share (%) |
| 9710 | Gold | 115.6 | 31.3 | 9710 | Gold | 331.2 | 95.0 | 711 | Coffee | 1.1 | 19.5 |
| 8414 | Trousers | 64.9 | 17.5 | 7641 | Telephone sets | 10.0 | 2.9 | 8415 | Shirts | 0.8 | 14.0 |
| 8514 | Other footwear | 37.2 | 10.1 | 8514 | Other footwear | 1.6 | 0.5 | 6649 | Glass | 0.7 | 12.8 |
| 8453 | Jerseys, pullovers | 13.6 | 3.7 | 6343 | Plywood | 0.9 | 0.3 | 6415 | Paper and paperboard | 0.7 | 11.9 |
| 6674 | Synthetic or reconstructed precious stones | 12.6 | 3.4 | 8973 | Jewelry | 0.9 | 0.3 | 7731 | Insulated wire | 0.6 | 10.9 |
| 711 | Coffee | 12.2 | 3.3 | 8458 | Other garments | 0.8 | 0.2 | 5921 | Starch, inulin and wheat gluten | 0.3 | 5.9 |
| 8438 | Underpants | 12.2 | 3.3 | 8453 | Jerseys | 0.6 | 0.2 | 8514 | Other footwear | 0.3 | 5.2 |
| 8454 | T-shirts | 12.2 | 3.3 | 423 | Rice | 0.6 | 0.2 | 7781 | Batteries | 0.2 | 4.2 |
| 611 | Sugars | 10.6 | 2.9 | 8414 | Trousers | 0.6 | 0.2 | 1222 | Cigarettes | 0.2 | 3.3 |
| 8426 | Trousers | 9.8 | 2.6 | 8484 | Headgear | 0.4 | 0.1 | 6429 | Articles of paper pulp | 0.1 | 2.1 |

Source: UN Comtrade; AMRO staff calculations
Note: SITC = Standard International Trade Classification

## Appendix 4. Lao PDR's Top 10 Export Destinations

| 2010 | | | 2011 | | | 2012 | | |
|---|---|---|---|---|---|---|---|---|
| **Destination** | **Trade Value (USD mn)** | **Share (%)** | **Destination** | **Trade Value (USD mn)** | **Share (%)** | **Destination** | **Trade Value (USD mn)** | **Share (%)** |
| Thailand | 1,022.1 | 53.5 | Thailand | 841.7 | 44.3 | Thailand | 694.7 | 43.5 |
| Australia | 279.0 | 14.6 | Australia | 473.1 | 24.9 | Australia | 442.0 | 27.7 |
| China | 222.8 | 11.7 | Vietnam | 194.7 | 10.3 | Vietnam | 198.3 | 12.4 |
| Vietnam | 124.3 | 6.5 | China | 105.3 | 5.6 | China | 107.7 | 6.7 |
| United Kingdom (UK) | 53.8 | 2.8 | Japan | 49.1 | 2.6 | Japan | 30.5 | 1.9 |
| United States (US) | 38.7 | 2.0 | UK | 37.7 | 2.0 | Germany | 26.6 | 1.7 |
| Germany | 38.0 | 2.0 | Germany | 35.5 | 1.9 | UK | 13.7 | 0.9 |
| Japan | 26.9 | 1.4 | US | 34.9 | 1.8 | Switzerland | 9.2 | 0.6 |
| Switzerland | 14.2 | 0.7 | Netherlands | 21.4 | 1.1 | Korea | 8.1 | 0.5 |
| Belgium | 13.4 | 0.7 | Italy | 20.6 | 1.1 | Netherlands | 7.2 | 0.5 |
| **2013** | | | **2014** | | | **2015** | | |
| **Destination** | **Trade Value (USD mn)** | **Share (%)** | **Destination** | **Trade Value (USD mn)** | **Share (%)** | **Destination** | **Trade Value (USD mn)** | **Share (%)** |
| Thailand | 956.0 | 32.0 | Thailand | 916.7 | 35.6 | China | 1,039.5 | 34.8 |
| Australia | 721.7 | 24.2 | China | 705.2 | 27.4 | Thailand | 1,008.1 | 33.8 |
| China | 366.7 | 12.3 | Vietnam | 433.7 | 16.9 | Vietnam | 537.8 | 18.0 |
| Vietnam | 364.9 | 12.2 | Australia | 103.7 | 4.0 | Germany | 58.6 | 2.0 |
| Netherlands | 203.0 | 6.8 | Germany | 71.6 | 2.8 | Japan | 49.6 | 1.7 |
| Germany | 77.2 | 2.6 | Japan | 53.5 | 2.1 | UK | 42.0 | 1.4 |
| Japan | 60.7 | 2.0 | UK | 42.4 | 1.6 | India | 33.0 | 1.1 |
| UK | 59.8 | 2.0 | Netherlands | 40.9 | 1.6 | Netherlands | 30.6 | 1.0 |
| US | 31.5 | 1.1 | US | 25.0 | 1.0 | US | 23.7 | 0.8 |
| Belgium | 27.2 | 0.9 | Switzerland | 24.5 | 1.0 | Switzerland | 20.5 | 0.7 |

Source: UN Comtrade; AMRO staff calculations

| 2016 | | | 2017 | | | 2018 | | |
|---|---|---|---|---|---|---|---|---|
| Destination | Trade Value (USD mn) | Share (%) | Destination | Trade Value (USD mn) | Share (%) | Destination | Trade Value (USD mn) | Share (%) |
| China | 1,128.3 | 36.1 | Thailand | 2,363.3 | 48.1 | Thailand | 2,802.1 | 48.2 |
| Thailand | 977.4 | 31.3 | China | 1,239.8 | 25.3 | China | 1,546.5 | 26.6 |
| Vietnam | 538.1 | 17.2 | Vietnam | 722.8 | 14.7 | Vietnam | 885.3 | 15.2 |
| India | 87.5 | 2.8 | India | 161.8 | 3.3 | India | 128.8 | 2.2 |
| Japan | 58.0 | 1.9 | Japan | 70.8 | 1.4 | Japan | 86.4 | 1.5 |
| Germany | 50.9 | 1.6 | Germany | 60.9 | 1.2 | Germany | 74.7 | 1.3 |
| United Arab Emirates | 34.1 | 1.1 | UAE | 27.1 | 0.6 | Hong Kong, China | 31.6 | 0.5 |
| Swaziland | 31.3 | 1.0 | Switzerland | 23.8 | 0.5 | US | 26.9 | 0.5 |
| UK | 24.9 | 0.8 | Hong Kong, China | 23.0 | 0.5 | Sweden | 25.2 | 0.4 |
| Switzerland | 23.8 | 0.8 | US | 22.6 | 0.5 | Switzerland | 23.4 | 0.4 |
| 2019 | | | 2020 | | | 2021 | | |
| Destination | Trade Value (USD mn) | Share (%) | Destination | Trade Value (USD mn) | Share (%) | Destination | Trade Value (USD mn) | Share (%) |
| Thailand | 2,406.8 | 41.4 | Thailand | 1,765.2 | 34.7 | Thailand | 2,306.3 | 32.2 |
| China | 1,672.3 | 28.8 | China | 1,465.9 | 28.8 | China | 2,248.0 | 31.4 |
| Vietnam | 1,054.9 | 18.2 | Vietnam | 998.8 | 19.6 | Vietnam | 1,252.3 | 17.5 |
| Japan | 93.6 | 1.6 | India | 109.0 | 2.1 | Australia | 348.5 | 4.9 |
| India | 90.6 | 1.6 | Australia | 88.7 | 1.7 | Cambodia | 129.4 | 1.8 |
| Germany | 81.8 | 1.4 | Japan | 84.7 | 1.7 | Switzerland | 115.9 | 1.6 |
| Hong Kong, China | 58.7 | 1.0 | Germany | 76.3 | 1.5 | Singapore | 92.0 | 1.3 |
| Switzerland | 58.1 | 1.0 | Hong Kong, China | 50.1 | 1.0 | Hong Kong, China | 88.3 | 1.2 |
| US | 29.5 | 0.5 | Indonesia | 45.3 | 0.9 | Japan | 82.9 | 1.2 |
| Italy | 25.0 | 0.4 | Cambodia | 44.5 | 0.9 | Germany | 77.8 | 1.1 |

Source: UN Comtrade; AMRO staff calculations

## Appendix 5. Lao PDR's Top 10 Competitive Goods

| 2010 | | | | 2011 | | | | 2012 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SITC Code | Product | RSCA | Trade Value (USD mn) | SITC Code | Product | RSCA | Trade Value (USD mn) | SITC Code | Product | RSCA | Trade Value (USD mn) |
| 2225 | Sesame seeds | 0.992 | 70.6 | 2450 | Fuelwood | 0.984 | 15.4 | 2922 | Lac; natural gums | 0.984 | 8.1 |
| 6674 | Synthetic or reconstructed precious stones | 0.983 | 12.8 | 6674 | Synthetic or reconstructed precious stones | 0.979 | 12.1 | 615 | Molasses | 0.981 | 7.6 |
| 2831 | Copper ores and concentrates | 0.977 | 485.8 | 2831 | Copper ores and concentrates | 0.975 | 425.5 | 6821 | Copper, refined and unrefined | 0.977 | 603.4 |
| 449 | Other maize, unmilled | 0.976 | 228.8 | 6821 | Copper, refined and unrefined | 0.974 | 659.6 | 6825 | Copper plates, sheets and strips | 0.976 | 66.2 |
| 6999 | Semi-manufactures and articles of tungsten (wolfram) | 0.971 | 22.0 | 6825 | Copper plates, sheets and strips | 0.972 | 80.8 | 6674 | Synthetic or reconstructed precious stones | 0.972 | 7.0 |
| 6825 | Copper plates, sheets and strips | 0.968 | 84.7 | 2473 | Wood rough, painted | 0.968 | 3.4 | 2831 | Copper ores and concentrates | 0.960 | 216.6 |
| 577 | Edible nuts | 0.954 | 71.8 | 2923 | Vegetable materials | 0.960 | 1.0 | 2732 | Gypsum, plasters, limestone flux | 0.959 | 5.7 |
| 6821 | Copper, refined and unrefined | 0.952 | 379.5 | 2732 | Gypsum, plasters, limestone flux | 0.960 | 6.4 | 2450 | Fuelwood | 0.957 | 4.5 |
| 2923 | Vegetable materials | 0.922 | 0.5 | 2221 | Groundnuts (peanuts) | 0.957 | 12.5 | 2485 | Wood of non-coniferous species | 0.956 | 12.3 |
| 2485 | Wood of non-coniferous species | 0.919 | 9.2 | 2485 | Wood of non-coniferous species | 0.944 | 12.0 | 2483 | Wood of coniferous species | 0.950 | 5.9 |

| 2013 | | | | 2014 | | | | 2015 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SITC Code | Product | RSCA | Trade Value (USD mn) | SITC Code | Product | RSCA | Trade Value (USD mn) | SITC Code | Product | RSCA | Trade Value (USD mn) |
| 6674 | Synthetic or reconstructed precious stones | 0.980 | 18.0 | 2742 | Iron pyrites, unroasted | 0.998 | 8.1 | 5243 | Salts of metal acids | 0.978 | 113.7 |
| 6821 | Copper, refined and unrefined | 0.976 | 970.1 | 2814 | Roasted iron pyrites | 0.997 | 10.7 | 6674 | Synthetic or reconstructed precious stones | 0.976 | 19.6 |
| 2831 | Copper ores and concentrates | 0.976 | 650.8 | 6674 | Synthetic or reconstructed precious stones | 0.984 | 24.7 | 2831 | Copper ores and concentrates | 0.974 | 621.8 |
| 2742 | Iron pyrites, unroasted | 0.975 | 0.9 | 2831 | Copper ores and concentrates | 0.973 | 501.1 | 2311 | Natural rubber latex | 0.972 | 19.8 |
| 2922 | Lac; natural gums | 0.975 | 9.7 | 6821 | Copper, refined and unrefined | 0.970 | 615.2 | 6821 | Copper, refined and unrefined | 0.958 | 514.4 |
| 2814 | Roasted iron pyrites | 0.969 | 4.4 | 2311 | Natural rubber latex | 0.968 | 16.8 | 548 | Vegetable products | 0.951 | 31.2 |
| 2475 | Wood of non-coniferous species | 0.960 | 6.3 | 2484 | Wood of non-coniferous species | 0.947 | 48.6 | 1110 | Non-alcoholic beverages | 0.947 | 144.0 |
| 573 | Bananas | 0.957 | 61.6 | 1110 | Non-alcoholic beverages | 0.943 | 105.6 | 573 | Bananas | 0.940 | 54.8 |
| 2221 | Groundnuts (peanuts) | 0.940 | 12.8 | 548 | Vegetable products | 0.938 | 18.0 | 2732 | Gypsum, plasters, limestone flux | 0.926 | 7.1 |
| 2485 | Wood of non-coniferous species | 0.934 | 13.9 | 2475 | Wood of non-coniferous species | 0.938 | 4.0 | 7648 | Telecommunications equipment | 0.925 | 255.1 |

Source: UN Comtrade; AMRO staff calculations
Note: SITC = Standard International Trade Classification. Competitiveness is measured by computing the revealed symmetric comparative advantage (RSCA). A product is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive when it is negative, between -1 and 0.

| 2016 | | | | 2017 | | | | 2018 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SITC Code | Product | RSCA | Trade Value (USD mn) | SITC Code | Product | RSCA | Trade Value (USD mn) | SITC Code | Product | RSCA | Trade Value (USD mn) |
| 2814 | Roasted iron pyrites | 0.999 | 5.6 | 3510 | Electric current | 0.987 | 1,283.6 | 3510 | Electric current | 0.985 | 1,398.4 |
| 2876 | Tin ores and concentrates | 0.985 | 5.4 | 548 | Vegetable products | 0.976 | 97.6 | 548 | Vegetable products | 0.972 | 86.1 |
| 5243 | Salts of metal acids | 0.981 | 123.0 | 573 | Bananas | 0.960 | 167.9 | 2641 | Jute and other textile bast fibers | 0.958 | 0.2 |
| 548 | Vegetable products | 0.981 | 81.4 | 2831 | Copper ores and concentrates | 0.956 | 769.0 | 2312 | Natural rubber (other than latex) | 0.954 | 145.3 |
| 573 | Bananas | 0.981 | 197.8 | 2311 | Natural rubber latex | 0.953 | 25.7 | 2311 | Natural rubber latex | 0.952 | 22.9 |
| 2831 | Copper ores and concentrates | 0.975 | 728.0 | 6674 | Synthetic or reconstructed precious stones | 0.950 | 18.3 | 2831 | Copper ores and concentrates | 0.948 | 707.5 |
| 6674 | Synthetic or reconstructed precious stones | 0.947 | 9.4 | 1110 | Non-alcoholic beverages | 0.941 | 215.5 | 6674 | Synthetic or reconstructed precious stones | 0.944 | 20.8 |
| 1110 | Non-alcoholic beverages | 0.946 | 155.8 | 421 | Rice in the husk | 0.936 | 6.7 | 2876 | Tin ores and concentrates | 0.942 | 2.4 |
| 6821 | Copper, refined and unrefined | 0.943 | 376.7 | 5243 | Salts of metal acids | 0.935 | 57.9 | 6821 | Copper, refined and unrefined | 0.940 | 749.7 |
| 2312 | Natural rubber (other than latex) | 0.942 | 67.9 | 2312 | Natural rubber (other than latex) | 0.934 | 126.8 | 1110 | Non-alcoholic beverages | 0.939 | 246.2 |
| 2019 | | | | 2020 | | | | 2021 | | | |
| SITC Code | Product | RSCA | Trade Value (USD mn) | SITC Code | Product | RSCA | Trade Value (USD mn) | SITC Code | Product | RSCA | Trade Value (USD mn) |
| 3510 | Electric current | 0.984 | 1,326.9 | 548 | Vegetable products | 0.988 | 210.6 | 2513 | Chemical wood pulp | 0.987 | 269.8 |
| 2311 | Natural rubber latex | 0.980 | 52.3 | 2519 | Semi-chemical wood pulp | 0.986 | 117.2 | 548 | Vegetable products | 0.987 | 285.0 |
| 548 | Vegetable products | 0.979 | 112.0 | 2311 | Natural rubber latex | 0.983 | 67.2 | 2311 | Natural rubber latex | 0.978 | 65.7 |
| 2519 | Semi-chemical wood pulp | 0.978 | 73.6 | 2513 | Chemical wood pulp | 0.983 | 144.0 | 3510 | Electric current | 0.976 | 1,633.1 |
| 11 | Bovine animals, live | 0.974 | 226.7 | 3510 | Electric current | 0.981 | 830.9 | 11 | Bovine animals, live | 0.976 | 222.3 |
| 2513 | Chemical wood pulp | 0.972 | 90.2 | 11 | Bovine animals, live | 0.979 | 250.1 | 6415 | Paper and paperboard | 0.973 | 525.2 |
| 2312 | Natural rubber (other than latex) | 0.960 | 165.1 | 573 | Bananas | 0.966 | 227.4 | 573 | Bananas | 0.966 | 238.3 |
| 573 | Bananas | 0.958 | 193.9 | 2312 | Natural rubber (other than latex) | 0.965 | 147.3 | 2923 | Vegetable materials | 0.964 | 3.8 |
| 2876 | Tin ores and concentrates | 0.957 | 3.8 | 5623 | Mineral or chemical fertilizers, potassic | 0.946 | 131.4 | 5623 | Mineral or chemical fertilizers, potassic | 0.962 | 138.6 |
| 2831 | Copper ores and concentrates | 0.941 | 589.4 | 13 | Swine, live | 0.931 | 40.2 | 2312 | Natural rubber (other than latex) | 0.962 | 214.4 |

Source: UN Comtrade; AMRO staff calculations
Note: SITC = Standard International Trade Classification. Competitiveness is measured by computing the revealed symmetric comparative advantage (RSCA). A product is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive when it is negative, between -1 and 0.

## Appendix 6. Lao PDR's Top 10 Competitive Goods by Product Group in 2021

| Food and live animals (Trade value: USD1,188.7 million) | | | | | Beverages and tobacco (Trade value: USD272.9 million) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) | SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) |
| 548 | Vegetable products | 0.987 | 285 | 24.0 | 1110 | Non-alcoholic beverages | 0.912 | 216.8 | 79.5 |
| 11 | Bovine animals, live | 0.976 | 222.3 | 18.7 | 1222 | Cigarettes containing tobacco | 0.677 | 35.8 | 13.1 |
| 573 | Bananas | 0.966 | 238.3 | 20.0 | 1223 | Other manufactured tobacco | 0.181 | 4.8 | 1.8 |
| 13 | Swine, live | 0.917 | 27.1 | 2.3 | 1211 | Tobacco, not stemmed/stripped | 0.039 | 0.5 | 0.2 |
| 421 | Rice in the husk | 0.904 | 7.3 | 0.6 | 1123 | Beer | -0.009 | 5.5 | 2.0 |
| 612 | Other beet or cane sugar | 0.878 | 63.2 | 5.3 | 1124 | Spirits | -0.183 | 8.4 | 3.1 |
| 564 | Flour, meal, flakes, granules and pellets of potatoes | 0.853 | 7.7 | 0.6 | 1212 | Tobacco, wholly/partly stemmed/stripped | -0.354 | 1.0 | 0.4 |
| 711 | Coffee | 0.852 | 87.9 | 7.4 | 1121 | Wine from fresh grapes | -0.998 | 0.0 | 0.0 |
| 615 | Molasses | 0.845 | 4.4 | 0.4 | | | | | |
| 611 | Sugars, beet or cane | 0.773 | 33.3 | 2.8 | | | | | |
| Crude materials (Trade value: USD1,298.6 million) | | | | | Minerals and fuels (Trade value: USD1,646.7 million) | | | | |
| SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) | SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) |
| 2513 | Chemical wood pulp | 0.987 | 69.8 | 20.8 | 3510 | Electric current | 0.976 | 1,633.1 | 99.2 |
| 2311 | Natural rubber latex | 0.978 | 65.7 | 5.1 | 3211 | Anthracite | 0.377 | 2.5 | 0.2 |
| 2923 | Vegetable materials of a kind used primarily for plaiting | 0.964 | 3.8 | 0.3 | 3222 | Lignite | -0.380 | 0.9 | 0.1 |
| 2312 | Natural rubber (other than latex) | 0.962 | 214.4 | 16.5 | 3212 | Other coal | -0.606 | 10.1 | 0.6 |
| 2322 | Reclaimed rubber | 0.933 | 7.2 | 0.6 | 3250 | Coke & semi-coke | -0.994 | 0.0 | 0.0 |
| 2732 | Gypsum, plasters, limestone flux, limestone and other calcareous stone | 0.923 | 16.6 | 1.3 | 3346 | Petroleum oils | -1.000 | 0.1 | 0.0 |
| 2641 | Jute and other textile bast fibers | 0.915 | 0.4 | 0.0 | 3330 | Crude petroleum | -1.000 | 0.0 | 0.0 |
| 2485 | Wood of non-coniferous species | 0.894 | 18.3 | 1.4 | | | | | |
| 2831 | Copper ores and concentrates | 0.830 | 331.0 | 25.5 | | | | | |
| 2519 | Semi-chemical wood pulp and pulps of other fibrous cellulosic material | 0.819 | 12.3 | 0.9 | | | | | |

Source: UN Comtrade; AMRO staff calculations

Note: SITC = Standard International Trade Classification. Competitiveness is measured by computing the revealed symmetric comparative advantage (RSCA). A product is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive when it is negative, between -1 and 0, which are shaded in gray.

| Animal and vegetable oils (Trade value: USD0.4 million) | | | | | Chemicals and related products (Trade value: USD263.8 million) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) | SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) |
| 4113 | Animal oils, fats and greases | -0.631 | 0.3 | 65.3 | 5623 | Mineral or chemical fertilizers, potassic | 0.962 | 138.6 | 52.6 |
| 4229 | Other fixed vegetable fats | -0.686 | 0.1 | 34.3 | 5921 | Starch, inulin and wheat gluten | 0.876 | 36.8 | 14.0 |
| 4314 | Vegetable waxes | -0.968 | 0.0 | 0.4 | 5232 | Chlorides, chloride oxides and chloride hydroxides | 0.784 | 9.0 | 3.4 |
| | | | | | 5931 | Propellent powders and other prepared explosives | 0.428 | 0.8 | 0.3 |
| | | | | | 5222 | Other chemical elements | 0.364 | 10.8 | 4.1 |
| | | | | | 5535 | Pre-shave, shaving or aftershave preparations | 0.322 | 9.6 | 3.6 |
| | | | | | 5243 | Salts of metal acids | 0.321 | 15.6 | 5.9 |
| | | | | | 5799 | Waste, parings and scrap of other plastics | 0.152 | 0.7 | 0.3 |
| | | | | | 5719 | Other polymers of ethylene | 0.129 | 9.6 | 3.6 |
| | | | | | 5753 | Polyamides | 0.093 | 7.1 | 2.7 |
| Manufactured goods (Trade value: USD841.1 million) | | | | | Machinery and transport equipment (Trade value: USD287.2mn) | | | | |
| SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) | SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) |
| 6415 | Paper and paperboard, uncoated, in rolls or sheets | 0.973 | 525.2 | 62.4 | 7648 | Telecommunications equipment | 0.644 | 98.8 | 34.4 |
| 6612 | Portland cement | 0.920 | 91.1 | 10.8 | 7649 | Parts and accessories suitable for use solely or principally with the apparatus of division 76 | -0.054 | 24.0 | 8.3 |
| 6649 | Glass | 0.897 | 89.7 | 10.7 | 7711 | Transformers, electrical | -0.116 | 4.0 | 1.4 |
| 6674 | Synthetic or reconstructed precious or semiprecious stones | 0.781 | 12.6 | 1.5 | 7731 | Insulated and other insulated electric conductors | -0.189 | 34.7 | 12.1 |
| 6852 | Lead plates, sheets, strips and foil; lead powders and flakes | 0.661 | 0.5 | 0.1 | 7723 | Electrical resistors | -0.372 | 2.4 | 0.8 |
| 6851 | Lead and lead alloys, unwrought | 0.601 | 9.5 | 1.1 | 7641 | Telephone sets | -0.411 | 90.1 | 31.4 |
| 6533 | Fabrics, woven, of synthetic staple fibers | 0.542 | 4.5 | 0.5 | 7787 | Electrical machines and apparatus | -0.505 | 7.9 | 2.7 |
| 6764 | Other bars and rods of iron and steel | 0.505 | 4.7 | 0.6 | 7243 | Sewing machines | -0.523 | 0.6 | 0.2 |
| 6821 | Copper, refined and unrefined | 0.208 | 53.5 | 6.4 | 7339 | Other machine tools for working metal | -0.535 | 0.2 | 0.1 |
| 6538 | Fabrics, woven, of artificial staple fibers, containing less than 85% by weight of such fibers | 0.200 | 0.7 | 0.1 | 7444 | Jacks | -0.625 | 0.3 | 0.1 |

Source: UN Comtrade; AMRO staff calculations
Note: SITC = Standard International Trade Classification. Competitiveness is measured by computing the revealed symmetric comparative advantage (RSCA). A product is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive when it is negative, between -1 and 0, which are shaded in gray.

| Other manufactured goods (Trade value: USD400.2 million) | | | | | Others (Trade value: USD965.2 million) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) | SITC code | Product | RSCA | Trade value (USD mn) | Share within the group (%) |
| 8414 | Trousers, bib and brace overalls | 0.765 | 69.6 | 17.4 | 9710 | Gold | 0.766 | 961.6 | 99.6 |
| 8519 | Parts of footwear | 0.698 | 17.5 | 4.4 | 9310 | Special transactions and commodities not classified according to kind | -0.980 | 3.6 | 0.4 |
| 8514 | Other footwear | 0.690 | 79.0 | 19.7 | | | | | |
| 8438 | Underpants, briefs, nightshirts | 0.651 | 13.0 | 3.2 | | | | | |
| 8413 | Jackets and blazers | 0.619 | 8.2 | 2.0 | | | | | |
| 8415 | Shirts | 0.580 | 10.2 | 2.5 | | | | | |
| 8484 | Headgear and fittings therefor | 0.555 | 13.9 | 3.5 | | | | | |
| 8437 | Shirts | 0.518 | 6.7 | 1.7 | | | | | |
| 8811 | Photographic cameras | 0.512 | 3.6 | 0.9 | | | | | |
| 8458 | Other garments, not knitted or crocheted | 0.463 | 11.5 | 2.9 | | | | | |

Source: UN Comtrade; AMRO staff calculations

Note: SITC = Standard International Trade Classification. Competitiveness is measured by computing the revealed symmetric comparative advantage (RSCA). A product is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive when it is negative, between -1 and 0, which are shaded in gray.

## Appendix 7. Lao PDR's Top 10 Export Destinations of Competitive Goods

| 2010 (n = 83) | | 2011 (n = 81) | | 2012 (n = 75) | | 2013 (n = 94) | | 2014 (n = 108) | | 2015 (n = 105) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Destination | Count | Destination | Count | Destination | Count | Destination | Count | Destination | Count | Destination | Count |
| Thailand | 72 | Thailand | 55 | Thailand | 54 | Thailand | 65 | Thailand | 76 | Thailand | 71 |
| Vietnam | 40 | Vietnam | 40 | China | 41 | China | 62 | China | 66 | Vietnam | 67 |
| China | 35 | China | 35 | Vietnam | 40 | Vietnam | 52 | Vietnam | 60 | China | 61 |
| France | 26 | Japan | 22 | Japan | 22 | Japan | 34 | Japan | 36 | Japan | 30 |
| Germany | 22 | UK | 21 | US | 17 | US | 26 | France | 25 | Germany | 23 |
| UK | 21 | US | 20 | Germany | 16 | France | 23 | Germany | 24 | US | 21 |
| US | 21 | France | 17 | France | 12 | Germany | 22 | US | 23 | France | 18 |
| Japan | 17 | Germany | 16 | UK | 11 | UK | 22 | UK | 21 | UK | 17 |
| Netherlands | 16 | Korea | 13 | Netherlands | 11 | Australia | 18 | Korea | 20 | Korea | 17 |
| Australia | 12 | Italy | 11 | Malaysia | 10 | Hong Kong, China | 17 | Australia | 18 | Netherlands | 16 |
| Hong Kong, China | 12 | Netherlands | 11 | | | | | Netherlands | 18 | | |
| Italy | 12 | | | | | | | | | | |

| 2016 (n = 99) | | 2017 (n = 85) | | 2018 (n = 83) | | 2019 (n = 100) | | 2020 (n = 97) | | 2021 (n = 98) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Destination | Count | Destination | Count | Destination | Count | Destination | Count | Destination | Count | Destination | Count |
| Thailand | 69 | Thailand | 62 | Thailand | 65 | China | 70 | China | 62 | China | 62 |
| China | 54 | Vietnam | 50 | Vietnam | 48 | Thailand | 68 | Thailand | 60 | Thailand | 60 |
| Vietnam | 52 | China | 48 | China | 47 | Vietnam | 62 | Vietnam | 53 | Vietnam | 56 |
| Japan | 29 | Japan | 26 | Japan | 26 | Japan | 34 | Japan | 34 | Japan | 30 |
| Germany | 22 | US | 19 | US | 23 | Korea | 24 | US | 22 | Hong Kong, China | 17 |
| US | 20 | Germany | 18 | Germany | 18 | US | 24 | UK | 18 | US | 17 |
| Korea | 18 | France | 16 | Korea | 16 | Germany | 21 | Canada | 17 | Malaysia | 16 |
| France | 16 | Korea | 14 | France | 15 | Hong Kong, China | 21 | Germany | 17 | Netherlands | 16 |
| Hong Kong, China | 16 | Belgium | 13 | UK | 15 | Canada | 19 | France | 17 | Australia | 15 |
| Netherlands | 15 | Canada | 13 | Hong Kong, China | 15 | Australia | 18 | Netherlands | 16 | Canada | 15 |
| | | Hong Kong, China | 13 | Netherlands | 15 | | | | | France | 15 |

Source: UN Comtrade; AMRO staff calculations
Note: "n" represents the total types of competitive goods exported in the relevant year. Competitiveness is measured by computing the revealed symmetric comparative advantage (RSCA). A product is deemed competitive when the RSCA value is positive, between 0 and 1, and uncompetitive when it is negative, between -1 and 0.

## Appendix 8. Lao PDR's Competitive and High Export Value Goods in 2021

| SITC code | Product | RSCA | Trade value (USD mn) |
|---|---|---|---|
| 2513 | Chemical wood pulp, dissolving grades | 0.987 | 269.8 |
| 548 | Vegetable products, roots and tubers, chiefly for human food | 0.987 | 285.0 |
| 2311 | Natural rubber latex, whether/not prevulcanized | 0.978 | 65.7 |
| 3510 | Electric current | 0.976 | 1,633.1 |
| 11 | Bovine animals, live | 0.976 | 222.3 |
| 6415 | Paper and paperboard, uncoated, in rolls or sheets | 0.973 | 525.2 |
| 573 | Bananas (including plantains), fresh/dried | 0.966 | 238.3 |
| 2923 | Vegetable materials of a kind used primarily for plaiting | 0.964 | 3.8 |
| 5623 | Mineral or chemical fertilizers, potassic | 0.962 | 138.6 |
| 2312 | Natural rubber (other than latex) | 0.962 | 214.4 |
| 2322 | Reclaimed rubber; waste and scrap of unhardened rubber | 0.933 | 7.2 |
| 2732 | Gypsum, plasters, limestone flux, limestone and other calcareous stone | 0.923 | 16.6 |
| 6612 | Portland cement, aluminous cement, slag cement, supersulphate cement | 0.920 | 91.1 |
| 13 | Swine, live | 0.917 | 27.1 |
| 1110 | Non-alcoholic beverages | 0.912 | 216.8 |
| 421 | Rice in the husk (paddy/rough rice) | 0.904 | 7.3 |
| 6649 | Glass | 0.897 | 89.7 |
| 2485 | Wood of non-coniferous species | 0.894 | 18.3 |
| 612 | Other beet or cane sugar and chemically pure sucrose, in solid form | 0.878 | 63.2 |
| 5921 | Starches, inulin and wheat gluten | 0.876 | 36.8 |
| 564 | Flour, meal, flakes, granules and pellets of potatoes, fruits and vegetables | 0.853 | 7.7 |
| 711 | Coffee, not roasted, whether or not decaffeinated | 0.852 | 87.9 |
| 615 | Molasses resulting from the extraction or refining of sugar | 0.845 | 4.4 |
| 2831 | Copper ores & concentrates | 0.830 | 331.0 |
| 2519 | Semi-chemical wood pulp and pulps of other fibrous cellulosic material | 0.819 | 12.3 |
| 2450 | Fuel wood (excluding wood waste) and wood charcoal | 0.809 | 6.3 |
| 2891 | Precious metal ores and concentrates | 0.802 | 32.0 |
| 2876 | Tin ores & concentrates | 0.787 | 1.4 |
| 5232 | Chlorides, chloride oxides and chloride hydroxides; bromides | 0.784 | 9.0 |

| 6674 | Synthetic or reconstructed precious or semiprecious stones | 0.781 | 12.6 |
| 611 | Sugars, beet or cane, raw, in solid form, not containing added flavouring | 0.773 | 33.3 |
| 9710 | Gold, non-monetary (excluding gold ores and concentrates) | 0.766 | 961.6 |
| 8414 | Trousers, bib & brace overalls, breeches & shorts, men's/boys' | 0.765 | 69.6 |
| 2479 | Woods in the rough/roughly squared | 0.752 | 9.0 |
| 2874 | Lead ores & concentrates | 0.752 | 14.0 |
| 2734 | Pebbles, gravel, broken/crushed stone | 0.701 | 6.3 |
| 8519 | Parts of footwear | 0.698 | 17.5 |
| 8514 | Other footwear with uppers of leather or composition leather | 0.690 | 79.0 |
| 1222 | Cigarettes containing tobacco | 0.677 | 35.8 |
| 12 | Sheep and goats, live | 0.670 | 2.2 |
| 2473 | Wood rough, painted | 0.663 | 1.1 |
| 8438 | Underpants, briefs, nightshirts, pyjamas, bathrobes, dressing-gowns | 0.651 | 13.0 |
| 7648 | Telecommunications equipment | 0.644 | 98.8 |
| 14 | Poultry, live | 0.640 | 4.9 |
| 2221 | Groundnuts (peanuts), not roasted or otherwise cooked | 0.627 | 5.4 |
| 752 | Spices (except pepper and pimento) | 0.625 | 12.4 |
| 481 | Cereal grains, worked or prepared in a manner not elsewhere specified | 0.623 | 12.5 |
| 8413 | Jackets & blazers, men's/boys', of textile materials, not knitted/crocheted | 0.619 | 8.2 |
| 2815 | Iron ores & concentrates, not agglomerated | 0.601 | 246.0 |
| 6851 | Lead and lead alloys, unwrought | 0.601 | 9.5 |
| 8415 | Shirts | 0.580 | 10.2 |
| 8484 | Headgear and fittings therefo | 0.555 | 13.9 |
| 579 | Fruit, fresh or dried | 0.551 | 64.2 |
| 423 | Rice, semi-milled or wholly milled | 0.546 | 27.8 |
| 6533 | Fabrics, woven, of synthetic staple fibres | 0.542 | 4.5 |
| 8437 | Shirts | 0.518 | 6.7 |
| 8811 | Photographic (other than cinematographic) cameras | 0.512 | 3.6 |
| 6764 | Other bars and rods of iron and steel | 0.505 | 4.7 |
| 168 | Meat and edible meat offal | 0.488 | 1.2 |
| 471 | Cereal flours (other than of wheat or meslin) | 0.473 | 1.0 |

| 713 | Extracts, essences and concentrates of coffee | 0.470 | 7.3 |
|---|---|---|---|
| 561 | Vegetables, dried (excluding leguminous vegetables), whole, cut | 0.466 | 3.7 |
| 8458 | Other garments, not knitted or crocheted | 0.463 | 11.5 |
| 545 | Other fresh or chilled vegetables | 0.441 | 33.1 |
| 3211 | Anthracite, whether/not pulverized, but not agglomerated | 0.377 | 2.5 |
| 5222 | Other chemical elements | 0.364 | 10.8 |
| 2875 | Zinc ores & concentrates | 0.344 | 7.5 |
| 5535 | Pre-shave, shaving or aftershave preparations, personal deodorants | 0.322 | 9.6 |
| 5243 | Salts of metal acids; organic and inorganic compounds of precious metals | 0.321 | 15.6 |
| 2225 | Sesame (Sesamum) seeds | 0.302 | 1.5 |
| 8212 | Mattress supports; articles of bedding or similar furnishings | 0.248 | 12.9 |
| 2515 | Chemical wood pulp, soda or sulphate, other than dissolving grades | 0.227 | 14.1 |
| 6821 | Copper, refined and unrefined; copper anodes for electrolytic refining | 0.208 | 53.5 |
| 1223 | Other manufactured tobacco (including smoking and chewing tobacco, snuff) | 0.181 | 4.8 |
| 8511 | Footwear incorporating a protective metal toecap | 0.148 | 1.3 |
| 8412 | Suits and ensembles | 0.142 | 2.0 |
| 741 | Tea, whether or not flavoured | 0.142 | 3.8 |
| 8974 | Other articles of precious metal or of metal clad with precious metal | 0.135 | 3.4 |
| 8999 | Manufactured goods | 0.135 | 5.6 |
| 5719 | Other polymers of ethylene, in primary forms | 0.129 | 9.6 |
| 6353 | Builders' joinery and carpentry of wood, including cellular wood panels | 0.127 | 7.7 |
| 5753 | Polyamides | 0.093 | 7.1 |
| 8426 | Trousers, bib & brace overalls, breeches & short, women's/girls' | 0.087 | 10.6 |
| 8454 | T-shirts, singlets & other vests, knitted/crocheted | 0.087 | 15.5 |
| 449 | Other maize, unmilled | 0.072 | 18.4 |
| 6794 | Other tubes, pipes and hollow profiles | 0.018 | 10.2 |
| *Threshold* | | *0.000* | *1* |

Source: UN Comtrade; AMRO staff calculations
Note: SITC = Standard International Trade Classification. Competitive and high export value goods are those that have positive revealed comparative symmetric advantage (RSCA) values and are above USD1million of export value. This table lists 86 products among 529 types that sLaos PDR exported in 2021 and is ordered from the highest RSCA-value product.

**References**

Akamatsu, K. 1961. "A Theory of Unbalanced Growth in the World Economy." *Weltwirtschaftliches Archiv* 86: 196-217.

———. 1962. "A historical pattern of economic growth in developing countries." *The Developing Economies* 1: 3-25. https://doi.org/10.1111/j.1746-1049.1962.tb01020.x

ASEAN Promotion Centre on Trade, Investment and Tourism. 2021. "Global Value Chains in ASEAN: Lao People's Democratic Republic." Paper 5. ASEAN-Japan Center: Tokyo. https://www.asean.or.jp/main-site/wp-content/uploads/2024/03/GVC_Laos_Paper-5_full_20210324-web.pdf

Dalum, B., K. Laursen and G. Villumsen. 1998. "Structural change in OECD export specialization patterns: de-specialization and 'stickiness'." *International Review of Applied Economics* 12: 447-467.

Department of Foreign Trade Policy. Trade Agreements. Ministry of Industry and Commerce. Lao People's Democratic Republic. https://www.dftp.moic.gov.la/en/ [Accessed March 18, 2024]

Hara, Y. and Shuto, H. 2005. "Trade structures and export competitiveness in Lao PDR and the East Asian countries." *Main Report on Macroeconomic Policy Support for Socio-economic Development in Lao PDR (Phase II).* Committee for Planning and Investment Lao People's Democratic Republic and Japan International Cooperation Agency. pp. 7-24. https://openjicareport.jica.go.jp/pdf/11802832.pdf

Hidalgo, C.A. and Hausmann R. 2009. "The building blocks of economic complexity." Proceedings of the National Academy of Sciences of the United States of America. 106 (26): 10570-10575. https://doi.org/10.1073/pnas.0900943106

Hecksher, E.F. 1919. "The effect of foreign trade on the distribution of income," in Howard S. Ellis and Lloyd A. Metzler. eds. *Readings in the Theory of International Trade*. 1949. American Economic Association: Philadelphia, Blakiston.

Japan External Trade Organization. EPA/FTA, WTO Database. https://www.jetro.go.jp/theme/wto-fta/ftalist/ [Accessed March 18, 2024]

Krugman, P. 1980. "Scale Economies, Product Differentiation, and the Pattern of Trade." *The American Economic Review* 70: 950-59.

Laursen, K. 1998. "Revealed comparative advantage and the alternatives as measures of international specialization." *DRUID Working Paper*. No. 98-30. Danish Research Unit for Industrial Dynamics (DRUID).

———. 2015. "Revealed comparative advantage and the alternatives as measures of international specialization." *Eurasian Bus Rev*. 5: 99-115. https://doi.org/10.1007/s40821-015-0017-1

Ministry of Planning and Investment. 2021. "9th Five-Year National Socio-Economic Development Plan (2021-2025)." Lao People's Democratic Republic.

Ohlin, B. 1933. "Interregional and International Trade." Harvard University Press: Cambridge, Massachusetts.

Organisation for Economic Co-operation and Development (OECD). Ocean shipping and shipbuilding. https://www.oecd.org/ocean/topics/ocean-shipping/ [Accessed March 18, 2024]

Ricardo, D. 1817. "On the Principles of Political Economy and Taxation." John Murray: London. https://www.econlib.org/library/Ricardo/ricP.html

Shohibul, A. 2013. "Revealed Comparative Advantage Measure: ASEAN-China Trade Flows." *Journal of Economics and Sustainable Development* 4 (7): 136-145. https://core.ac.uk/download/pdf/234645942.pdf

The Growth Lab at Harvard University. The Atlas of Economic Complexity. http://www.atlas.cid.harvard.edu.

Torok, A. and Jambor, A. 2016. "Determinants of the revealed comparative advantages: The case of the European ham trade." *Agricultural Economics.* – Czech 62: 471-482. https://agricecon.agriculturejournals.cz/pdfs/age/2016/10/03.pdf

United Nations Statistics Division. 2006. "Standard International Trade Classification (SITC) Revision 4." *Statistical Papers.* Series M No. 34. Rev. 4. United Nations: New York. https://unstats.un.org/unsd/publication/SeriesM/SeriesM_34rev4E.pdf

———. 2018. "Classification by Broad Economic Categories Rev. 5." *Statistical Papers.* Series M No. 53, Rev. 5. United Nations: New York. https://unstats.un.org/unsd/trade/classifications/SeriesM_53_Rev.5_17-01722-E-Classification-by-Broad-Economic-Categories_PRINT.pdf

———. UN Comtrade Database. https://comtradeplus.un.org/ [Accessed March 18, 2024]

United States International Trade Administration. 2022. "Trade Agreements." Laos-Country Commercial Guide. https://www.trade.gov/country-commercial-guides/laos-trade-agreements [Accessed March 18, 2023]

United States International Trade Commission. 2021. "Raspberries for Processing: Conditions of Competition between U.S. and Foreign Suppliers, with a Focus on Washington State." Publication Number: 5194. Investigation Number: 332-577. Washington DC. https://www.usitc.gov/publications/332/pub5194.pdf

Vixathep, S. 2011. "Trade Liberalization and Comparative Advantage Dynamics in Lao PDR." *Lao Trade Research Digest* II.

Vollrath, T. L. 1991. "A theoretical evaluation of alternative trade intensity measures of revealed comparative advantage." *Weltwirtschaftliches Archiv* 127: 265-80.

Widodo, Tri. 2009 (a). "Comparative Advantage: theory, empirical measures and case studies." *Review of Economic and Business Studies* Issue 4: 57-82.

———. 2009 (b). "Dynamic Comparative Advantages in the ASEAN+3." *Journal of Economic Integration* 24 (3): 505-529.

World Bank. 2020. "Accelerating Digitalization: Critical Actions to Strengthen the Resilience of the Maritime Supply Chain." Washington DC. https://thedocs.worldbank.org/en/doc/773741610730436879-0190022021/original/AcceleratingDigitalizationAcrosstheMaritimeSupplyChain.pdf

World Trade Organization. Preferential Trade Agreements Database. http://ptadb.wto.org/Country.aspx?code=418 [Accessed March 18, 2024]

———. Regional Trade Agreements Database. http://rtais.wto.org/UI/PublicSearchByMemberResult.aspx?MemberCode=418&lang=1&redirect=1 [Accessed March 18, 2024]