ASEAN +3 MACROECONOMIC RESEARCH OFFICE

AMRO Annual Consultation Report

Lao PDR - 2024

ASEAN+3 Macroeconomic Research Office (AMRO)

December 2024

Acknowledgments

1. This Annual Consultation Report on Lao PDR has been prepared in accordance with the functions of AMRO to monitor and assess the macroeconomic status and financial soundness of its members; identify relevant risks and vulnerabilities; report these to member authorities; and if requested, assist them in mitigating these risks through the timely formulation of policy recommendations. This is being done in accordance with Article 3 (a) and (b) of the AMRO Agreement.

2. This Report is drafted on the basis of the Annual Consultation Visit of AMRO to Lao PDR from June 17 to 28, 2024 (Article 5 (b) of the AMRO Agreement). The AMRO Mission team was led by Dr. Sumio Ishikawa (Mission Chief) and joined by Dr. Nguyen Thi Kim Cuc (Deputy Mission Chief), Ms. Poh Lynn Ng (Desk Economist), Ms. Ravisara Hataiseree (Fiscal Specialist), Mr. Naoaki Inayoshi (Economist), Mr. Akifumi Fujii (Economist), Mr. Somphone Changdabout (Associate), and Mr. Thai Yangsingkham (Associate). AMRO Director Dr. Kouqing Li and Chief Economist Dr. Hoe Ee Khor also participated in key policy meetings with the authorities. The AMRO Annual Consultation Report on Lao PDR for 2024 was peer-reviewed by a group of economists from AMRO's Country Surveillance, Financial Surveillance and Fiscal Surveillance teams; endorsed by the Policy and Review Group; and approved by Chief Economist Dr. Hoe Ee Khor.

3. The analysis in this Report is based on information available up to August 30, 2024.

4. By making any designation of or reference to a particular territory or geographical area, or by using the term "member" or "country" in this Report, AMRO does not intend to make any judgments as to the legal or other status of any territory or area.

5. On behalf of AMRO, the ACV team wishes to thank the Lao PDR authorities for their comments on this Report, as well as their excellent meeting arrangements and hospitality during our visit.

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Executive Summary

1. The Lao PDR economy is projected to sustain a moderate recovery. Real GDP growth slowed to 4.2 percent in 2023 as El Niño weather conditions dampened hydropower and agricultural production. GDP is projected to expand by 4.5 percent in 2024, supported by a recovery in the electricity sector and continued growth in tourism and logistics activities. The growth outlook is nevertheless constrained by elevated inflation and kip depreciation, along with increased labor migration.

2. Inflation is expected to persist at a double-digit rate. Consumer price inflation accelerated to 31.2 percent in 2023 from 23.0 percent in 2022, with food prices increasing at the fastest rate. The high inflation was fueled by the rapid increase in the monetary base and the depreciation of the Lao kip. Prolonged high inflation and depreciation of the kip have accelerated inflationary expectations, contributing to the persistent rise in consumer prices. CPI inflation is projected to remain high at about 25 percent in 2024.

3. The external position is still vulnerable. The overall balance of payments (BOP) recorded a surplus in 2023 due to a current account surplus, higher FDI inflows associated with a one-off large transaction in the energy sector, and the government's continued suspension of debt repayments to major creditors. Moving forward, elevated debt repayment burdens will continue to put pressure on the external balance amid a foreign reserve buffer that is still low.

4. The Laotian kip has extended its depreciation trend. In 2023, the commercial bank exchange rate depreciated by 23.5 percent against the U.S. dollar, while the commercial-parallel rate gap averaged 6.76 percent. The weakening of the kip reflected ample kip liquidity, while heightened expectations of further kip depreciation have intensified currency substitution into the U.S. dollar. The Bank of the Lao PDR (BOL) implemented regulations mandating the minimum repatriation and conversion of export earnings into Lao kip.

5. The central bank has stepped up measures to absorb kip liquidity. The BOL's purchase of government bonds from 2021 drove a rapid expansion in the monetary base. To mop up liquidity, the BOL issued bills to the public and raised the reserve requirement ratio in 2022-2023. While the monetary base growth has slowed since mid-2023, real kip interest rates remain highly negative. The BOL has now switched to issuing short-term papers to mop up liquidity in the banks.

6. The government registered a fiscal surplus of 0.7 percent of GDP in 2023, driven by strengthened revenue collection. Growth in tax revenues was driven by a further expansion of the value-added tax (VAT) base, a lump-sum tax collection from the cryptocurrency sector, and hydropower royalties. The fiscal balance is expected to revert to moderate deficits in 2024 and 2025, in line with the government's five-year plan.

7. A moderation in the public debt-to-GDP ratio is conditional on macroeconomic stabilization. The public debt-to-GDP ratio increased to 103 percent in 2023, driven by sharp kip depreciation and the recognition of public investment arrears. The projected moderation in the debt ratio over the medium term is highly contingent on an improvement in macroeconomic conditions, especially a decline in inflation and a stabilization of the kip.

8. Further kip depreciation and persistently high inflation would exacerbate the current macro-financial instability. Continued kip depreciation would lead to higher import prices and fuel a further increase in consumer prices. External debt burdens would also rise, exacerbating already strained government finances. An intensification of currency substitution would lead to a further depreciation of the kip and dollarization of the banking sector while complicating the effective conduct of monetary policy.

9. Extreme weather events could dampen economic growth. In 2023, decreased precipitation due to El Niño conditions led to less hydropower electricity output. Natural disasters such as droughts and floods would affect agriculture and electricity production, driving up inflation.

10. Risks to public debt sustainability persist amid elevated external debt service. Negative macroeconomic shocks, including a growth downturn and sharp kip depreciation, pose major threats to debt sustainability. There is also a risk of a renewed arrears buildup if fiscal discipline is not strictly enforced. The government faces significant challenges in issuing offshore bonds, exacerbated by its sovereign rating downgrade in the Thai market. Refinancing risks and costs have also increased, due to higher reliance on short-term debt rollovers.

11. Pockets of financial vulnerabilities remain in the banking system. The capital buffer of the largest state-owned bank fell well below the minimum ratio. The currently low official non-performing loan ratio reported by banks could rise significantly upon the termination of regulatory forbearance. Banks' asset quality remains vulnerable to the financial weakness in major electricity companies.

12. The BOL should consistently maintain a tight monetary policy stance to stabilize the kip and to anchor inflationary expectations. To restrain monetary base expansion, the BOL should sterilize liquidity injections from its future purchases of government bonds. AMRO welcomes the BOL's recent switch to issuing short-term instruments to banks to mop up excess liquidity. Further RRR increases could also be considered.

13. AMRO encourages the authorities to accelerate market-friendly foreign exchange policy measures. Alongside the widening of the trading band, the BOL should consider adjusting the reference rate to narrow the gap between commercial bank and parallel exchange rates. Repatriation and conversion requirements should be time-bound and periodically assessed, with policy details clearly communicated in a timely manner.

14. Policy measures to address banking-sector vulnerabilities should be enhanced. Raising the capital buffer of a systematically important bank to at least the minimum regulatory level will help to improve its soundness and facilitate financial intermediation. Upon the termination of regulatory forbearance, banks should properly recognize non-viable loans and set aside provisions for those loans accordingly. The BOL's timely and clear guidance is needed to ensure a smooth transition to Basel II standards and IFRS 9 among banks.

15. Fiscal discipline needs to be strengthened to restore fiscal sustainability. The government should outline specific measures to achieve medium-term fiscal plan targets. Public financial management systems should be improved to prevent arrears from accumulating again.

16. Revenue mobilization should be continued to raise more revenue to support growth-enhancing expenditure. The tax base should be expanded, with an increase in the share of income-based taxes. Leveraging electronic tax systems could broaden the tax base and reduce tax compliance costs. Tax refunds can be expedited with the development of risk-based audits.

17. The government should consider a comprehensive debt restructuring plan over the medium-to-long term with its main creditors. With external debt servicing projected to remain elevated, this would help to lower the government's annual debt service payments to more sustainable levels. The government should also prepare for the future transfer of hydropower assets under the Build-Operate-Transfer scheme to reap its benefits.

18. Reforms of state-owned enterprises should be accelerated to mitigate the risk of the materialization of government contingent liabilities. To ease the financial burden of the state-owned Électricité du Laos (EDL), the average electricity tariff should be raised to the cost recovery level. Greater transparency with regards to EDL's business performance and financial conditions is crucial, including the timely publication of audited financial statements.

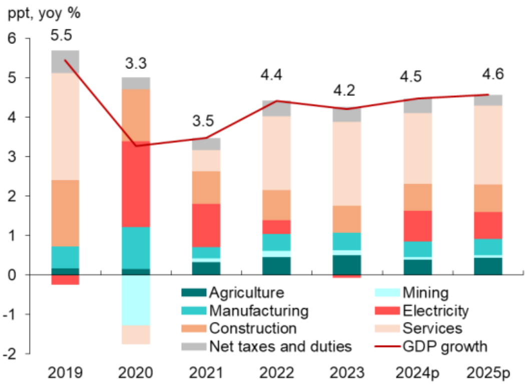
19. More ambitious structural reforms and infrastructure investment are needed to promote inclusive and sustainable growth. The authorities should remain committed to improving the country's transport and connectivity infrastructure. These efforts should be accompanied by appropriate regulations and incentives to create a business-friendly environment. Lao PDR also needs to make more progress in its efforts to address the adverse effects of climate change.

A. Recent Developments and Outlook

A.1 Real Sector Developments and Outlook

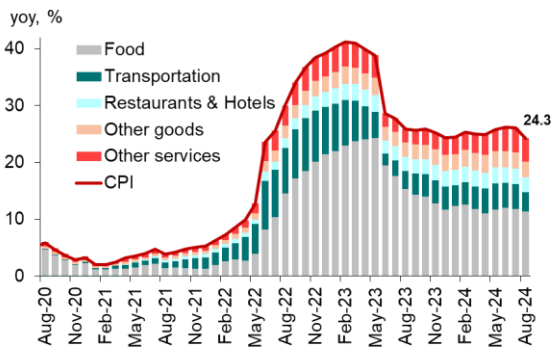
1. The Lao PDR economy is expected to sustain a moderate recovery, yet significant macroeconomic challenges are hampering its growth prospects. Real GDP grew by 4.2 percent in 2023, lower than the 4.4 percent recorded in 2022 (Figure 1). Dry El Niño weather conditions disrupted and reduced hydropower and agricultural production during the year, while agriculture exports contracted. These weaknesses, however, were partially offset by a robust expansion in the service sector, driven by a strong recovery in tourism-related and logistics activity,[1] which was supported by improved connectivity infrastructure.[2] A recovery in the electricity sector[3] and continued growth in services are expected to support a pickup in real GDP growth to 4.5 percent in 2024.[4] Nevertheless, Lao PDR continues to grapple with challenging macroeconomic conditions. In particular, the balance of payments has come under stress from heavy debt service payments, which has in turn put downward pressure on the exchange rate. In addition, weakness in the Laotian kip has been exacerbated by ample liquidity of the local currency. Persistent double-digit inflation has eroded real wages and household income, constraining private consumption. Furthermore, the highly uncertain economic prospects, including the high inflation and continued depreciation of the kip, are driving an increase in outward migration,[5] resulting in growing domestic labor shortages.

Figure 1.Contribution to GDP Growth



Source: Lao Statistics Bureau; AMRO staff estimates

Figure 2. Inflation



Source: Lao Statistics Bureau; AMRO staff estimates

2. Inflation is expected to remain elevated. Consumer price inflation accelerated to 31.2 percent in 2023 from 23.0 percent in 2022 (Figure 2). Double-digit price increases were seen across all categories of the CPI basket. Food, which accounts for almost half of the basket, experienced the highest rate of inflation, with prices rising by 38.0 percent. In the first eight months of 2024, CPI inflation moderated from a high base but remained elevated at an average

[1] International tourist arrivals surged threefold from 2022 to reach 3.4 million in 2023, with tourism receipts rising substantially to USD962 million from USD264 million. The rebound in tourism boosted growth in various service sub-sectors, including accommodation and food services, wholesale and retail trade, as well as transport and logistics. The Ministry of Information, Culture and Tourism has announced a target of 4.6 million international tourist arrivals for 2024, and has recorded over 2 million in the first half of the year.

[2] Notable infrastructure completions in recent years included the Laos-China Railway and the Thanaleng dry port.

[3] New projects include: (i) a 600 MW Monsoon Wind Power Project in Xekong province and Attapeu province, which started construction and installed the first wind turbine in 2023, and (ii) a 1,200 MW wind power project in Savannakhet province, which signed a project development agreement with the government in 2024.

[4] Preliminary estimates by the Lao Statistics Bureau showed that real GDP grew by 4.7 percent in the first quarter of 2024, up from 4.1 percent in Q4 2023.

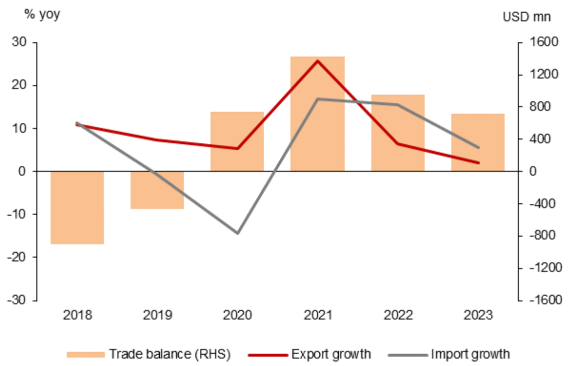
[5] On June 13, 2024, the Ministry of Labour and Social Welfare reported that more than 415,000 Lao workers were employed abroad, about half of whom were in illegal employment.

year-on-year rate of 25.3 percent. Despite lower global oil and food prices, inflation in Lao PDR has not fallen back to its pre-Ukraine war level as in the neighboring economies. It appears that inflation has become de-anchored from pre-pandemic levels because of the sharp depreciation of the kip which was exacerbated by the massive increase in monetary base. High inflation and kip depreciation have driven up inflationary expectations, which has contributed to the persistent rise in consumer prices (Selected Issue 1).[6] CPI inflation is expected to remain high at about 25 percent in 2024. Ongoing kip weakness and elevated inflationary expectations will continue to exert upward pressure on inflation.

A.2 External Sector and the Balance of Payments

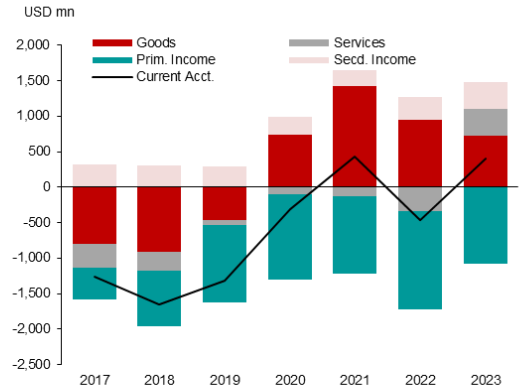
3. The overall balance of payments shifted to a surplus in 2023, but the external position is still vulnerable. The current account turned into a surplus equivalent to 2.9 percent of GDP as improvements in the service account, as well as in the primary and secondary income balances, more than offset a narrower trade surplus (Figure 3 and 4). Notably, a robust rebound in tourism revenue amid slower recovery in outbound travel shifted the service account deficit into a surplus (Figure 4).[7] The financial account continued to register net inflows, due mainly to record-high FDI inflows, but this was in turn because of a significant one-off transaction in the energy sector.[8] Portfolio investments saw net outflows owing to substantial repayments of maturing bonds by both the public and private sectors. Continued suspension of debt repayments in the public sector helped mitigate the magnitude of net "other investment" outflows.[9] Against this backdrop, the overall balance of payments registered a surplus of USD197 million. Gross international reserves[10] rose from USD 1.48 million in 2022 to USD 1.68 billion as at end-2023, sufficient to finance 2.3 months of imports. Nevertheless, Lao PDR's external position remains vulnerable, with reserve buffers still low and debt repayment burdens projected to remain elevated going forward.

Figure 3. Trade Balance



Source: BOL

Figure 4. Current Account

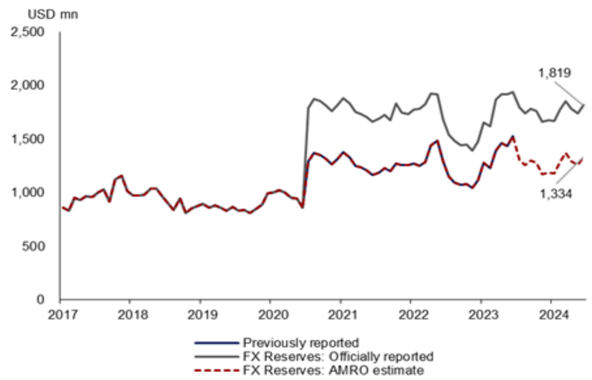


Source: BOL

[6] Selected Issue 1 shows people's expectations of inflation and kip depreciation were positively associated with CPI inflation. For instance, CPI increased by 0.34 percent on a month-on-month basis when inflationary expectations, represented by the previous month's CPI month-on-month inflation, rose by 1 percent. Similarly, CPI increased by 0.14 percent on a month-on-month basis when kip depreciation expectations, represented by the gap between the parallel and bank rates against the U.S. dollar in the previous month, rose by 1 percent. In addition, expanding monetary aggregates (broad money) were found to be positively correlated with CPI inflation. The transmission likely happened through credit and exchange rate channels.
[7] Going forward, service receipts will also receive a boost from a projected increase in transport and other service receipts, supported by the Laos-China Railway and further development of logistic facilities.
[8] The transaction involved Chinese FDI of USD625 million to an electricity transmission company called EDL-T.
[9] "Other investment" outflows in 2023 were mainly attributed to the private sector's increased acquisition of foreign assets and continued repayment of external debt obligations.
[10] This is an updated amount published by the authorities in July 2023, and includes a foreign-exchange swap transaction with the People's Bank of China as part of Lao PDR's foreign assets. As of July 2020, the new data is higher than the previous statistic by USD501 million. However, full information on the swap agreement and its activation has not been disclosed.

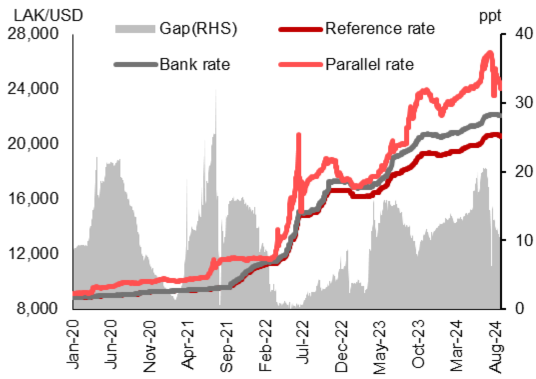
4. The kip has continued to depreciate at a rapid pace. Despite the surplus in the overall BOP and increase in gross international reserves (Figure 5), the kip continued to depreciate in 2023, with the commercial bank exchange rate sliding by 22.6 percent against the Thai baht and 23.5 percent against the U.S. dollar.[11] Parallel kip exchange rates also experienced steep declines, with the kip depreciating by about 21 percent against the U.S. dollar in 2023, while the gap between the commercial bank rate and parallel rate averaged 6.76 percent.[12] As of end-August 2024, the kip had weakened by a further 5.8 percent (year-to-date) against the Thai baht and 7.2 percent against the U.S. dollar (Figure 6). Heightened expectations of further kip depreciation have fuelled increased currency substitution, as shown by the recent strong rise in foreign currency (FCY) deposits and an increase in the dollarization ratio to 71 percent.[13] Furthermore, while the exchange rate trading band was widened,[14] the gap between the bank and parallel rates widened in the first seven months of 2024, exceeding 25 percent in July 2024, amid a slow adjustment of the BOL's reference rates. This has reduced the supply of foreign currency to commercial banks, exacerbating the shortage of foreign currency while exerting further downward pressure on the kip in the parallel market. Against this backdrop, on March 7 of this year,[15] the BOL issued a regulation mandating the repatriation of export earnings and a requirement to convert a minimum percentage of these earnings into the kip (Box A).

Figure 5. Gross International Reserves



Source: BOL; CEIC; AMRO staff calculations
Note: The authorities updated the gross international reserves data by including the foreign-exchange swap transaction with the People's Bank of China in July 2020 as part of Lao PDR's foreign assets. The new statistic is higher than the previous record, registered in July 2020, by USD501 million. However, full information on the FX swap agreement and its activation has not been disclosed. Updated data is obtained up to September 2023, and the previously reported data ended in July 2023.

Figure 6. Exchange Rates



Source: BOL; AMRO staff calculations
Note: Bank rates are set by commercial banks and could fluctuate within a certain band from the reference rate, which the BOL sets every day. The gap is defined as the percentage difference between the commercial bank and parallel rates.

[11] These figures are based on the annual average exchange rate. The exchange rates here refer to those set by commercial banks, which are determined based on the BOL reference rate. A parallel market rate applies to foreign exchange transactions which occur outside of the banking system based on demand and supply conditions.
[12] The gap for the LAK/THB averaged 3.04 percent in 2023.
[13] The share of FCY deposits to total deposits climbed from 59 percent in 2021 to 71 percent in 2023.
[14] According to No: 553/BOL, June 2023, the BOL widened the trading band of the kip to the U.S. dollar for commercial banks from ±4.5 percent to ±7.5 percent of the BOL's daily reference rate.
[15] The regulation was announced on March 7, 2024, but implemented on May 2, 2024.

Box A. Lao PDR's Foreign Exchange Regulation on Repatriation and Conversion of Export Proceeds

Growing external imbalances and a shortage of foreign exchange onshore have prompted the central bank to implement regulations on the repatriation and conversion of export proceeds. On March 7, 2024, the Bank of the Lao PDR (BOL) announced details of a regulation requiring exporters to repatriate a specified minimum percentage of their export proceeds and convert a portion into the kip. This regulation is a follow-up to the Amended Law on the Management of Foreign Currency that was announced in November 2022.

Table A1. Repatriation and Conversion of Export Proceeds by Sector

Sector	a. Repatriation of FCY Proceeds		b. Conversion of FCY Proceeds	
	Minimum percentage, %	Timeframe, days	Minimum percentage, %	Timeframe, days
Minerals	85	90	35	Within 3 days
Services	80	60	20	
Agriculture	75	60	30	
Electricity	20	180	20	
Others	70	90	20	
Commercial banks must sell at least 30% of FCY purchased from exporters to the BOL by the next working day.				

Source: Decision No.333/BOL

The regulation differentiates between repatriation and conversion requirements by sector. For example, mineral and service exporters are required to repatriate the highest percentages of their earnings compared with the other sectors (Table A1.a). At the same time, exporters also need to sell a percentage of their foreign currency earnings (Table A1.b) to a domestic commercial bank within three working days from the date of repatriation. Banks are directed to sell 30 percent of this foreign currency onward to the BOL. These ratios and timeframes are subject to periodic revisions by the BOL as circumstances evolve.

To enhance its supervision mechanisms, the BOL is developing a new tool for monitoring capital inflows and outflows, known as the Capital Flow Management System (CMS). This system is designed to monitor the country's foreign currency flows more effectively. All investors and exporters are required to register their businesses in the system and provide their customs identification numbers. When fully operational, the CMS will link real-time information on business transactions with commercial banks, the BOL and relevant ministries.

The enforcement of repatriation and conversion rule comes at a critical juncture for Lao PDR. Since Russia invaded Ukraine in February 2022, the kip has halved in value as surging global food and energy prices drove up the country's import bill, exerting downward pressure on the exchange rate. The high external debt burden, and intensified currency substitution, also contributed to the strong kip depreciation. As of end-2023, the BOL's foreign exchange reserves stood at USD1.67 billion, covering only 2.3 months of imports. Risks are growing that the combination of limited supply of foreign exchange in banks, thin foreign reserves buffer, persistent currency depreciation, and weakening sentiments on the value of the kip, could reinforce itself in a vicious cycle. Such dynamics would also worsen the country's external debt payment capacity, accelerate kip depreciation expectations, and further exacerbate inflation.

Given these risks, the implementation of the March 7 FX management policy can help to stabilize Lao PDR's macroeconomic and financial conditions in the short term. This outcome can be achieved through enhancing the availability of foreign exchange in the domestic market while alleviating downward pressure on the kip. As reported by the BOL, only about 55 percent of total export proceeds were repatriated to Lao PDR in 2023, reflecting the difficulty of bringing foreign exchange earnings back into the domestic financial system.

However, this policy introduces new risks and policy challenges. Investor sentiments will likely be negatively affected, deterring future investments due to uncertainty over businesses' ability to retain and gain access to sufficient foreign exchange for their operational needs. In addition, the persistent depreciation of the kip further raises concerns about the effect of such a ruling on business profits due to exchange rate losses. Against this backdrop, exporters may attempt to circumvent the rules through misreporting, undermining the policy's effectiveness. Monitoring compliance could also impose significant administrative and operational burdens on both the government and businesses, leading to inefficiencies and higher costs.

Lao PDR's latest FX regulation is not a unique or isolated policy tool. Many developing countries, including some in the ASEAN+3 region, have enacted similar regulations in the past in response to heightened financial market volatility and large capital outflows. In the wake of the Asian Financial Crisis (AFC) and other external shocks, several countries in the region had introduced a range of FX policy measures, including mandatory repatriation and surrender requirements, to support their currencies and strengthen their foreign reserves positions. Most of these measures, however, have since been removed or significantly loosened, once financial conditions stabilized and as reserve buffers improved. Table A2 provides an overview of measures implemented in recent years by Indonesia, Malaysia, Myanmar and Thailand.

Table A2. Requirements on Repatriation of Export Proceeds in Selected ASEAN Countries[16]

Details	Indonesia	Malaysia	Thailand	Lao PDR	Myanmar
Effective period	Aug 2023 – current	Dec 2016 – Mar 2021[17]	AFC – current[18]	May 2024 – current	October 2021 – current
Repatriation requirements	30% of export proceeds if proceeds exceed USD250,000 Within 90 days of export date	100% of export proceeds Within 6 months of export date	100% of export proceeds if proceeds exceed USD1 million Within 360 days of export date	20% – 85% of export proceeds Within 60 – 180 days of export date	100% of export proceeds
Minimum holding period	3 months	None	None	None	None
Conversion into local currency	Not mandated, but encouraged	75% of export proceeds	Exporters can either sell or deposit FX earnings with authorized banks upon repatriation	20% – 35% of repatriated export proceeds	25% of export proceeds[19]
Applicable industries	Natural resource industries	All goods-related industries	All goods and service-related industries	All goods and service-related industries	Designated commodities according to Notification No. 51/2020[20]
Incentives provided to exporters	Lower taxes on interest earnings from rupiah deposits Competitive interest rates on FX earnings	All ringgit proceeds from exporters eligible for higher deposit rates than offered by market	None	None	None

[16] Adapted from *Annex 2: Special Issue on "Foreign Exchange Management in Lao PDR and Neighboring Countries",* Annual Consultation Report on Lao PDR 2023, AMRO. Information in Table 2 is sourced from regulations of respective central banks.
[17] From April 2021, Malaysia no longer mandates the conversion of export proceeds into the ringgit, but the six-month deadline for repatriation is still in place, with exporters allowed to keep their export proceeds in an FCY account.
[18] Thailand's repatriation and conversion of export proceeds regulations have evolved substantially since they were introduced during the AFC. Details in Table 2 refer to the current regulations.
[19] Notification No. 35/2021 dated October 3, 2021: Exporters must sell the remaining export incomes in foreign exchange in their bank accounts to an Authorized Dealer (AD) licensed bank at market prices within 30 days of repatriation. Notification No. 12/2022 dated April 3, 2022: The foreign exchange earnings of locals must be sent back to Myanmar and exchanged for Myanmar kyats within one working day of wage payment. Notification 12/2022 does not apply to foreign currency accounts held by the Union Government and Union Ministries according to Directive No. 5/2022 dated April 5, 2022. Notification No. 36/2022 dated August 5, 2022: Exporters must sell 65 percent of their U.S. dollar export receipts immediately to the AD licensed bank at the reference rate of MMK2,100 per U.S. dollar. Notification No. 15/2023 dated July 13, 2023, revised the proportion of U.S. dollar export receipts down to 50 percent, followed by Notification No. 26/2023 dated December 6, 2023, which lowered it further to 35 percent. Notification No.37/2024 dated 7 August 2024 lowered this further to 25 percent.
[20] The designated commodities that require an export license include live animals, rare species of fish and animal products, herbal medicine and root, forest products, products of mineral raw materials, and restricted chemical products.

	deposited in local banks				
Other accompanying measures	Require non-bank firms to hedge against short-term FCY liabilities Regular policy communication and dialogue with investors	Develop investor-friendly dynamic hedging program Regular policy communication and dialogue with investors [21]	Bank of Thailand collaborates with commercial banks to promote FX hedging products Regular policy communication and dialogue with investors	Regular policy communication and dialogue with investors	Require exporters of designated commodities to apply for export license

Strict FX management policies are burdensome and should be lifted or relaxed once macroeconomic and financial conditions stabilize. Past country experiences have shown that in the face of adverse exchange rate market pressures, FX management policies can be effective in improving the availability of foreign exchange in domestic markets while mitigating a sharp deterioration in the external position. However, these measures must be implemented carefully, with details clearly communicated and regular policy dialogue held with all relevant stakeholders. Offering incentives, such as tax breaks, could also help to offset the potential negative impact on exporters. Importantly, this policy tool must be seen as only a temporary measure. It is not a long-term solution to address inherent structural weaknesses and imbalances in the balance of payments. Structural reforms must be taken to strengthen the balance of payments and attract new sources of foreign currency income.

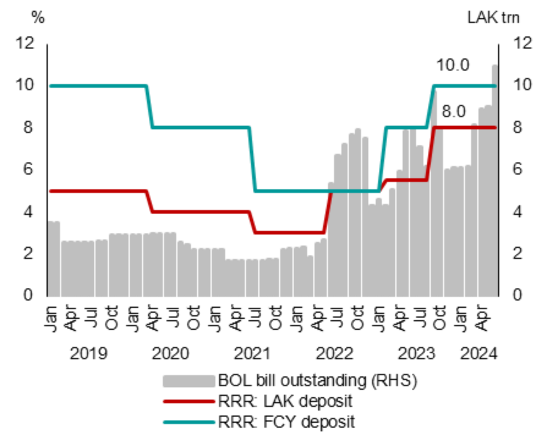
A.3 Monetary Conditions and Financial Sector

5. The monetary base continued to expand, albeit at a slower rate in end-2023 and early 2024, as the BOL stepped up liquidity absorption. The monetary base expanded significantly by 23 percent in 2021, mainly driven by the BOL's purchase of government bonds from the banks.[22] The high liquidity provided the condition for the sharp kip depreciation and rise in inflation when global commodity prices spike in early 2022 with the outbreak of the Ukraine war. To mop up kip liquidity, the central bank issued LAK5 trillion of six-month bills at a 20 percent interest rate to the public in the second half of 2022. However, the monetary base continued to expand by 27.2 percent in 2022, prompting the BOL to issue new bills amounting to LAK11 trillion in 2023. The reserve requirement ratio (RRR) was also raised from 5 to 8 percent for kip deposits, and from 5 to 10 percent for foreign currency deposits in 2023 (Figure 7).[23] Moreover, the BOL raised its policy (lending facility) rate from 7 to 8 percent in March 2024 and further to 10 percent in June. The central bank conducted seven-day bill auctions for banks between March and May 2024,[24] but has switched to issuing seven-day bills at a fixed interest rate of 10 percent from June and 10.5 percent from August. In addition, it has introduced three-month and six-month bills and deposits with interest rates set at 11.24 percent

[21] To stem the depreciation of the ringgit this year, the government recently introduced measures such as encouraging government-linked investment companies (GLICs) and government-linked companies (GLCs) to repatriate and convert their foreign income. There is also a pilot fast-track pre-approval framework for companies that bring back foreign currency funds and convert to the ringgit, enabling them to reinvest abroad with ease without needing approval from the central bank.
[22] Government bonds included investment and recapitalization bonds issued in 2021 to two state-owned banks, and triangulation bonds issued to banks to settle loans owed by contractors of unpaid government projects. See paragraph 9 for more information about the government's expenditure arrears and triangulation bonds issuance. As the result of the purchase, the BOL's gross claims on the government increased by cumulatively LAK9.3 trillion between 2021 and 2023.
[23] In addition, the BOL has reduced the share of government bonds in total required reserves from 70 percent to 50 percent, and increased the minimum share of cash from 30 percent to 50 percent, effective from early 2024.
[24] The BOL conducted seven-day BOL bill auctions in March-May 2024. The auction results increased from LAK2.1 trillion in the first auction to LAK5-6 trillion in May, while the number of banks participating in the auction rose from three to nine. The BOL announced the auction volume, while the participating banks provided bidding interest rates which averaged about 3 percent per annum compared with the BOL's seven-day deposit rate of 0.74 percent prior to June 2024. Starting from June, the BOL simply issued bills and deposits to banks at fixed interest rates.

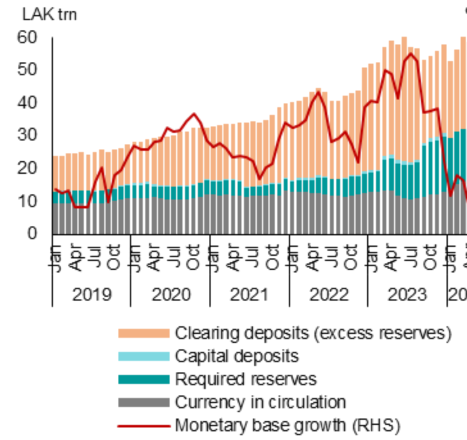
and 11.54 percent, respectively. In August, these rates were increased to 11.76 percent and 12.09 percent. The monetary base has slowed since mid-2023, contracting by 4.2 percent as of June 2024 (Figure 8).

Figure 7. BOL Bills Outstanding and RRR



Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data is as of June 2024.

Figure 8. Monetary Base Growth and Components



Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data is as of June 2024.

6. Kip liquidity conditions remain loose. Kip deposit growth slowed but was still at double digits until early 2024. The 12-month kip deposit and lending rates edged up marginally to 5.5 percent and 9.5 percent, respectively, markedly lower than CPI inflation and FX depreciation rates.[25] The kip interest rates were highly negative in real terms, which induced more kip borrowings and a switch to FCY deposits among households and businesses, thereby causing the currency to depreciate further. Indeed, borrowings in kip still increased robustly by 26 percent as of mid-2024, compared with 30.3 percent by end-2023. The loan-to-deposit (LTD) ratio for the kip was elevated at 97 percent as of June 2024 (Figure 9). In contrast, the LTD ratio for foreign currencies declined to about 54 percent, reflecting rapid growth in FCY deposits compared to FCY loans.[26] The share of FCY deposits to total deposits increased from 59 percent in 2021 to 71 percent in 2023.

7. Bank-level data continued to exhibit a large divergence among banks with pockets of financial vulnerabilities.

a. The capital adequacy ratio (CAR) of the whole banking system recorded 18.2 percent as of end-2023, compared with 18.7 percent in 2022 and 17.5 percent in 2021 (Figure 10). Notably, several banks reported higher CARs, in part due to improved profits and increased capital contributions from shareholders.[27] In contrast, the capital buffer of the largest state-owned bank continued to decline and remained well below the minimum regulatory requirement of 8 percent.[28]

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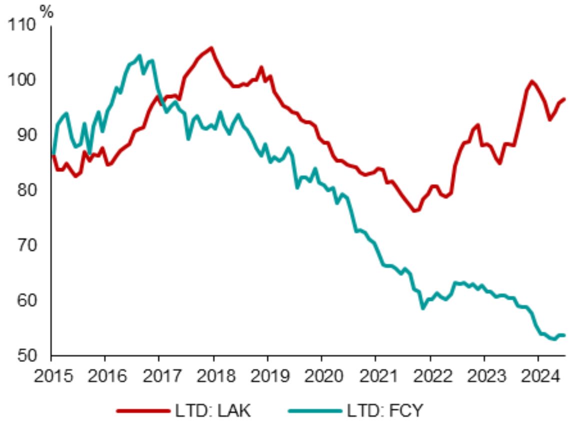
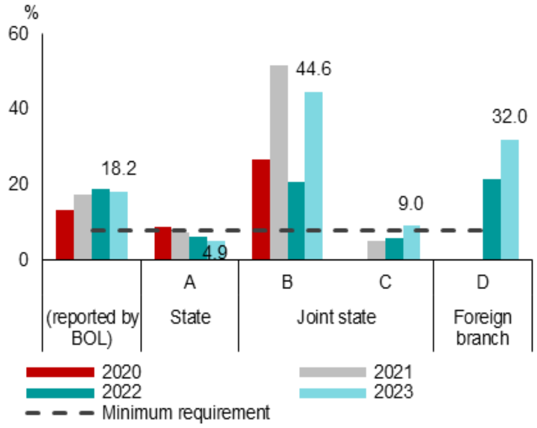
[25] Following the BOL's issuance of bills and deposits at high interest rates – 10 percent for seven days, 11.24 percent for three months, and 11.54 percent for six months – banks have announced plans to raise their deposit rates accordingly.
[26] Banks have been cautious in granting FCY loans which are provided only to the borrowers with FCY revenue.
[27] According to its financial report for 2023, the Lao Development Bank's CAR increased from 5.7 percent in 2022 to 9.0 percent in 2023. Its major shareholder raised capital contributions to the bank by LAK435 billion to LAK935 billion in 2023. The bank, once wholly owned by the government, was restructured in 2021 with a 70 percent share sold to the private sector while the government retained a 30 percent share.
[28] The largest state-owned bank reported that its CAR had been below the minimum regulatory threshold of 8 percent since 2021 and stood at 4.9 percent as of end-2023. Data from the BOL's Bank Supervision Department, which calculated the ratio using current Laotian accounting standards, also indicated a low 6.39 percent as of end-2023. The bank accounts for about 40 percent of total deposits. The major shareholder of the bank is the government, represented by the Ministry of Finance with a 60 percent

Figure 9. Loan-to-Deposit Ratio by Currency



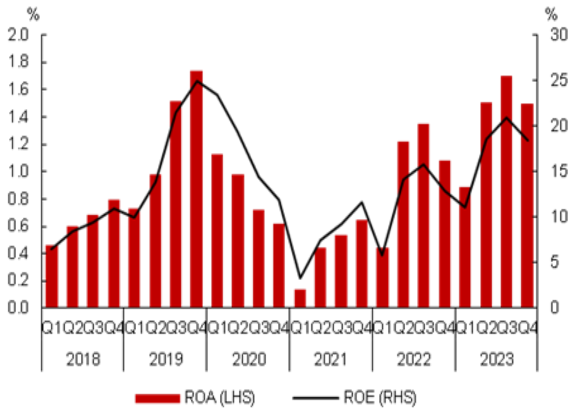
Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data is up to June 2024.

Figure 10. Capital Adequacy Ratio



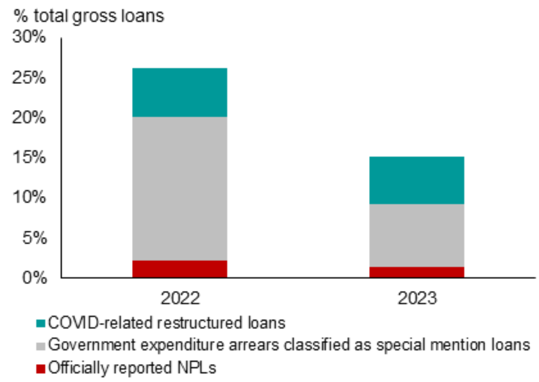
Source: BOL; CEIC; banks' financial reports
Note: The dashed line denotes an 8 percent threshold.

Figure 11. Bank Profitability



Source: BOL; CEIC; AMRO staff calculations

Figure 12. Loans at Risk



Source: BOL; LMOF; AMRO staff calculations

b. Stronger loan growth underpinned a rebound in interest incomes and an improvement in profitability in 2023. Banks' return on assets increased to 1.5 percent as of end-2023, up from 1.1 percent in 2022 and 0.6 percent on average during the pandemic (Figure 11).

c. The official non-performing loan (NPL) ratio moderated to 1.4 percent by end-2023 from 2.2 percent a year earlier. Higher interest incomes enabled banks to write off more NPLs last year.[29] In addition, banks' asset quality has improved with the government issuing bonds to settle loans affected by government expenditure arrears.[30] Nevertheless, banks' asset quality remains subject to downside risks. NPLs could rise upon the phaseout of regulatory forbearance on loans affected by the pandemic[31] starting from early 2024.[32] The size of bank loans to government projects which remain unsettled is still large at about LAK14 trillion, or roughly 8 percent of total loans outstanding in 2023 (Figure 12). In addition, banks' asset quality has been vulnerable to the weak financial performance of several electricity companies.[33]

share, while 10 percent is owned by COFIBRED, a subsidiary of BRED, a French group of cooperative banks. The remaining 30 percent is held by other domestic and foreign investors. The state-owned bank has been listed on the Lao Securities Exchange since 2011.

[29] For example, NPLs worth 4.5 percent of total loans outstanding were reportedly written off from the largest state-owned bank's books in 2023, compared with 2.1 percent in 2022.

[30] These loans were previously classified as "special mention" loans in banks' books.

[31] Outstanding restructured loans related to the COVID-19 pandemic were estimated at 6 to 7 percent of total loans as of end-2022, and moderated to about 5 percent in early 2024.

[32] Indeed, the largest state-owned bank's ratio of impaired loans to total loans surged to 21.5 percent in Q1 2024, up from 12.4 percent as at end-2023. Meanwhile, specific provisions for impaired loans were low at 14 percent, steadily declining from 28 percent and 21 percent as of end-2022 and end-2023, respectively.

[33] Several banks have restructured loans that were taken out by the largest state-owned enterprise in the electricity sector.

d. The adoption of Basel II and international financial reporting standards IFRS 9 is ongoing.[34] Banks have started to apply minimum Basel II criteria on capital adequacy and initiated internal capital adequacy assessments and information disclosure.[35] The BOL and commercial banks are in the preparation stage and conducting gap analysis for IFRS 9 implementation. The plan to adopt Basel II by 2025 and IFRS 9 by 2026 will likely be delayed in light of the BOL's resource and capacity constraints, the impacts of the pandemic and, more recently, liquidity and exchange rate shocks on commercial banks. On a positive note, the central bank's active engagement in technical assistance offered by donors and international organizations is expected to strengthen its regulatory and supervisory capacity moving forward.[36]

A.4 Fiscal Sector

8. The fiscal balance registered a surplus in 2023 and is expected to record moderate deficits in 2024-2025, in line with the government's fiscal five-year plan. Revenue collection was higher than budgeted at 17.4 percent of GDP in 2023, increasing substantially from 14.8 percent in 2022.[37] Continued expansion of the value-added tax (VAT) base, a lump-sum tax collection from the cryptocurrency sector, and hydropower royalties supported robust tax revenue collection. Nontax revenue was enhanced by higher income from overflight rights,[38] in line with the recovery in global tourism. Budget expenditure also rose, albeit at a slower pace, from 15.0 percent of GDP in 2022 to 16.6 percent in 2023, driven by increased disbursement of foreign-financed capital expenditure. The fiscal balance is estimated to record a surplus of 0.7 percent of GDP in 2023, improving from a 0.2 percent deficit in 2022, but is expected to revert to a deficit of 0.7 percent and 1.0 percent of GDP in 2024 and 2025, respectively (Figure 15).[39] Revenue in 2024 is expected to exceed the budget target on the back of the restoration of the VAT rate from 7 percent to 10 percent during the year.[40] This expected increase will help to finance the higher public investment and external interest payments. Overall, AMRO projects the fiscal deficit, including unpaid interest, to average 1.1 percent of GDP, staying within the National Assembly's 2 percent of GDP ceiling set under the fiscal five-year plan for 2021-2025.[41]

9. The government has been striving to resolve legacy public investment arrears and avoid accumulating new arrears.[42] As of end-2022, the Laotian authorities had identified public investment arrears worth LAK33 trillion, equivalent to 13 percent of GDP. Of this amount,

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[34] The Strategic Plan for Financial Sector Development of the Lao PDR adopts Basel II standards in three phases between 2016 and 2025, with the goal of enhancing banks' risk management by aligning capital adequacy requirements with banks' risk profiles (credit, market and operational risks), improving supervisory capacity by moving toward a risk-based supervisory approach, and strengthening disclosure and market discipline. There is also a plan to achieve full adoption of IFRS 9 by 2026, which allows banks more discretion to incorporate forward-looking information into loan-loss provisions via an expected credit loss (ECL) framework, hence requiring earlier and larger impairment allowances and enhancing financial stability. Box B provides detailed information on these plans and implementation progress. The progress of Basel II and IFRS 9 implementation is described in the AMRO Annual Consultation Report on Lao PDR 2023.

[35] Indeed, more banks reported their CARs in their financial reports in 2023.

[36] AMRO has provided technical assistance on liquidity stress tests, bank scorecard exercises and, more recently, training on IFRS 9 to BOL staff members.

[37] The increase in revenue collection in 2022 and 2023 was partially attributed to higher inflation and kip depreciation.

[38] Overflight rights revenue is collected from airlines operating routes that fly over Lao PDR.

[39] In case the authorities had fully met interest payment obligations, the fiscal deficit would have improved from 1.4 percent of GDP in 2022 to 0.4 percent of GDP in 2023. AMRO expects that from 2024 onwards, interest payments will be serviced in full.

[40] Revenue collection in the first five months of 2024 has been robust, achieving 52 percent of the revenue target with a total of LAK25,957 billion out of the budgeted LAK50,107 billion.

[41] Lao PDR currently adheres to fiscal commitment targets that limit the annual budget deficit to 3 percent of GDP and the five-year fiscal deficit of 2021-2025 to an average of 1 percent of GDP, although these commitments have not been constituted as fiscal rules.

[42] The government has accumulated arrears from (i) unbudgeted infrastructure projects at the provincial and district levels in the past, (ii) recurrent expenditure arrears due to, for example, unpaid utility bills, and (iii) suspension of external debt repayments to some creditors. For (i), the stock of arrears accumulated at the provincial level has been consolidated and a repayment schedule agreed with the contractors and commercial banks via the issuance of arrears-clearance bonds, respectively. As for (ii), the government recorded LAK403 billion in recurrent expenditure arrears in 2023, including unpaid public electricity and water bills, and is currently in the process of clearing these arrears. As for (iii), Lao PDR suspended interest payments to external creditors that averaged around 1 percent of GDP from 2021 to 2023.

the government has cleared LAK10 trillion by issuing arrears-clearance bonds to contractors and commercial banks in 2021.[43] It continued to issue additional arrears-clearance bonds worth LAK8 trillion during 2023-2024 and also allocated LAK1 trillion from its budget to settle part of the arrears in 2023. As a result, the outstanding arrears have decreased from LAK 18 trillion in 2023 to LAK 14 trillion in 2024, which the government is still in the process of verifying these remaining uncleared arrears. In amendments to the Public Investment Law and the Budget Law in 2015, ceilings were imposed during the budget request process on line ministries and local governments, which improved budget planning. To prevent arrears originating in public investments from occurring in the future, the government has implemented the Public Debt Management Law since 2018, which prohibits central and provincial authorities from undertaking projects without the approval of the National Assembly. A plan to improve Public Investment Management (PIM project) was launched in 2022 to integrate the three-year public investment rolling plan into the annual budget, which should prevent the incurrence of new public investment arrears.

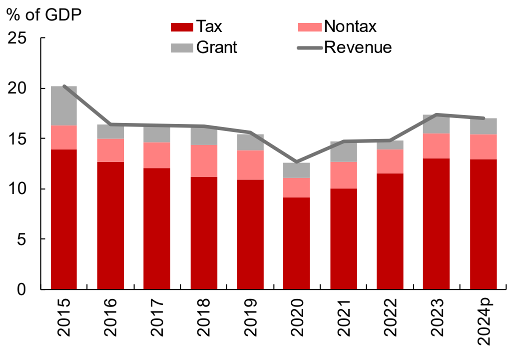
10. Government debt increased in 2023 but is expected to moderate over the medium to long term; gross financing needs, nevertheless, remain elevated (Annex 3)**.** The public debt-to-GDP ratio is estimated to have increased from 99 percent of GDP in 2022 to 103 percent in 2023, mainly on account of the kip depreciation, which is mitigated by high inflation,[44] and the incorporation of the remaining public investment arrears, totalling LAK18 trillion, equivalent to 7 percent of GDP, in the total debt stock.[45,46] Between 2020 and 2023, the government suspended principal repayments to certain external creditors amounting to USD1.42 billion, equivalent to about 10 percent of GDP.[47] High inflation, higher GDP growth, sustained primary balance surpluses, and repayment of on-lending loans to SOEs, are expected to reduce the debt ratio to 98.6 percent of GDP in 2024 notwithstanding continued kip depreciation. In the medium term, the debt ratio is expected to decline further, assuming that monetary stability is restored with inflation and kip depreciation reduced to moderate levels, and that the medium-term fiscal plan is achieved.[48] Meanwhile, a higher reliance on short-term financing in recent years[49] has led to greater gross financing needs, from 8.4 percent of GDP in 2022 to 11.2 percent and 12.2 percent in 2023 and 2024, respectively.[50]

11. Increased domestic borrowing and SOE repayments of on-lending loans partly supported the government in meeting FCY financing needs amid continued suspension of debt repayments in 2023. The scheduled FCY debt service in 2023 amounted to USD1.62 billion. The government secured part of its FCY needs through tax and nontax revenues, domestic borrowing, bond issuance in Thailand, and repayment from on-lending loans to Électricité du Laos (EDL).[51] However, the downgrade of the country's credit rating in Thailand

[43] Among arrear clearance bonds, triangulation bonds were issued to banks to settle loans that the banks had provided to contractors for government projects. Investment bonds will be issued to contractors which undertook public investment projects without borrowing from banks. Recapitalization bonds were issued to recapitalize state-owned banks as well.
[44] The continuing kip depreciation is likely to lead to high inflation (Selected Issue 1). The high inflation could partially mitigate the impact of the depreciation on the public debt-to-GDP ratio by reducing the real value of the debt stock.
[45] AMRO staff estimates include domestic arrears in government debt upon recognition, whereas Lao PDR authorities will classify arrears as government debt upon the issuance of arrears-clearance bonds. The government issued triangulation bonds equivalent to LAK4.1 trillion in 2023, and an additional LAK3.9 trillion in the first half of 2024.
[46] The impact of including recognized arrears in the debt stock in 2023 on the debt ratio was partially mitigated by positive GDP growth and continued fiscal consolidation as reflected in the primary balance surplus.
[47] The government continued to suspend interest payments to certain external creditors in 2023, following the suspension in 2021-2022. In 2024, the government started to repay debt to major creditors on an invoice basis. It paid USD70 million to USD80 million in the first half of 2024, and is expected to pay USD150 million in the whole year, which accounts for about 20 percent of the debt servicing to that creditor due this year.
[48] In AMRO's baseline scenario, pressures on Lao PDR's macroeconomic indicators are expected to ease going forward, with real GDP growth and the GDP deflator stabilizing at about 5 percent and the pace of kip depreciation slowing to below 10 percent by 2027 and moderating further beyond 2027.
[49] The share of one-year maturity FCY bonds issued through the LSX surged from an average of 63 percent of total bonds outstanding between 2021 and 2022 to 88 percent in 2023.
[50] Gross financing needs for 2024 include new debt servicing from short-term commercial borrowing in 2023.
[51] EDL received transmission line leasing fees upon the activation of its concessional agreement with EDL-T, part of which was utilized to repay EDL's on-lending debt to the government in 2023 and 2024.

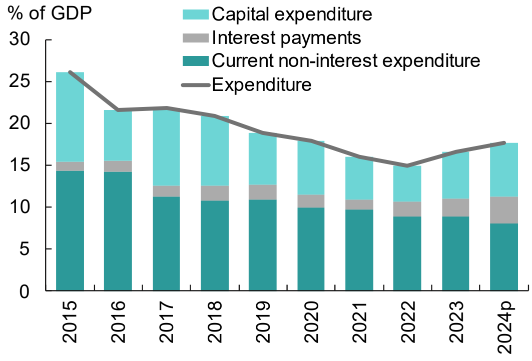
to non-investment grade in September 2023[52] made it very costly for the government to issue bonds in the Thai market, which prompted Lao authorities to rely more on borrowings in FCY from domestic banks. As fiscal revenues and borrowing in the domestic and foreign markets still fell short of the scheduled FCY debt service, the government continued to suspend its interest and amortization payments to major creditors in 2023.[53]

Figure 13. Government Revenue



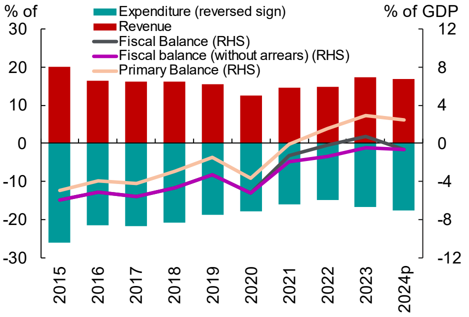
Source: Lao PDR Ministry of Finance (LMOF); AMRO staff projections

Figure 14. Government Expenditure



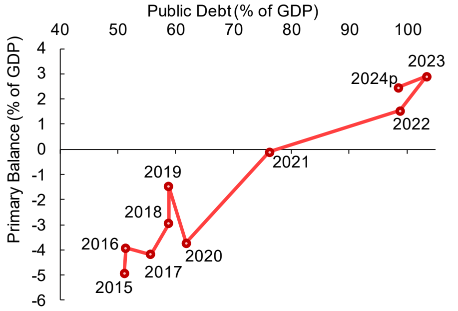
Source: LMOF; AMRO staff projections.
Note: Interest payments reflect actual payments and do not include unpaid interest due to some creditors.

Figure 15. Fiscal Balance



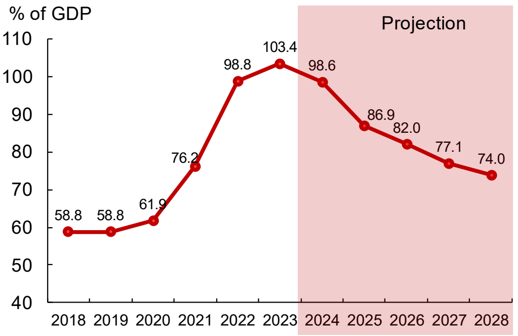
Source: LMOF; AMRO staff projections
Note: The "fiscal balance" indicator (grey line) is based on actual interest payments and excludes unpaid interest payment obligations. The "fiscal balance (without arrears)" indicator (pink line) reflects the fiscal balance with full interest payment obligations as estimated by AMRO.

Figure 16. Debt to GDP and Primary Balance



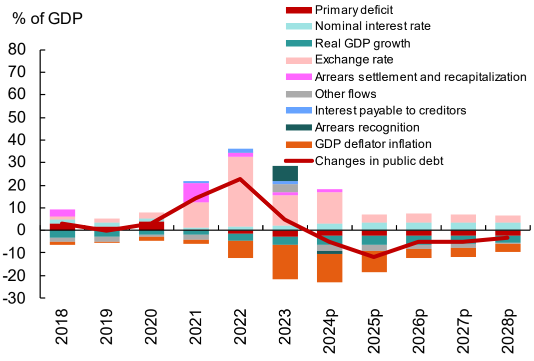
Source: LMOF; AMRO staff projections

Figure 17. Public Debt
(at end of period)



Source: LMOF; AMRO staff estimates

Figure 18. Debt Dynamics



Source: LMOF; AMRO staff calculations

[52] The credit rating agency in Thailand cited the sharply depreciated kip and high inflationary pressures in Lao PDR as major reasons behind the downgrade.
[53] Suspended interest payments will be incorporated into the debt stock for the corresponding year of suspension, while principal repayments that have been suspended will remain in the debt stock.

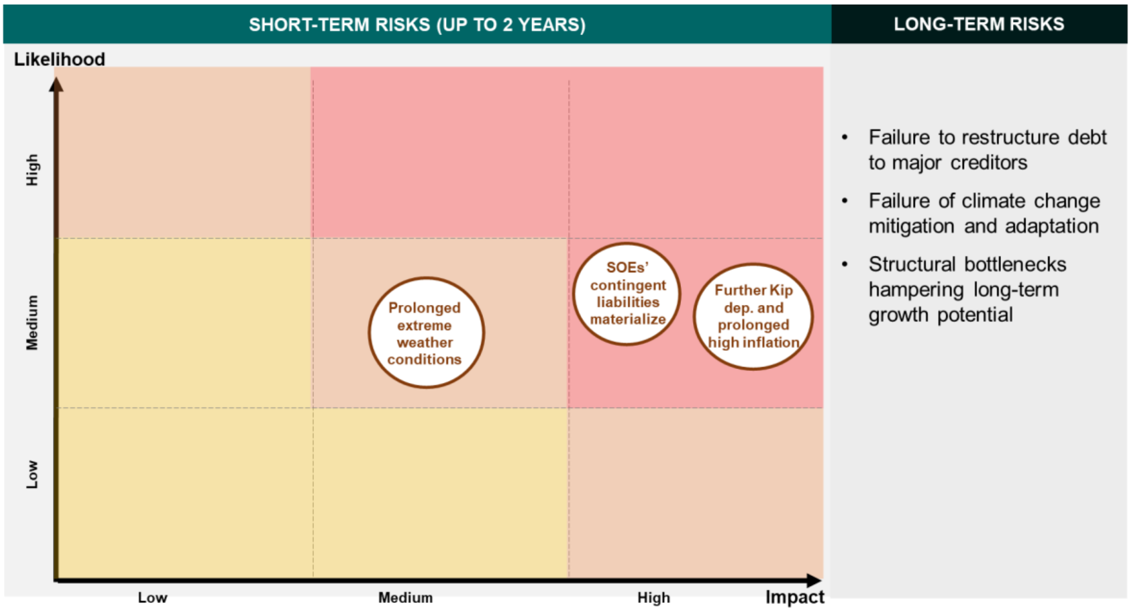
A.5 Climate Change

12. Lao PDR remains committed to global efforts to combat climate change. In 2023, Lao PDR experienced record-high temperatures as well as an estimated 76 extreme weather events, including storms, floods, landslides and wildfires, sustaining more than USD53 million in damages, equivalent to 0.4 percent of GDP.[54] Amid severe fiscal constraints, Lao PDR does not have sufficient resources to invest in mitigation and adaptation infrastructure, further exacerbating the risks and likelihood of large losses from climate-related disasters going forward. In 2021, the country reaffirmed its commitment to climate action by enhancing its Nationally Determined Contribution (NDC), aiming for a 60 percent reduction in greenhouse gas emissions by 2030, which aligned with its long-term goal of achieving net-zero emissions by 2050. Complementing these efforts, the BOL, in partnership with the International Finance Corporation (IFC), is developing a road map to enhance green finance.[55] This collaboration aims to develop robust financial frameworks that support sustainable projects and stimulate necessary private-sector investments to achieve Lao PDR's climate objectives.

[54] The figures were estimated in a report presented by the Lao Deputy Prime Minister in March 2024.
[55] This agreement focuses on: (1) aligning Lao PDR's green activities with ASEAN taxonomy and global standards; (2) developing guidelines for green lending and risk management in financial institutions; (3) setting up frameworks and standards for green and sustainable finance instruments; and (4) enhancing knowledge sharing and capacity building with international partners.

B. Risks, Vulnerabilities and Challenges

Figure 19: Lao PDR Risk Map



Source: AMRO staff

13. A further depreciation of the kip, coupled with persistently high inflation, would exacerbate the current macro-financial instability. A persistent depreciation of the kip would fuel a further increase in consumer prices and heighten inflationary expectations. It would also worsen external debt burdens for both the public and private sectors. This threatens to exacerbate the already strained government finances, intensifying concerns about fiscal sustainability. At the same time, an escalation in the rate of currency substitution would lead to further depreciation of the kip and dollarization of the banking sector. Such a vicious cycle of escalating prices and continued local currency weakening would significantly affect consumer confidence and investor sentiments, while eroding purchasing power and affecting livelihoods.

14. Extreme weather could intensify inflationary pressures and threaten the economic recovery. Extreme weather events could pose a significant risk to major economic sectors, in particular agriculture and electricity. In 2023, decreased rainfall led to less water in the Mekong River and a decline in hydropower output. Furthermore, the agriculture sector, which accounts for more than 10 percent of GDP and around 70 percent of total employment, is highly vulnerable to drought and floods. These disasters would negatively affect domestic and regional agriculture production, exerting upward pressure on food prices.

15. Risks to debt sustainability persist. While economic recovery and commitments to fiscal consolidation are expected to reduce the debt-to-GDP ratio in the medium to long term, risks to debt sustainability, which are already assessed as high, could be further exacerbated by negative shocks to growth, the primary balance, and currency depreciation. For example, stress test results reveal that the debt-to-GDP ratio could increase to 113 percent of GDP in 2025 if the kip were to depreciate by the same magnitude as in 2022-2023. Furthermore, project arrears could build up again if fiscal disciplines are not strictly enforced. This would add to the public debt burden and undermine fiscal consolidation efforts. Indeed, the backlog of outstanding arrears remains sizable and would require many years to clear. A further increase in these arrears would erode public confidence and restrict the public-sector resources available to spend on enhancing growth, thereby hindering economic growth and activities.[56] On top of this, persistent arrears will adversely affect the debt-servicing capacity of private companies and SOEs and the soundness of the banking sector.

16. The government's external debt service burden is large and worsening against the backdrop of elevated FCY debt service. The government faces challenges in securing foreign exchange to repay USD1-2 billion of external debt service payment coming due each year going forward. Since bond issuances in Thailand have become too costly due to the downgrade in Lao PDR's sovereign credit rating in September 2023, the government will need to find other sources of foreign exchange to make interest and amortization payments and to refinance maturing bonds and loans. Given the currently subdued loan-to-deposit ratio in FCY, domestic banks could temporarily support part of the government's foreign exchange needs by providing FCY loans or buying government bonds denominated in FCY. However, most of the banks will not be able to provide such support for more than one to two years. Refinancing risks and costs have also increased due to higher reliance on short-term debt in recent years.

17. The external financing gap of the government could expand further on prolonged weakness in SOEs' financial positions. Loss-making SOEs, particularly EDL and EDL-Generation Public Company (EDL-Gen), could impose an additional fiscal burden on the government if they fail to honour their debt obligations (Box B). Failure to improve SOEs' financial positions could trigger a need for financial support from the government including government guarantees, or result in these SOEs being unable to repay on-lent debt. As of end-2023, publicly guaranteed debt and on-lent debt remained elevated at USD1.8 billion and USD3.8 billion, respectively.[57] If the government was forced to fulfil its guarantees or failed to collect on-lent debt, the external financing gap would widen further. Given the already large financing gap expected from 2024 onward, this could exacerbate the government's burden in servicing external debt.

Box B. State-owned Enterprises in Lao PDR Electricity Sector[58]

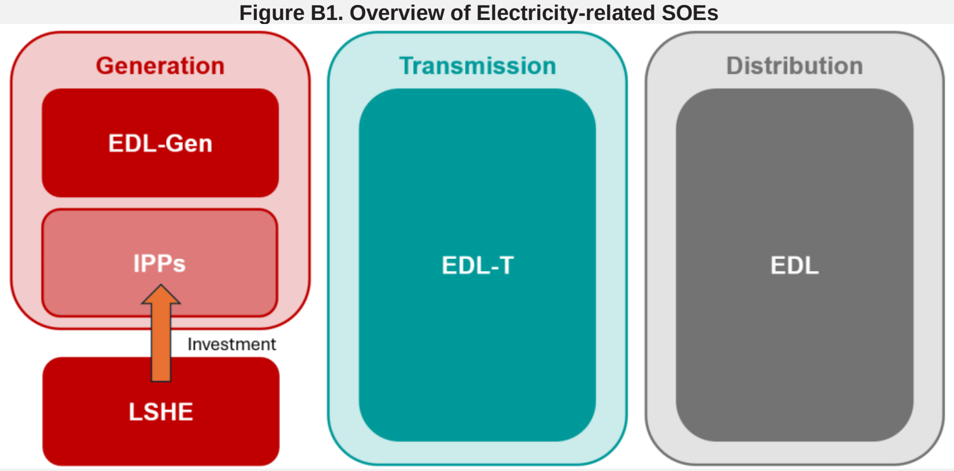
To analyze the electricity sector in Lao PDR, the segment that operates in the domestic market, which is facing multiple issues, should be considered separately from the segment in the export market. Players in the export market, primarily consisting of independent power producers (IPPs), are performing well in general due to ample forex revenue provided by overseas utility companies. On the other hand, in the domestic market, state-owned enterprises (SOEs) play a major role but are saddled with high FCY debt, suffering from worsened financial conditions mainly stemming from the low electricity tariff charged to domestic users as well as the severe kip depreciation since 2022. The current box provides an overview of the challenges faced by these SOEs and the support given by the government of Lao PDR.

Aside from independent power producers (IPPs), the domestic market of Lao PDR's power sector consists of four SOEs: Electricity Du Laos (EDL), EDL-Generation Public Company (EDL-Gen),[59] Electricity Du Laos Transmission Company (EDL-T)[60] and Lao State Holding

[56] According to 2019 Public Expenditure and Financial Accountability (PEFA), Lao authorities allocate 30 percent of capital spending to settling arrears.
[57] Government-guaranteed debt as of end-2023 consisted of USD1,797 million owed by EDL. On-lent debt consisted of USD3,448 million owed by EDL and USD315 million owed by Lao Holding State Enterprise.
[58] Prepared by Akifumi Fujii, Economist.
[59] EDL-Gen was founded in 2010 and listed on the Laos Securities Exchange in 2011. Its shareholder structure has EDL holding 75 percent and other investors holding 25 percent. The primary operation is to generate electricity for domestic consumption. As of December 2023, its total installed capacity was 1.7 GW, comprising 0.7 GW provided by its wholly owned power plants (10 sites) and 1.0 GW from partially owned IPP power plants (16 sites).
[60] In December 2023, EDL-T began operations as a Lao-Chinese joint venture. The shareholder structure consists of EDL holding 10 percent and China Southern Power Grid Yunnan International Company holding 90 percent. The company is responsible for constructing, operating and maintaining high-voltage transmission lines of 230 kilovolts and above within Lao PDR. It also delivers transmission services to EDL.

Enterprise (LSHE).[61] EDL was conducting electricity generation, transmission and distribution in a vertically integrated manner before EDL-Gen and EDL-T were established through spin-offs from EDL. Currently, EDL handles distribution only, while EDL-Gen is responsible for generation and EDL-T covers transmission. LSHE, a government-owned investment vehicle, holds equity stakes in several IPP projects but is not involved in operating these power plants (Figure B1).

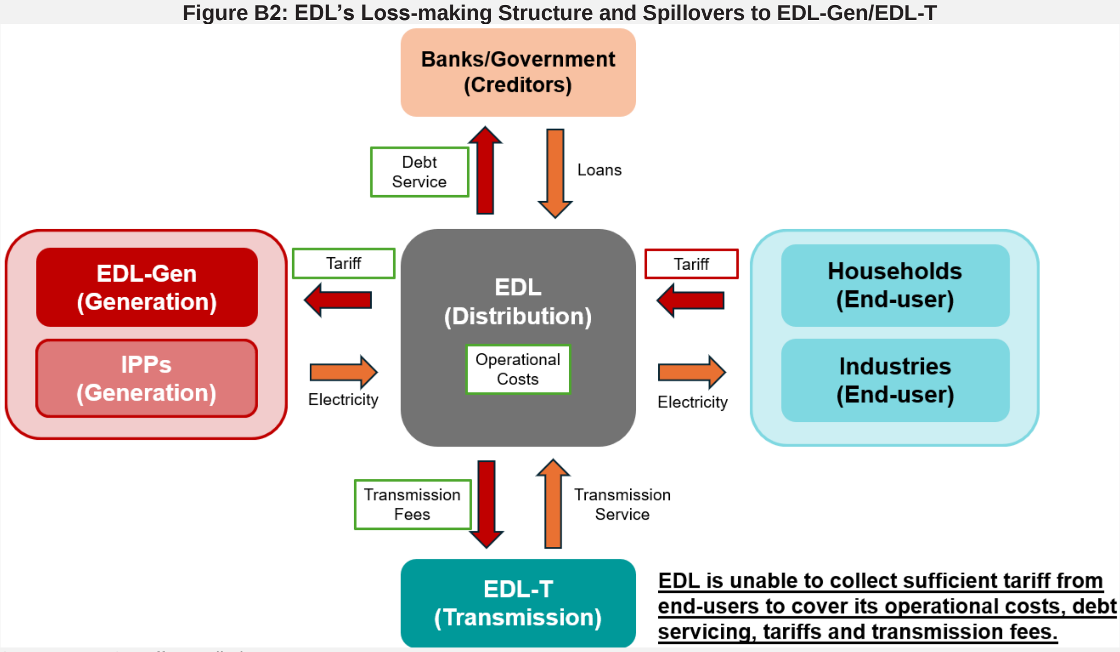
Figure B1. Overview of Electricity-related SOEs



Source: AMRO staff compilation

Most of these SOEs are facing financial difficulties, largely due to EDL's unsound financial position. In supplying electricity to domestic users, EDL buys electricity from EDL-Gen and IPPs according to power purchase agreements. It must also pay transmission fees to EDL-T. Most of these payment obligations are invoiced in U.S. dollars, while electricity tariffs collected from domestic users are in kip. The depreciation of the kip since 2022 has inflated EDL's payment obligations, exacerbating the company's currency mismatch. Although the government increased the electricity tariff of industrial users in February 2023, the total tariff collection is not sufficient to cover costs[62] (Figure B2). As a result, EDL faces financial difficulties, leading to delays in payments to IPPs, EDL-Gen and EDL-T. The audited financial statements of EDL have not been published since 2018, complicating the understanding of its financial situation.

Figure B2: EDL's Loss-making Structure and Spillovers to EDL-Gen/EDL-T



Source: AMRO staff compilation

[61] Established in 2005, LSHE functions as an investment vehicle of the Lao government. It focuses on investing in IPP projects that export electricity to neighboring countries. Unlike the other SOEs, its business scope does not include generation, transmission, distribution or any other operation of a project.
[62] According to EDL estimates, the average electricity tariff for domestic users remains at about half of the cost recovery level even after the tariff increase in February 2023.

Meanwhile, EDL-Gen is struggling with its own cash-flow problem, mainly due to delayed tariff payments from EDL. These payment delays drastically reduced EDL-Gen's operating cash flow in 2023 to less than a tenth of 2022.[63] As the ongoing kip depreciation had put additional pressure on EDL-Gen's liquidity by inflating its FCY-denominated debt, the company was not able to service debt with its operational incomes alone, resulting in the sale of its equity stakes in two IPPs in 2023.[64] Besides, EDL-Gen had to significantly increase short-term borrowings from domestic banks and bond issuances in Thailand to remain current in its obligations (Table B1).

Table B1. EDL-Gen's Cash Flow (LAK million)

	2023	2022
Net cashflow from operating activities	38,239	449,061
Interest paid	(1,196,408)	(765,460)
Net cashflow from investing activities	1,842,427	411,666
o/w cashflow from IPP equity sales	1,745,412	-
Net cashflow from financing activities	154,822	(153,939)
o/w proceeds from short-term borrowing	2,502,753	330,866
o/w repayments short-term borrowing	(1,232,749)	(296,059)
o/w proceeds from bond issuance	2,176,726	391,527
o/w repayments for bonds	(3,218,542)	(451,253)
Net change in cash for the year	839,080	(58,672)

Source: EDL-Gen; AMRO staff compilation

Although it is too early to evaluate EDL-T's performance and financial situation, close monitoring should be warranted. As EDL-T started operation in December 2023, its financial statements are not yet available. However, similar issues concerning delayed payments from EDL necessitate vigilance regarding EDL-T's future developments. The current depreciation of the kip is also worrisome, as most materials and equipment which are necessary for the company's operation need to be imported.

In contrast, LSHE's financial situation is relatively sound. Its main revenue comes from dividends paid by IPP projects in which LSHE has a stake. In these projects, most of the generated electricity is exported to the Electricity Generating Authority of Thailand (EGAT) and the electricity tariffs are paid in a timely manner to each IPP. Currently, LSHE invests in four IPP projects,[65] but the dividends from these projects are decreasing due to rising interest payment costs at each project level. The lower revenues have led LSHE to rely more on borrowing from domestic banks to manage its cash flow.

To these SOEs, the government provides substantial loans (on-lent debts) and government guarantees. Failure to improve the SOEs' financial soundness could increase the government's fiscal burden through the non-collection of on-lent debts and materialization of government guarantees. Furthermore, some SOEs owe non-guaranteed debts, whose repayments will not be necessarily supported by the government (Table B2). However, the SOEs' current financial difficulties are attributed to the unprofitable EDL, which is in turn constrained by the low government-controlled electricity tariffs. Therefore, some SOEs are discussing with the government for possible support for these non-guaranteed debts as well.[66] According to the latest debt bulletin, the Ministry of Finance has started to monitor these debts.

[63] As a result, trade receivables on EDL-Gen's balance sheet, comprising unpaid electricity tariffs from EDL, nearly tripled to LAK1.7 trillion as of end-2023 compared with LAK0.6 trillion in 2022.
[64] According to the 2023 audited financial statements of EDL-Gen, the company sold its entire equity stakes in Dong Shong Power Company, a hydroelectric power business where it had owned 20 percent, and EDL-Gen Solar Power Company, in which it had 17.8 percent of the solar power business.
[65] LSHE operates three hydropower projects, namely Nam Theun 2, Xepian-Xenamnoy and Nam Ngiep 1, and one coal-fired power project called Hongsa Mine-Mouth, all of which have started operations.
[66] For instance, EDL-Gen plans to finance part of the scheduled debt service to Thai bondholders in 2024, which amounts to about USD200 million, through loans from the government in addition to collecting trade receivables from EDL and dividends from IPPs.

Table B2: SOE Debt as of End-2023 (USD million)

SOEs/Debtors	Debt On-lent by Government	Debt Guaranteed by Government	Non-guaranteed Debt
EDL	3,447.97	1,797.04	52.13
EDL-Gen	-	-	943.23
EDL-T	-	-	-
LSHE	315.03	-	12.38

Source: LMOF; AMRO staff compilation

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18. Structural weaknesses are constraining Lao PDR's long-term growth potential. Lao PDR still faces significant structural challenges that are hindering its development prospects. While the Lao-China Railway is a welcome development, infrastructure bottlenecks remain acute in the country, restraining connectivity and trade efficiency. In addition, limited access to finance, particularly for small and medium enterprises (SMEs), is constraining economic dynamism, which is crucial for job creation. Outward labor migration poses another significant challenge as domestic labor shortages inhibit the ability of local industries to grow.

C. Policy Discussions and Recommendations

C.1 Restoring Macroeconomic Stability

19. The central bank should tighten monetary policy to stabilize the exchange rate and re-anchor inflationary expectations. The BOL has appropriately raised the RRR, and further RRR increases could be considered. To restrain the expansion of the monetary base, the BOL should absorb the liquidity that is injected into the system through its purchase of foreign currencies and government triangulation bonds, if any.[67] The issuance of BOL bills to the public at high interest rates incurred high costs and its effectiveness was temporary, lasting only until the bills mature. The BOL's switch to issuing short-term instruments to banks to mop up the excess liquidity is welcome. The current BOL bill rates are much lower than the rates offered to the public but remain high. That said, their levels are justifiable, considering the urgent need to lower inflationary expectations and stabilize the kip exchange rate. In the long run, a market-competitive pricing mechanism, such as bill auctions, could be used. Efforts to improve the BOL-supported Interbank2018 platform and bolster interbank activities via this platform are also recommended to develop the money market and enhance the transmission of monetary policy.[68]

[67] As mentioned in paragraph 9, the government identified investment arrears of LAK33 trillion as of end-2022, of which LAK19 trillion were settled mostly via the issuance of triangulation bonds. As the government is now verifying the remaining LAK14 trillion, there is a possibility that the government would issue triangulation bonds to settle these arrears upon verification finalization.
[68] The Interbank2018 platform was launched to process transactions between the BOL and banks or open market operations, and to facilitate interbank lending and borrowing and FX trading transactions. That said, transactions in the interbank market have been mostly related to FX trading, primarily in the form of spot transactions, with declining volumes in recent years. There have been few interbank transactions of short-term borrowing and lending using Interbank2018 as banks are reportedly cautious about the repayment capacity of borrowing banks. Most banks prefer to borrow and lend on a bilateral basis instead. According to **AMRO**

20. AMRO encourages the authorities to accelerate market-friendly foreign exchange policy measures. Narrowing the gap between the bank and parallel exchange rates would increase the supply of foreign exchange in the formal market. As such, the BOL widened the LAK/USD exchange rate trading band for commercial banks in June 2023 to ±7.5 percent of the daily reference rate from the previous ±4.5 percent. As a result, the gap between the two rates narrowed, but only temporarily and in July 2024, the gap widened to above 20 percent. However, more recently, the gap has narrowed again as the increase in LAK deposit rates boosted kip demand, contributing to a strengthening of the parallel rate. The BOL is encouraged to consider not only broadening the trading band but also adjusting the reference rate. To stabilize the kip exchange rate, the BOL must maintain a tight monetary policy by raising interest rate or reducing the monetary base. At the same time, the authorities should take action to reschedule external debt payments in order to alleviate the demand for foreign exchange.

21. Repatriation and conversion requirements should be implemented in close consultation with stakeholders to minimize the impact on exporters. Experience in other countries suggests that the BOL's new foreign currency regulation, which requires exporters to repatriate and convert their export earnings, could be justified when foreign reserves are low and there is excess demand in the domestic forex market. However, the measure may undermine investor confidence and encourage evasion by exporters. Hence, the measure should be time-bound, and policy details should be clearly communicated to relevant stakeholders in a timely manner. The BOL may consider developing a dedicated helpline and online portal to explain and clarify any inquiries about the regulation. To avoid overly burdening the business community and commercial banks, the repatriation and conversion rates should be periodically assessed in close consultation with these stakeholders. Exporters subject to the regulation should have access to sufficient foreign exchange in a timely manner. Incentives in the form of preferential access to bank loans could be offered to exporters who fully comply with the regulation. Moreover, an adequate monitoring system and a strong enforcement of penalties would be essential to enhance compliance among exporters.

22. The BOL is encouraged to disclose more fully its international reserves position, which includes the unactivated portion of foreign-exchange swap arrangements. Since July 2023, the BOL has revised the international reserves figure by including the full amount of its foreign-exchange swap arrangement with the People's Bank of China as part of its foreign reserves even though the swap arrangement, which was set up in July 2020, has not been fully activated.[69] However, the international reserves figure should reflect the readily available external assets of the BOL which can be mobilized swiftly to meet its balance of payment needs or to intervene in the forex market. In other words, reserve assets should include only the activated portion of the foreign exchange swap arrangement.[70] Revealing the full details of its international reserves will instil investor confidence in the accuracy of Lao PDR's data on international reserves.

23. Policy measures to address banking-sector vulnerabilities should be stepped up.

Annual Consultation Report on Lao PDR (2023), Interbank2018's functions and flexibility could be improved to incentivize banks to use the platform more actively. Enhanced transparency and information disclosure will also promote trust in the system and facilitate interbank lending.

[69] According to the BOL, the full value of the swap arrangement with the PBOC was included in the BOL's definition of reserves as the swap line aims at stabilizing the foreign exchange market.

[70] Further information is available in the IMF's publication, "International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template.

a. Bank recapitalization. Decisive policy measures to raise the capital buffer of the largest state-owned bank to at least the minimum regulatory level will improve its soundness and help the bank to resume normal financial intermediation function.[71] Recent increases in equity contributions to several banks with relatively low capital buffers are prudent and should be continued.

b. NPL recognition and resolution. Following the phaseout of regulatory forbearance on pandemic-related restructured loans, banks should properly recognize non-viable loans and set aside adequate provisions for those loans. Likewise, continued settlement of overdue loans related to unbudgeted local government projects or the electricity sector will improve the quality of banks' books.

c. Risk management and regulatory standard enforcement. The implementation of international regulatory standards, including Basel II and IFRS 9, will enhance banks' risk management and information disclosure and transparency. To enable a smooth adoption of these standards among banks, the BOL's timely and clear guidance is crucial. As far as banking supervision is concerned, using tools such as bank scorecards will assist the central bank in moving toward a risk-based supervisory approach. Likewise, stress tests should be regularly conducted to assess the impacts of macroeconomic and exchange rate shocks on banks' soundness indicators.

C.2 Steering Toward Prudent Fiscal Management

24. The government should continue revenue mobilization to restore fiscal sustainability while supporting growth-enhancing spending.

a. Tax policy and administration reforms. Efforts to expand the VAT base to include more than 4,000 new VAT registrants, and the decision to raise VAT and excise tax rates,[72] are highly commendable. The Lao government should continue to expand its tax base and increase the share of income-based taxes to reduce reliance on consumption taxes.[73] The tax base could be broadened through increased registration with the Personal Taxpayer Identification Number (PTIN) system.[74] In addition, nationwide expansion of electronic tax registration, filing and payment systems, including the Tax Revenue Information System (TaxRIS) and the Automated System for Customs Data (ASYCUDA), is recommended to streamline taxpayer services and reduce compliance costs, particularly for small and medium taxpayers. To expedite tax refunds,[75] tax authorities should develop risk-based audits to quantify taxpayers' compliance risk and speed up refunds for low-risk taxpayers. Improving data gathering on tax expenditures is also necessary for a comprehensive review of the investment promotion law in order to redesign incentives and enhance tax collection.

b. New tax measures. With effect from August 2024, Lao PDR is imposing VAT on digital services provided by foreign suppliers, digital platforms and e-commerce retailers to local population. The authorities should closely monitor these vendors to ensure VAT registration and to meet tax collection targets. To prepare for the audit of digital service

[71] Options to consider could involve raising the equity contributions by existing shareholders, including the government, divesting from joint ventures and associated firms, and suspending dividend payments to shareholders, in addition to looking for new strategic investors.
[72] In 2023 and 2024, the authorities increased excise tax rates on various products including cars, alcohol, tobacco, soft drinks and energy drinks.
[73] Despite the share of consumption-based taxes in total tax dropping from 54 percent between 2017 and 2022 to 46 percent in 2023, income-based taxes account for 24 percent of total tax. Therefore, prioritizing income-based taxes, which are more progressive, is advisable.
[74] Individuals, such as locals and foreigners, businesspeople, retailers and online sellers, must register and obtain a PTIN for tax purposes.
[75] According to the VAT Law in Lao PDR, VAT refunds must be paid within three months, but the actual reimbursements have been delayed.

providers, tax authorities should computerize accounting and data collection systems and provide training to tax officers to enhance their data analytical skills.

25. Public financial management and fiscal discipline should be strengthened to prevent future expenditure arrears and enhance overall fiscal governance.

a. The Lao government had incurred sizable arrears with private contractors on infrastructure projects undertaken by local authorities without proper reporting to or approval from the central government for budgeting. Continued resolution of existing arrears will improve the balance sheet of contractors, public service providers and domestic banks. At the same time, public financial management systems should be improved to prevent the arrears problem from recurring again. The government should also ensure strict compliance with the regulations set forth in the Public Investment Law, the Budget Law and the Public Debt Management Law to prevent a fresh accumulation of arrears.

b. Meanwhile, expenditure arrears often arise due to weak revenue and expenditure forecasting, which result in systematic overestimation of tax revenue and periodic shortfalls in central government cash flows, leading to delayed payments. Revenue and expenditure forecasting could be improved with a better cash management and financing plans within the year. Improving cash management by consolidating cash balances in a Treasury single account (TSA) and ensuring collection of sufficient data on revenue and expenditure, will help the authorities to project the payment schedule more accurately and minimize delayed payments.

c. Strengthening fiscal discipline is essential for achieving sound fiscal governance, which in turn supports effective policymaking, reduces fiscal risks, promotes long-term stability, and enhances public trust. Although the authorities have a medium-term fiscal plan in place, transparency can be further improved by outlining specific measures to achieve the targets set in the plan.[76] Fiscal targets should be based on realistic macroeconomic projections and communicated clearly to the public. Additionally, the authorities should closely monitor indicators on debt affordability[77] and financing availability,[78] which, although established, are no longer being actively tracked, to guide policy decisions and support sustainable fiscal strategy. As the public debt situation is brought under control, the government may consider formalizing these fiscal indicators into fiscal rules, provided the authorities' administrative capacity is sufficient. Timely release of the full budget plan, budget operation documents and the debt bulletin is advisable.

26. The government should pursue a more comprehensive restructuring of external debt to reduce annual debt service payments to an affordable level. Given elevated foreign exchange needs from 2024 onward, limited access to external financing and low foreign reserves holdings, the government should pursue a more comprehensive debt restructuring with its main creditors to lower annual debt service payments to a level that is consistent with its medium-term balance of payments projections.[79] The government is considering partial

[76] The revised 2026-2030 Medium-term Fiscal Framework anticipates an increase in the revenue-to-GDP ratio from 17 percent in 2023 to 20 percent within the next three years of 2025-2027, and a further rise to 22 percent by 2030. In addition, the framework expects that expenditure growth will be maintained below revenue growth to achieve a slight budget deficit and eventually a balanced or surplus budget.
[77] An example of debt affordability is the ratio of interest payments to revenue.
[78] Examples of financing availability ratios are the share of government debt in foreign currency to total government debt, external financing needs to GDP, and debt to GDP.
[79] To lower its annual debt service burden, the government may need to agree with creditors to lengthen the maturity and/or lower the interest rate of existing debt. A rollover of existing debt could also help alleviate the burden, but financing terms applicable to

privatization of existing power plants by forming a super holding company with a minor equity contribution from a foreign investor.[80] The equity sales proceeds are expected to support the government's foreign currency financing needs. From 2029 onwards, Lao PDR's balance of payments will be boosted by the transfer of IPP project assets to the government under the Build-Operate-Transfer scheme.[81] As IPPs have enjoyed profits thanks to the strong revenue stream accorded by foreign utility companies, these assets should provide similar benefits to the government once they are transferred to the government. The government should start preparations for such future asset transfers (Selected Issue 2).[82]

27. To expand available financing sources, Lao PDR should deepen its domestic government bond market. The issuance of government bonds totalling LAK3.7 trillion, USD55.9 million and THB3 billion in 2023[83] through the Lao Securities Exchange (LSX) was a marked expansion from its 2022 issuance of LAK1.4 trillion and USD14 million. The big increase was attributable to the setting of higher coupon rates on the bonds which were more in line with market conditions. That said, the domestic government bond market remains small in size and illiquid due to limited trading in the secondary market. Enhancing disclosure of information on government bonds and promotion of financial education are crucial. Furthermore, effective communication between the government and investors are necessary for the authorities to understand the appetite of investors and build market confidence. Furthermore, commercial banks hold most of the government bonds, with limited subscription by long-term institutional investors.[84] Policy measures or incentives should be taken to bring long-term institutional investors, such as insurance companies, into the investor base. This will allow the government to issue long-term government bonds to deepen its bond market (Box C).

Box C. Bond Market Development in Lao PDR[85]

The Lao Securities Exchange (LSX), as the main capital market in Lao PDR, is in the early stages of development with ongoing technical assistance in key areas. Although the LSX was established in 2010, the first government bond issuance through the LSX began in 2018 for budget-financing purposes.[86] As of February 2024, Lao PDR had received nine technical assistance (TA) projects from the Asian Bond Markets Initiative (ABMI), which significantly contributed to its development. In present, the country is receiving its tenth TA to further strengthen its capacity in areas such as government yield curves, corporate bond issuance, and green bonds.

Government bonds are issued with coupon rates set by the government, and the bond market remains small and illiquid despite increased subscriptions in 2023. Government bonds are offered through LSX twice a month, coordinated by securities companies, with the coupon rates determined by the government. The securities companies conduct survey of market demand and report to Lao PDR's Ministry of Finance (LMOF), which then sets interest rates, amounts and tenors based on the survey result. The LMOF and LSX will issue a prospectus that provides detailed information about the bond offering. The securities companies subsequently contact potential investors to offer the bonds (Figure C1). Subscriptions have been small, averaging around 0.4 percent of GDP between 2018 and 2022, but increased significantly to 2.4 percent of GDP in 2023, reflecting primarily the higher coupon rates that were more aligned with market conditions (Figures C2, C3). In

the new debt should be carefully examined to avoid an increase in future debt service which is more than the country's payment capacity.

[80] The government plans to sell 35 percent of the super holding company's equity to Energy Absolute, a Thai-based alternative energy firm established in 2006, at the price of USD1 billion.

[81] After the transfer, the government could earn more FCY income by operating the projects itself or through SOEs, or by selling its equity stake to other investors.

[82] For instance, the government may need to start coordination with the current concessionaire, look for an electricity off-taker after the asset transfer, and begin personnel training for the post-transfer operation.

[83] Thai-denominated bonds were offered through the LSX for the first time in 2023.

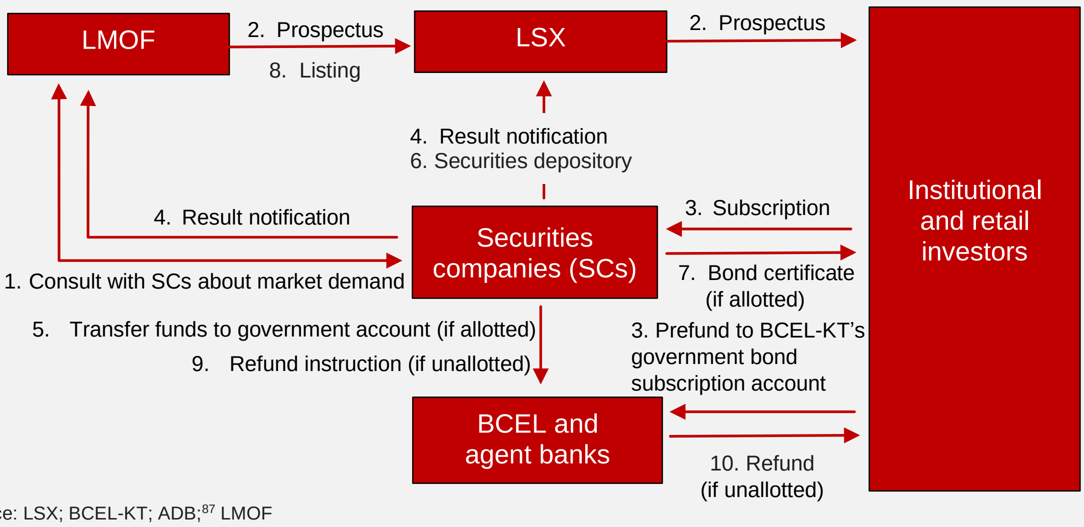
[84] Institutional investors in Lao PDR include the Lao Social Security Organization and the Deposit Protection Fund.

[85] Prepared by Ravisara Hataiseree, Economist, and Somphone Changdabout, Associate.

[86] The first Lao kip government bonds were offered in 2018, followed by the first U.S. dollar government bonds in 2020, and Thai baht government bonds in 2023.

addition, the government has consistently made timely payments upon maturity. Nevertheless, the domestic government bond market remains small and illiquid with limited trading (Figure C4).

Figure C1. Process of Budget-balancing Bond Issuance in LSX



Source: LSX; BCEL-KT; ADB;[87] LMOF

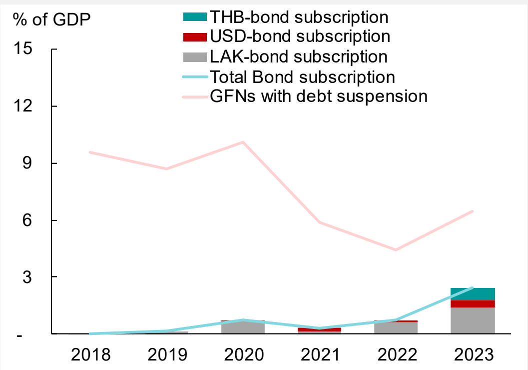
Note:

(1) BCEL and agent banks

- BCEL, or Banque Pour Le Commerce Exterieur Lao Public, serves as the agent bank for investors and manages government bond subscription accounts.
- Other agent banks include Lao Development Bank, Agricultural Promotion Bank, ST Bank, Phongsavanh Bank and Maruhan Japan Bank Laos.
- Investors can invest via one of six agent banks or directly through SCs. If an investor chooses to invest via an agent bank, the bank will assist in transferring funds to the BCEL-KT's government bond subscription account. Alternatively, if an investor invests directly through SCs, they must prefund directly to the BCEL-KT's government bond subscription account.

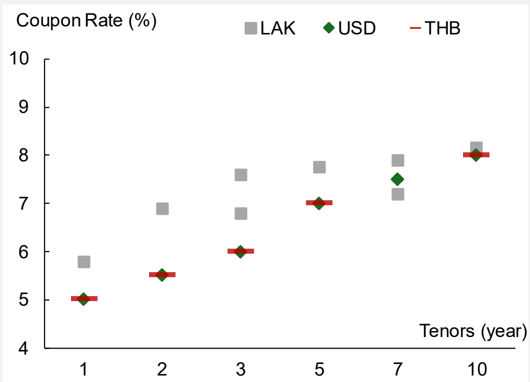
(2) The securities companies include BCEL-KT Securities Company Limited, LDB Securities Sole Company Limited, and Lao-China Securities Company Limited.

Figure C2. Bonds Subscribed Via LSX vs. GFNs



Source: LSX; AMRO staff compilation

Figure C3. Government Bond Coupon Rates and Tenors by Currency for 2023 Offerings



Source: LSX; AMRO staff compilation

Note: (1) LMOF offered two tranches of kip bonds in 2023 with tenors of three and seven years. The lower rates with tenors of three and seven years were for the tranche that was registered to be offered in 2022, and whose undersubscribed portion was carried over to 2023, while the higher rates were registered to be offered in 2023.

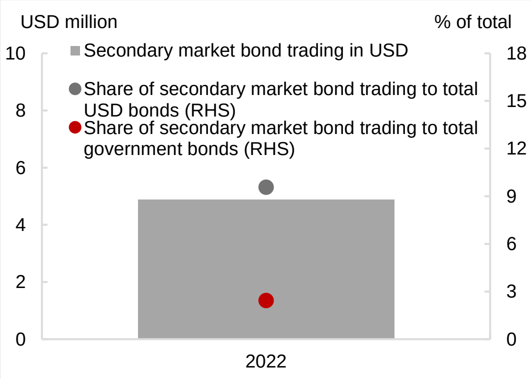
(2) Kip bond yields increased for the first time in 2023, up 0.8 percentage points for the one, three and five-year tenors, 0.7 percentage points for the seven-year tenor, and 0.65 percentage points for the 10-year tenor. In contrast, U.S. dollar bond yields have remained unchanged since their offering

In 2023, the government offered more kip-denominated bonds than either U.S. dollar or Thai baht bonds, but subscription to both the kip and U.S. dollar bonds fell short of the targets. Of a total offer of LAK5.5 trillion of kip bonds, investors subscribed to only LAK3.7 trillion. As for U.S.

[87] Asian Development Bank (ADB). December 2022. "Developing a Local Currency Government Bond Market in an Emerging Economy After COVID-19: Case for the Lao People's Democratic Republic." Manila, Philippines: Asian Development Bank. http://dx.doi.org/10.22617/TCS220527-2

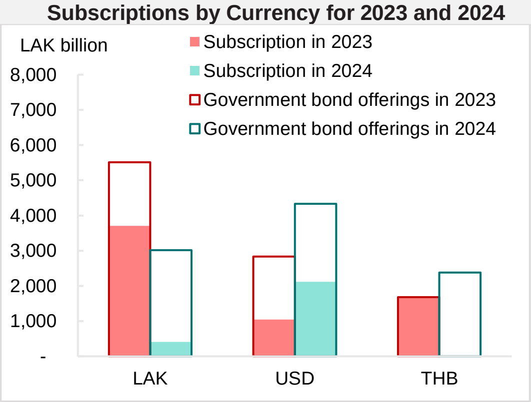
dollar-denominated bonds, of the total offer of USD151 million, subscriptions totaled only USD56 million. Only the baht-denominated bonds were fully subscribed at THB3 billion (Figure C5). The under-subscribed kip and U.S. dollar bonds in 2023 were carried over to 2024 which saw LAK0.4 trillion and USD95 million subscribed by May 2024, mostly absorbed by institutional investors. Government bonds have a minimum tenor of one year, as short-term bills are offered directly through the Bank of Lao PDR.

Figure C4. Secondary Market Bond Trading



Source: LSX; AMRO staff compilation
Note: (1) Only U.S. dollar government bonds have traded in the secondary market.
(2) The share of secondary market bond trading in 2022 is compared with the bond stock at the end of 2021. The end-of-period exchange rate for converting kip bonds to U.S. dollars was 11,193 LAK/USD in 2021.

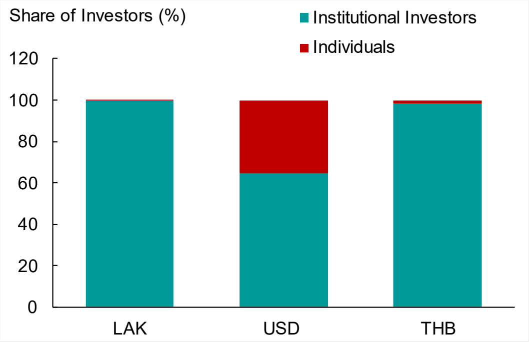
Figure C5. Government Bond Offerings and Subscriptions by Currency for 2023 and 2024



Source: LSX; AMRO staff compilation
Note: The exchange rates for converting FCY bonds to kip are 18,707 LAK/USD and 561 LAK/THB in 2023, and 22,155 LAK/USD and 681 LAK/THB in 2024.

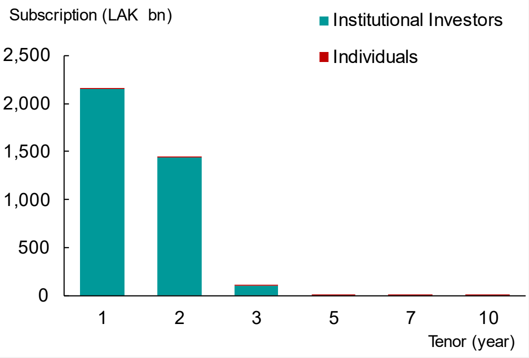
Government bonds with tenors of one to three years appeal to institutional investors, while individual investors primarily invest in bonds with longer maturities. Institutional investors, mainly domestic commercial banks, are the primary buyers of government bonds across all three currencies. They subscribed to 99.8 percent of kip, 65 percent of U.S. dollar, and 98.6 percent of baht-denominated bonds in 2023 (Figure C6). These institutional investors predominantly bought kip bonds with tenors of one to three years, and U.S. dollar and baht bonds with a tenor of one year (Figures C7, C9).

Figure C6. Government Bond Investor Base by Currency in 2023



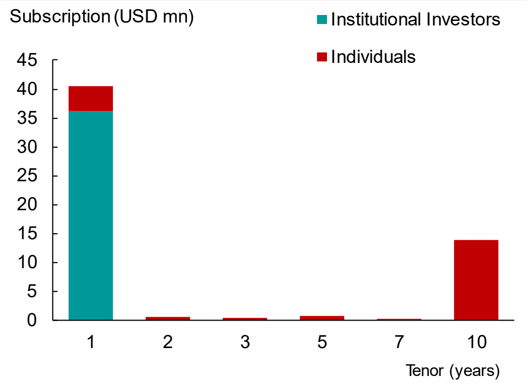
Source: LSX; AMRO staff compilation

Figure C7. Investor Base of Kip Bonds by Tenor in 2023



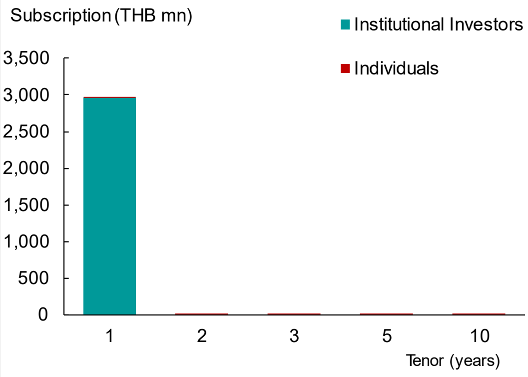
Source: LSX; AMRO staff compilation

Figure C8. Investor Base of U.S. Dollar Bonds by Tenor in 2023



Source: LSX; AMRO staff compilation

Figure C9. Investor Base of Baht Bonds by Tenor in 2023



Source: LSX; AMRO staff compilation

Participants of the Lao PDR bond market are gaining interest in corporate bonds following the first U.S. dollar-denominated issuance via the LSX in 2023, with more issuances expected in 2024. Individual investors fully subscribed to the first corporate bond through private placement, totaling USD3 million with a four-year tenor and a 7.5 percent interest rate. Given the small share of corporate bonds compared with the total government bond issuance, the authorities are encouraging more corporate bond issuances through the LSX. In 2024, at least two new corporate bonds are expected, worth USD4 million to USD15 million in total. One will be a green bond for constructing electric car charging stations, and the other is meant to raise refinancing and working capital for four leasing companies.

Several macroeconomic factors undermine the attractiveness and liquidity of Lao PDR's government bonds, affecting investor confidence and market dynamics. Notable factors include persistently high inflation and kip depreciation, which reduce the appeal of kip-denominated bonds due to potential value erosion. Sovereign credit rating downgrades, and high external debt also raise concerns about public debt sustainability, further affecting investor confidence and appetite for government bonds. Limited secondary market liquidity, with few transactions recorded since its establishment in 2018, results in investors holding government bonds until maturity.

To deepen Lao PDR's bond market, authorities are trying to expand the investor base to non-bank institutions and individuals. Although the Lao Social Security Organization, including pension and provident funds, the Deposit Protection Fund and insurance companies currently invest in government bonds, their investment share is small compared with commercial banks. Introducing regulations that require non-bank financial institutions to allocate a certain share of their assets to government bonds would lead to further investment. For example, in Thailand, the Social Security Fund must invest at least 60 percent of its assets in highly secure assets, such as Treasury bills, government bonds, guaranteed bank deposits and investment-grade fixed-income securities.[88] Deepening the secondary market to enhance bond liquidity and offering tax incentives could also make government bonds more attractive. Furthermore, the LSX is developing systems to facilitate government bond trading and information disclosure through mobile applications, including the Mobile Trading System and People Alternative Market, making it more convenient and cost-effective for individual investors.

28. EDL reforms to restore its solvency should be accelerated so that the government can avoid an additional fiscal burden related to the SOE's debt. AMRO staff welcomes EDL's receipt of a concession fee of USD625 million from EDL-T, which was later used to repay EDL's own debt and on-lent debt owed to the government. However, given the presumably large size of EDL's outstanding debt and accumulated accounts payables to electricity suppliers including EDL-Gen, other efforts to restore the profitability of EDL are essential. While

[88] The Social Security Fund's asset allocation is governed by the Social Security Committee Regulations on Investment of the Social Security Fund B.E. 2549 (2006).

the electricity tariff on industries was increased in February 2023, the government should consider a road map to raise average electricity tariffs to at least the cost recovery levels to ease EDL's financial burden, while providing cash transfers to offset the impact on vulnerable groups.[89] EDL should also expand its revenue base by attracting new customers, such as the cryptocurrency mining industry,[90] without sacrificing its electricity supply to established clients. Given the seasonality of output from hydropower plants, excess electricity generated during the rainy season could be exported to neighboring countries to earn additional revenue. Strengthening EDL's governance as well as improving the transparency of EDL's business performance and financial conditions through efforts to obtain an auditor's clearance, so that audited financial statements can be published in a timely manner, is indispensable in carrying out these reforms.[91] The government may need to consider capital injections into EDL, should more measures be needed.

29. Coordinated fiscal consolidation and macroeconomic stability are crucial for sustainable debt management in Lao PDR. The debt dynamics of Lao PDR in recent years are primarily influenced by macroeconomic variables, particularly the exchange rate and inflation. Despite recent improvements in the primary balance, the focus of fiscal consolidation should be on improving macroeconomic conditions, such as exchange rate and price stability, by coordinating with other macroeconomic policies. Stabilizing these factors can help restore debt sustainability and support an improvement in sovereign credit rating, thereby increasing market access at lower costs, and alleviating pressure on external buffers. Fiscal consolidation should also prioritize revenue mobilization over spending cuts, given the already constrained expenditure levels. Strengthening fiscal discipline and improving PFM can further enhance the effectiveness of the fiscal consolidation efforts.

C.3 Laying Foundations for Long-term Sustainable Growth

30. More ambitious structural reforms are needed to promote more inclusive and sustainable growth. The authorities should remain committed to improving transport and connectivity infrastructure, especially infrastructure development projects identified under the 9th Five-Year National Socio-Economic Development Plan. As exemplified by the Laos-China Railway operations, improved infrastructure would bolster the logistics industry and unlock Lao PDR's potential to become a regional transport hub while boosting tourism. These efforts should also be accompanied by appropriate regulations and incentives to create a business-friendly environment. In addition, the authorities should continue to expand efforts to promote sustainable tourism, given its potential to become a more important source of foreign currency income for the country. While close communication with the business community would be important, the authorities' plan to increase the minimum wage since 2022 is a welcome move to stem the outflow of Laotian workers abroad. The authorities are encouraged to improve access to finance among SMEs to allow them to expand production capacity and invest in new technologies to enhance the competitiveness of Lao PDR's industries. Close coordination with development partners is critical in filling the financial and knowledge gap to accelerate structural transformations. Lao PDR also needs to make more progress to address the adverse effects of climate change. Increased revenue from mobilization could be directed toward investments in infrastructure that will aid climate change adaptation.

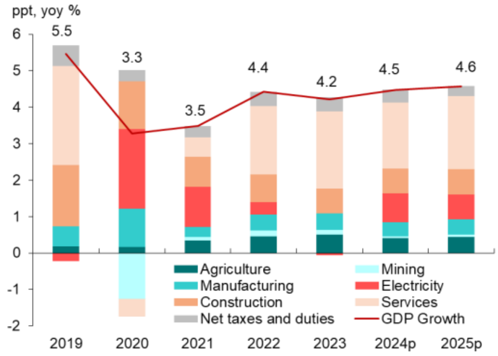
[89] After the tariff increase in February 2023, the average tariff across all users climbed from 4.04 cents per kilowatt-hour (kWh) to 6.32 cents/kWh, according to EDL. However, the cost recovery level based on EDL's estimate is 11 cents/kWh. EDL is now proposing an additional rise to 7.5 cents/kWh to the government.
[90] In 2021, Lao PDR enacted legislation to pilot the licensing of crypto mining and trading activities, in the hope that it could earn more FCY income by selling electricity generated by hydropower to crypto-related businesses.
[91] According to EDL, the company has not been able to issue audited financial statements since 2018 as it has failed to obtain an auditor's clearance.

Appendices

Appendix 1. Selected Figures for Major Economic Indicators

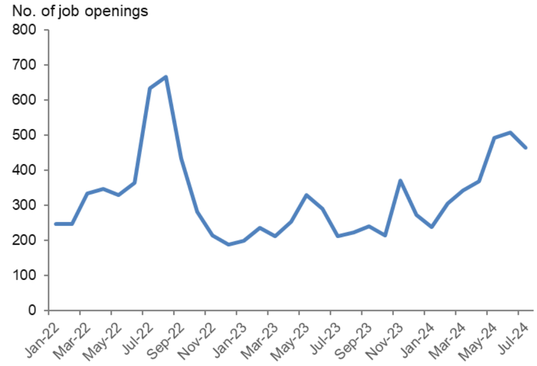
Figure 1.1. Real Sector

Growth in 2024 will be supported by a recovery in the electricity sector and robust expansion in services.



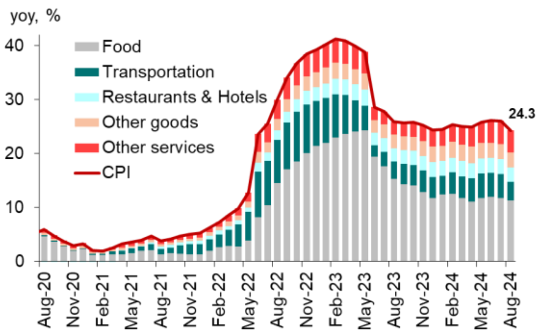
Source: LSB; AMRO staff estimates

The number of active job openings has increased amid growing shortages in the domestic labour market.



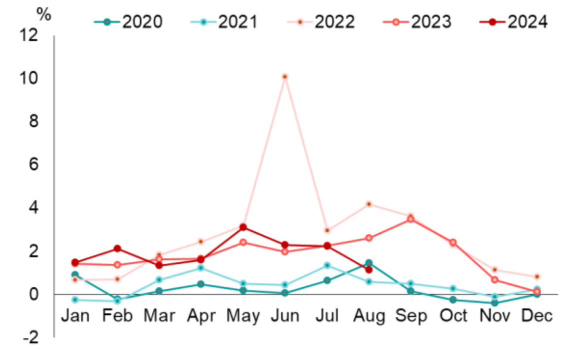
Source: Revelio Labs.

Headline inflation accelerated in 2023 and remained elevated in the first eight months of 2024.



Source: LSB; AMRO staff calculations

Recent month-on-month inflation rates are still high.



Source: LSB; AMRO staff estimates

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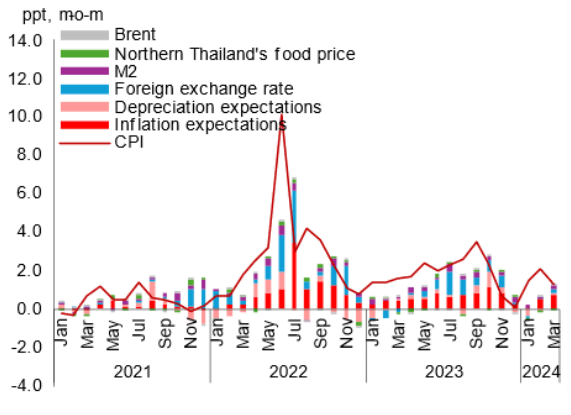
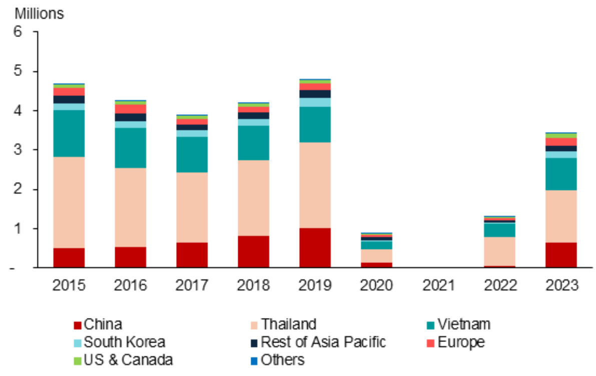
Expectations of inflation and kip depreciation have increased and firmly contribute to the persistent rise in CPI.



Source: BOL; LSB; CEIC; AMRO staff calculations
Note: Inflationary expectations are represented by the previous month's CPI month-on-month inflation. Depreciation expectations are represented by the previous months' growth rate of the gap between the LAK/USD parallel and the bank rates. Data is available up to March 2024.

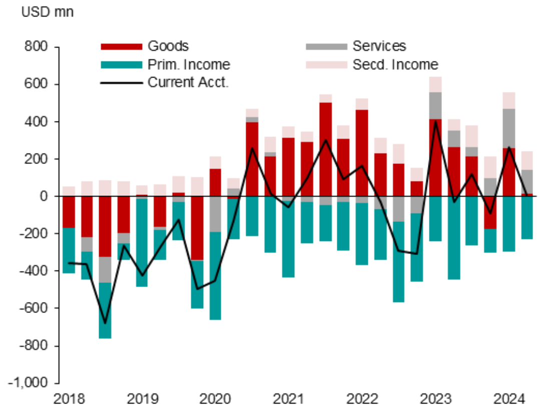
International tourist arrivals rebounded strongly in 2023 after travel restrictions were lifted.



Source: Ministry of Information, Culture and Tourism

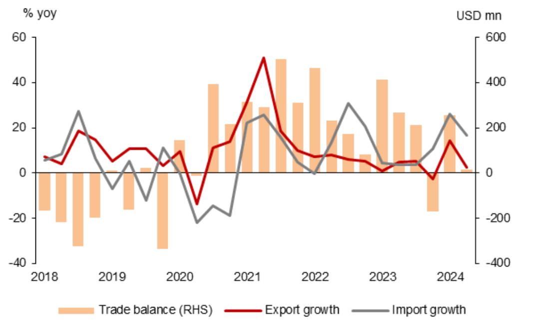
Figure 1.2. External Sector

The current account turned around to record a surplus of 2.9 percent of GDP in 2023.



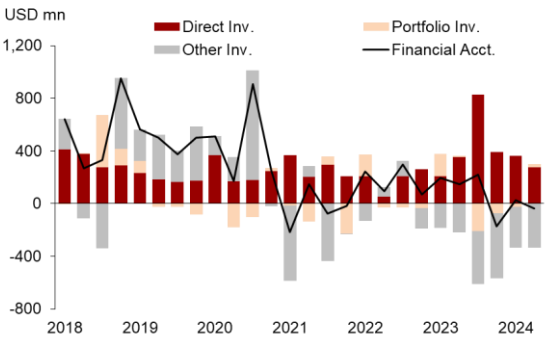
Source: BOL; AMRO staff calculations

The trade balance narrowed in 2023 as export growth moderated faster than imports.



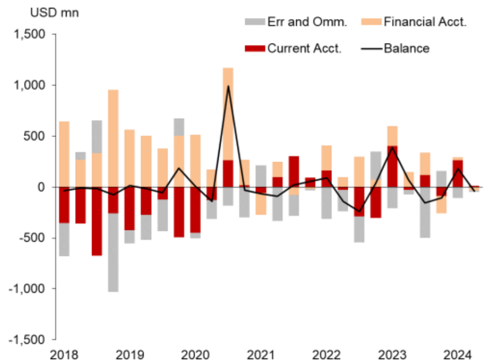
Source: BOL; AMRO staff calculations

Large FDI into the energy sector pushed up overall financial inflows in Q3 2023.



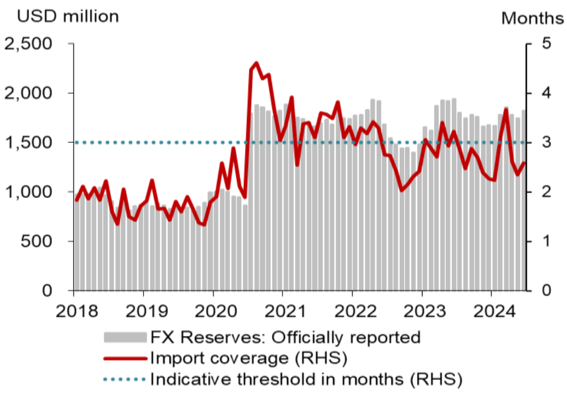
Source: BOL; AMRO staff calculations

The overall BOP shifted to a surplus in 2023.



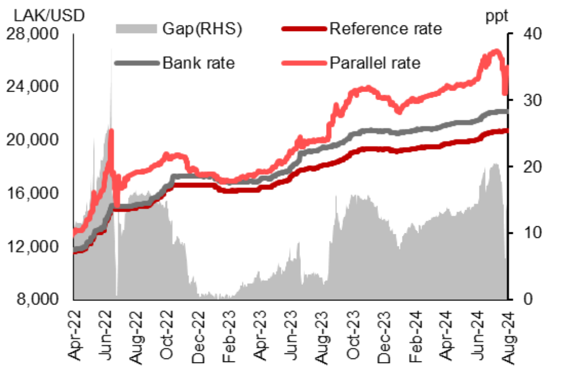
Source: BOL; AMRO staff calculations

Foreign reserves rebounded in 2023 but remain low.



Source: BOL

The kip continued to slide further in 2024, with a slight appreciation in recent weeks.

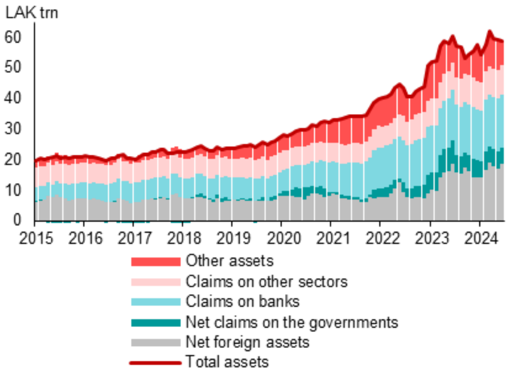


Source: BOL; CEIC; AMRO staff calculations

Note: The bank rate is set by commercial banks and could fluctuate within a ±7.5% band after June 2023 (±4.5% before June 2023) from the BOL-defined reference rate. The gap is defined as the percentage difference between the reference parallel rates.

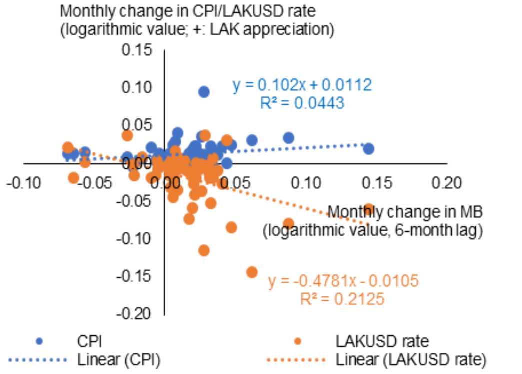
Figure 1.3. Monetary and Banking Sector

BOL assets have expanded rapidly since 2022 due to higher claims on banks and the government and to more net foreign assets…



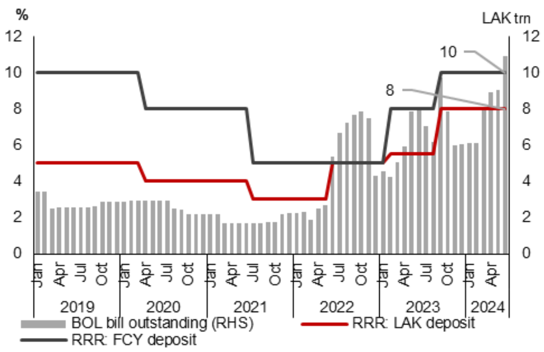
Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data obtained up to June 2024.

… which likely contributed to recent elevated inflation and kip depreciation



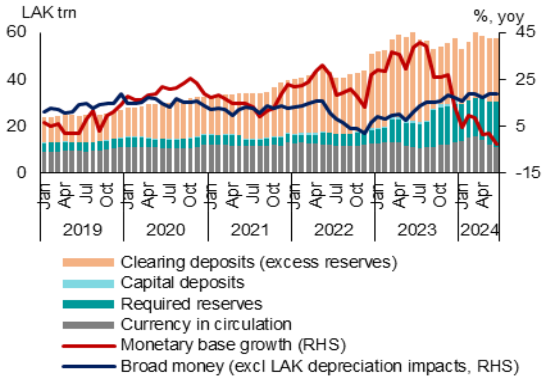
Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data obtained from January 2019 to March 2024. The blue and yellow lines indicate that expansion in the monetary base is likely associated with higher CPI inflation and a weaker kip exchange rate with a six-month time lag.

BOL has issued bills and raised the reserve requirement ratio to absorb liquidity…



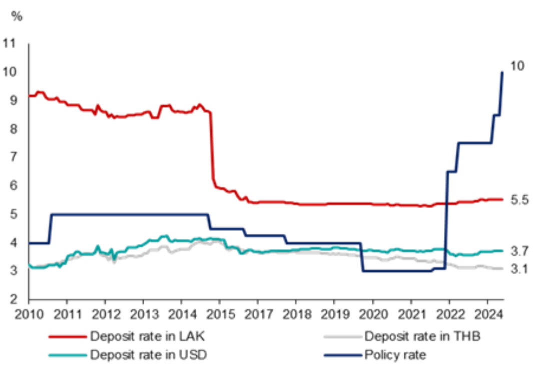
Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data obtained up to June 2024.

… leading to lower excess bank reserves and slower monetary base growth from end-2023.



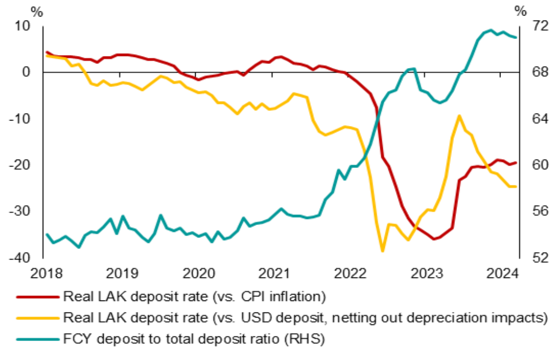
Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data obtained up to June 2024.

Despite BOL policy rate hikes, banks' kip deposit rates were broadly unchanged.



Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data obtained up to June 2024.

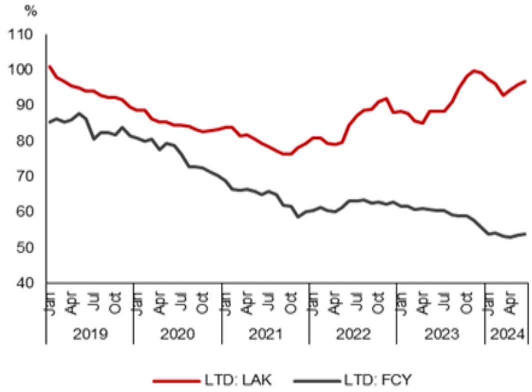
Large real negative kip interest rates have induced more FCY deposits and increased dollarization.



Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data obtained up to March 2024.

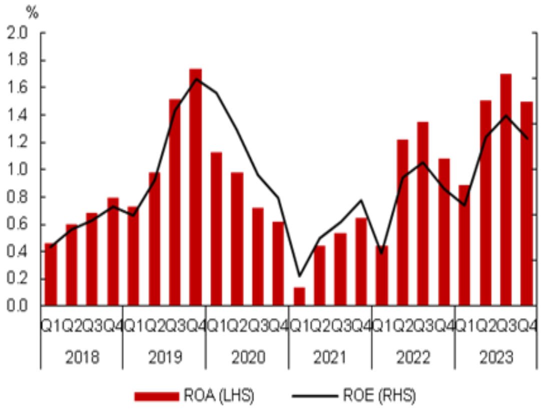
Figure 1.4. Banking Sector

Strong kip loan growth drove loan-to-deposit back to pre-pandemic levels…



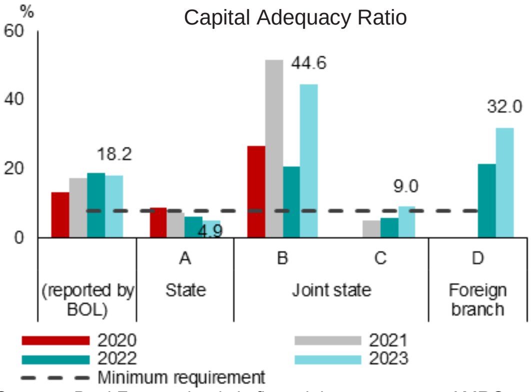
Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data obtained up to June 2024.

… and supported higher interest incomes and improved profits among banks in 2023.



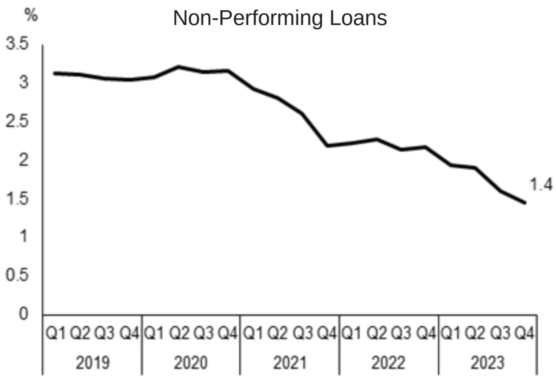
Source: BOL; CEIC; AMRO staff calculations
Note: Quarterly data obtained up to Q4 2023.

CARs improved in several banks but fell further in the state-owned largest bank.



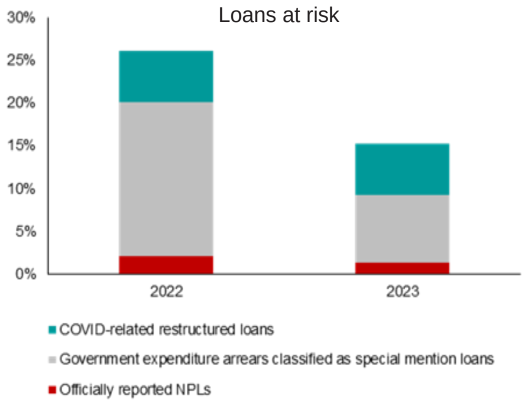
Source: BankFocus; banks' financial statements; AMRO staff calculations

Officially reported NPLs moderated in 2023…



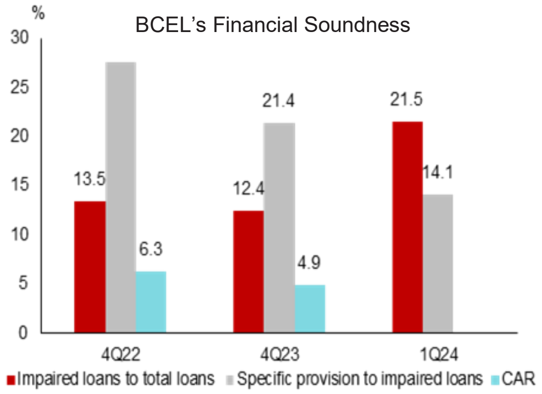
Source: BOL; CEIC; AMRO staff calculations

… but could rise upon the phaseout of regulatory forbearance for pandemic-hit loans and loans to the electricity sector.



Source: BOL; CEIC; AMRO staff calculations

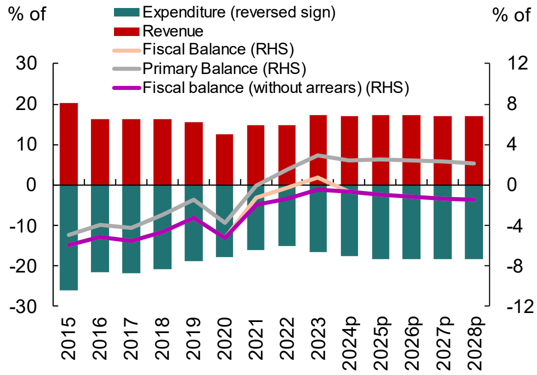
Indeed, the largest state-owned bank's impaired loans surged in early 2024 amid low provisioning and thin capital buffers.



Source: BOL; banks' financial statements; AMRO staff calculations

Figure 1.5. Fiscal Sector

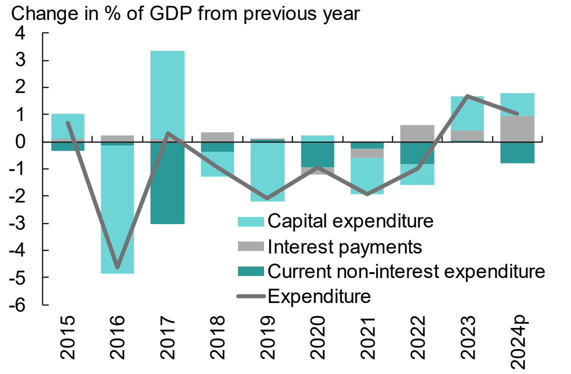
The fiscal balance registered a surplus in 2023 but is projected to revert to small deficits in the medium term.



Source: LMOF; AMRO's staff projections

Note: The fiscal deficit (yellow line) is based on actual interest payments and excludes unpaid interest. The pink line shows the deficit with full interest payment obligations estimated by AMRO staff.

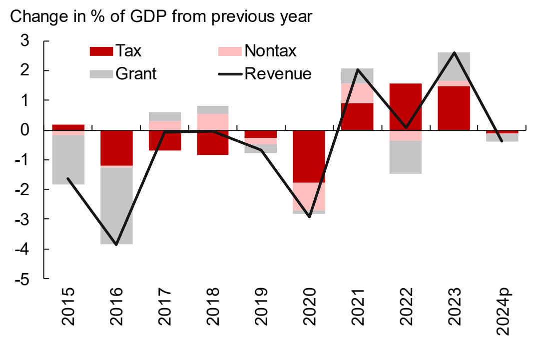
The rise in expenditure in 2023 was driven mainly by foreign-financed capital expenditure.



Source: LMOF; AMRO's staff projections

Note: Interest payments reflect actual payments and exclude unpaid interest due to some creditors.

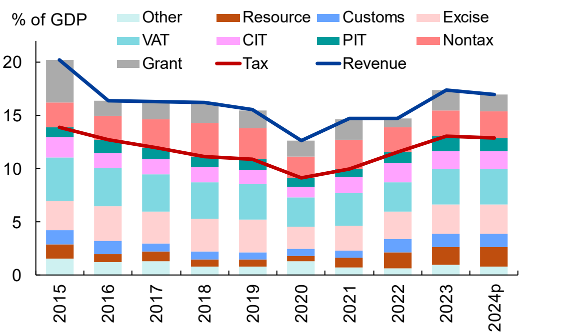
Meanwhile, higher grants and better-than-budgeted tax collection improved the fiscal balance in 2023.



Source: LMOF; AMRO staff projections

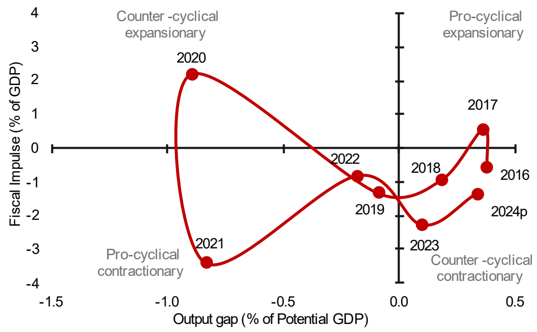
Note: Percentage point difference in revenue-to-GDP ratio and its decomposition.

Tax revenue was boosted by VAT base expansion and taxes from higher commodity prices and kip depreciation.



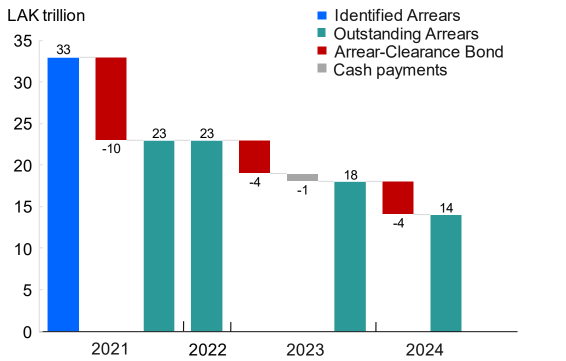
Source: LMOF; AMRO staff projections

With robust revenue in 2023, the fiscal stance is countercyclical and more contractionary than 2022.



Source: LMOF; AMRO's staff projections

While strict fiscal discipline is needed to prevent new arrears, the government also has to clear large outstanding arrears.



Source: LMOF, AMRO staff compilation

Appendix 2. Selected Economic Indicators for Lao PDR

	2020	2021	2022	2023	Projections	
					2024	2025
Real Sector and Prices	(In percent change unless otherwise specified)					
Real GDP	3.3	3.5	4.4	4.2	4.5	4.6
Agriculture	1.1	2.4	3.4	3.7	3.0	3.4
Industry	9.2	6.1	4.4	3.1	5.0	4.8
Services	-1.2	1.4	5.0	5.6	4.7	5.2
GDP deflator	2.9	3.4	11.6	18.2	14.2	10.6
Consumer price inflation (average)	5.1	3.8	23.0	31.2	25.0	15.0
External Sector	(In millions of USD unless otherwise specified)					
Current account balance	-304	432	-459	405	105	116
(In percent of GDP)	-1.6	2.3	-3.0	2.9	0.7	0.8
Trade balance	745	1,419	954	721	689	558
(In percent of GDP)	3.9	7.5	6.3	5.1	4.8	3.8
Exports	6,115	7,695	8,198	8,370	8,861	9,334
(In percent change)	5.3	25.8	6.5	2.1	5.9	5.3
Imports	5,370	6,275	7,244	7,649	8,173	8,776
(In percent change)	-14.4	16.8	15.4	5.6	6.8	7.4
Services, net	-99	-127	-332	380	367	296
Primary income, net	-1,202	-1,087	-1,395	-1,075	-1,340	-1,164
Secondary income, net	252	226	315	378	390	427
Financial account balance	1,842	-164	706	388	362	-316
Direct investment, net	968	1,072	726	1,781	1,374	985
Portfolio investment, net	-257	-310	71	-99	-306	-563
Other investment, net	1,131	-926	-91	-1,294	-706	-738
Net Errors and Omissions	-726	-353	-512	-598	-457	-454
Overall balance	824	-84	-257	197	15	-649
Gross international reserves	1,821	1,737	1,480	1,677	1,703	1,064
(In months of imports of goods and services)	3.8	3.2	2.2	2.3	2.2	1.3
Fiscal Sector (General Government)	(In percent of GDP)					
Revenue and grants	12.7	14.7	14.8	17.4	17.0	17.3
Tax Revenue	9.1	10.0	11.6	13.1	12.9	13.3
Expenditure	17.9	16.0	15.0	16.6	17.7	18.3
Current non-interest expenditure	9.9	9.7	8.8	8.9	8.1	8.1
Interest expenditure	1.5	1.2	1.8	2.2	3.1	3.5
Capital expenditure	6.4	5.1	4.4	5.6	6.5	6.7
Overall fiscal balance	-5.2	-1.3	-0.2	0.7	-0.7	-1.0
Fiscal balance with unpaid interest payment obligations	-5.2	-1.9	-1.4	-0.4	-0.7	-1.0
Primary balance	-3.7	-0.1	1.6	2.9	2.5	2.5
Government debt	61.9	76.2	98.8	103.4	98.6	86.9
Monetary and Financial Sector	(In percent change, end-period unless otherwise specified)					
Credit growth	5.5	10.6	46.7	28.2	34.4	22.6
Credit to GDP (percent)	41.8	43.2	54.4	56.7	69.9	70.6
Monetary base	18.8	23.2	27.2	13.7	12.0	9.5
Broad money	16.3	24.0	36.9	33.3	14.6	7.1
Memorandum Items						
Nominal GDP (LAK billion)	172,919	184,982	215,609	265,475	316,750	366,476
Nominal GDP (USD million)	19,099	18,984	15,061	14,191	14,297	14,637
GDP per capita (USD)	2,641	2,587	2,024	1,881	1,870	1,885
Exchange rate (commercial rate against USD, average)	9,054	9,744	14,316	18,707	21,378	
Exchange rate (commercial rate against USD, EOP)	9,290	11,193	17,312	20,480	22,075	

Source: National authorities, AMRO staff estimates
Note: Fiscal indicators and gross international reserves in months of imports are based on AMRO estimations and projections. Exchange rate figures for 2024 refer to actual rates up till end-August 2024. Credit growth and credit to GDP data refer to banks' claims on the private sector only.

Appendix 3. Balance of Payments

Indicators	2019	2020	2021	2022	2023
	(In millions of USD unless specified otherwise)				
Current account	-1,320	-304	432	-459	405
Trade balance	-466	745	1,419	954	721
Exports, f.o.b.	5,806	6,115	7,695	8,198	8,370
Imports, c.i.f.	6,272	5,370	6,275	7,244	7,649
Services, net	-67	-99	-127	-332	380
Primary income, net	-1,084	-1,202	-1,087	-1,395	-1,075
Secondary income, net	298	252	226	315	378
Capital and financial account	1,959	1,854	-162	714	390
Financial account (net)	1,944	1,842	-164	706	388
Direct investment (net)	756	968	1,072	726	1,781
Portfolio investment (net)	-41	-257	-310	71	-99
Other investment (net)	1,230	1,131	-926	-91	-1,294
Errors and omissions	-515	-726	-353	-512	-598
Overall balance	124	824	-84	-257	197
Memorandum items:					
Current account (% of GDP)	-7.0	-1.6	2.3	-3.0	2.9
Gross international reserves (USD million)	997	1,821	1,737	1,480	1,677
(In months of imports of goods and services)	1.6	3.8	3.2	2.2	2.3
Nominal GDP (USD million)	18,718	19,097	18,928	15,049	14,183
Exchange rate (against USD, average)	8,690	9.055	9,745	14,327	18,718

Source: BOL

Appendix 4. Statement of Central/General Government Operations

Indicators	2019	2020	2021	2022	2023
	(In billions of LAK unless specified otherwise)				
Revenue	25,328	21,846	27,178	31,835	46,123
Tax	17,736	15,765	18,534	24,938	34,646
Income-based tax	3,856	3,179	4,227	6,174	8,221
Consumption-based tax	10,385	8,322	9,997	11,478	16,055
Trade tax	1,012	1,085	1,205	2,621	3,307
Other tax	2,483	3,179	3,105	4,665	7,064
Nontax	4,763	3,451	4,966	4,988	6,563
Grant	2,829	2,565	3,678	1,908	4,914
Expenditure	30,624	30,858	29,507	32,281	44,152
Current non-interest expenditure	17,679	17,123	17,880	19,013	23,499
Interest payments	2,868	2,609	2,163	3,806	5,769
External	2,428	2,100	1,762	2,492	4,448
Domestic	440	509	401	1,314	1,321
Capital expenditure	10,076	11,123	9,465	9,461	14,885
Fiscal Balance	(5,295)	(9,012)	(2,329)	(446)	1,971
Primary Balance	(2,427)	(6,403)	(166)	3,360	7,740
	(In percent of GDP)				
Revenue	15.6	12.7	14.7	14.8	17.4
Tax	10.9	9.1	10.0	11.6	13.1
Income-based tax	2.4	1.8	2.3	2.9	3.1
Consumption-based tax	6.4	4.8	5.4	5.3	6.0
Trade tax	0.6	0.6	0.7	1.2	1.2
Other tax	1.5	1.8	1.7	2.2	2.7
Nontax	3.1	2.9	2.0	2.7	2.3
Grant	1.7	2.0	2.7	2.3	2.5
Expenditure	18.8	17.9	16.0	15.0	16.6
Current non-interest expenditure	10.9	9.9	9.7	8.8	8.9
Interest payments	1.8	1.5	1.2	1.8	2.2
External	1.5	1.2	1.0	1.2	1.7
Domestic	0.3	0.3	0.2	0.6	0.5
Capital expenditure	6.2	6.4	5.1	4.4	5.6
Fiscal Balance	-3.3	-5.2	-1.3	-0.2	0.7
Primary Balance	-1.5	-3.7	-0.1	1.6	2.9
Memorandum items:					
Nominal GDP (LAK billion)	162,657	172,612	184,982	215,609	265,475

Source: LMOF; AMRO staff estimates

Appendix 5. Monetary Survey

Indicators	2019	2020	2021	2022	2023
	(In billions of LAK unless specified otherwise)				
Net Foreign Assets	-7,260	-5,071	461	5	16,768
Assets	20,769	31,070	43,074	58,985	82,955
Liabilities	-28,029	-36,142	-42,613	-58,980	-66,186
Net Domestic Assets	103,447	116,966	138,264	189,843	236,224
Net Domestic Credit	85,594	92,110	113,712	155,239	191,570
Government	4,587	7,630	19,506	18,050	16,288
Private sector	68,544	72,301	79,963	117,316	150,394
Other items net	17,852	24,856	24,551	34,604	44,654
Reserve Money	27,325	32,469	40,011	50,902	57,894
Broad Money	96,186	111,895	138,724	189,849	252,993
Currency in circulation	10,990	12,195	13,386	12,662	13,014
Currency outside banks	8,581	9,312	10,490	9,500	9,174
Deposits	87,560	102,521	128,150	180,309	243,720
Of which: Foreign currency	47,470	56,718	75,395	119,993	173,762
Of which: Local currency	40,090	45,803	52,755	60,316	69,958

Source: BOL

Appendix 6. Climate Change Policy Fact Sheet [92]

<table>
<tr><th>Item</th><th>Sub-item</th><th colspan="5">Note</th></tr>
<tr><td rowspan="10">Nationally Determined Contribution (Mar 2021)</td><td>Emission reduction target</td><td colspan="5">• (Unconditionally) Achieve 60% reduction in greenhouse gas (GHG) emissions compared with business-as-usual (BAU) scenario.
• (Conditionally) Increase forest cover to 70% of total land area, develop 1 GW of renewable energy including wind and solar power and a 300 MW biomass-fired power plant, and reduce final energy usage by 10% compared with BAU scenario.</td></tr>
<tr><td rowspan="9">Main mitigation targets</td><td rowspan="3">Sector</td><td colspan="4">2030</td></tr>
<tr><td colspan="2">Unconditional</td><td colspan="2">Conditional</td></tr>
<tr><td>Target</td><td>ktCO_2e[93]</td><td>Target</td><td>ktCO_2e</td></tr>
<tr><td>Forestry and other land uses</td><td>Reduce deforestation emissions</td><td>1,100</td><td>Increase forest to 70% of land area</td><td>45,000</td></tr>
<tr><td>Energy</td><td>• Install total 13 GW of hydropower
• Introduce 50,000 clean energy-efficient stoves</td><td>2,550</td><td>• Install total 1 GW of solar and wind power
• Install total 300 MW of biomass
• Reduce final energy use by 10%</td><td>1,364</td></tr>
<tr><td>Transport</td><td>• Launch new Bus Rapid Transit system in Vientiane
• Laos-China Railway, launched in [year]</td><td>325</td><td>• Achieve 30% EV penetration
• Use biofuels as 10% of transport fuels</td><td>59</td></tr>
<tr><td>Agriculture</td><td>-</td><td>-</td><td>Apply adjusted water management practices to 50,000 hectares</td><td>128</td></tr>
<tr><td>Waste</td><td>-</td><td>-</td><td>Launch(?) 500tonne/day solid waste management project</td><td>40</td></tr>
<tr><td>Total</td><td colspan="2">3,975</td><td colspan="2">46,450</td></tr>
<tr><td>Long-term commitments</td><td></td><td colspan="5">• Aim to increase forest cover to 70% of total land area through initiatives such as REDD+ (Reducing Emissions from Deforestation and Forest Degradation), forest conservation, sustainable management of forests, and enhancement of forest carbon stocks.
• Focused on enhancing climate resilience in agriculture, water resources, urban development, public health and energy by promoting climate-resilient farming systems, strengthening water resource management, increasing resilience of urban infrastructure, improving public health services, and building resilience in hydropower sector through better dam safety regulations.</td></tr>
<tr><td>Energy transition initiatives</td><td></td><td colspan="5">• 600 MW Monsoon Wind Farm: To export electricity to Vietnam so as to cut emissions by 1,400 ktCO_2e per year.
• 50 MW Solar Attapeu Power Project (SAPP): Lao DPR's first utility-scale solar photovoltaic power plant, expected to generate 128 GWh per year and reduce annual emissions by 479 ktCO_2e.
• 1.2 GW Wind Farm: To be completed by 2025 to diversify and increase Lao PDR's renewable energy capacity.
• 2 GW Geothermal Energy Development: To use advanced geothermal systems to generate electricity.</td></tr>
</table>

[92] Prepared by Thai Yangsingkham, Associate, with contributions from Poh Lynn Ng, Desk Economist.
[93] ktCO_2e: kilotonnes of carbon dioxide equivalent.

<table>
<tr><td rowspan="3">Financing</td><td>Financing needs</td><td>
<table>
<tr><th>2030 conditional mitigation measure</th><th>USD Million</th></tr>
<tr><td>Solar and wind power: 1 GW total installed</td><td>1,500</td></tr>
<tr><td>Biomass: 300 MW total installed</td><td>720</td></tr>
<tr><td>30% EV penetration</td><td>500</td></tr>
<tr><td>Biofuels to meet 10% of transport fuels</td><td>230</td></tr>
<tr><td>10% less final stationary energy usage</td><td>30</td></tr>
<tr><td>50,000 hectares of adjusted water management practices</td><td>65</td></tr>
<tr><td>Implementation of 500t/day solid waste management project</td><td>17</td></tr>
<tr><td>Total</td><td>4,762</td></tr>
</table>
</td></tr>
<tr><td>Project name</td><td>• Lao PDR Emission Reductions Program: to improve governance and sustainable forest landscape management (EUR65 million)
• Lao Landscapes and Livelihoods Project (LLL): To promote sustainable forest management and enhance livelihood opportunities (USD57 million)
• Biodiversity Conservation Corridors Project in Greater Mekong region: to scale up sustainable forest management (USD12 million)
• Building Climate and Disaster Resilience Capacities of Vulnerable Small Towns: to enhance climate and disaster resilience (USD5.5 million)
• Climate Smart Agriculture Alternatives for Upland Production Systems: to enhance resilience of upland communities to climate change (USD18.5 million)</td></tr>
<tr><td>Source of funds</td><td>• World Bank / International Development Association (IDA): supports development projects and programs.
• Asian Development Bank (ADB): supports economic development and regional cooperation.
• Green Climate Fund (GCF): established within framework of United Nations Framework Convention on Climate Change (UNFCCC).
• Global Environment Facility (GEF): focuses on projects related to biodiversity, climate change and land degradation.
• Canadian Clean Energy and Forest Climate Facility (CCEFCF): supports clean energy and forest-related climate initiatives.
• International Fund for Agricultural Development (IFAD): contributes to Lao PDR Emission Reductions Program.
• Canadian Clean Energy and Forest Climate Facility (CCEFCF): supports clean energy and forest-related climate initiatives.</td></tr>
<tr><td rowspan="2">Enabling framework for climate change financing</td><td>Bank of the Lao PDR and International Finance Corporation (BOL-IFC)</td><td>• Develop and define green activities for Lao PDR to align with ASEAN taxonomy and international standards.
• Create guidelines on green lending and environmental risk management for financial institutions.
• Establish frameworks for issuing green, social and sustainable bonds, including capacity building and knowledge sharing with regional and international stakeholders.</td></tr>
<tr><td>MOF Climate Change Initiatives</td><td>• Environmental tax: planned for 2025, with implementation in 2026.
• Carbon credit decree: circulating draft to gather government opinions.
• Green taxonomy: development underway with ADB assistance.
• Climate financing: finalizing green public procurement, discussing green bonds with BOL.</td></tr>
</table>

Source: Lao PDR NDC; UN; OECD; World Bank; AMRO staff compilation

Appendix 7. Data Adequacy for Surveillance Purposes

Criteria/ Key Indicators for Surveillance	Availability (i)	Reporting Frequency/ Timeliness (ii)	Data Quality (iii)	Consistency (iv)	Others, if Any (v)
National Accounts	- GDP on the production side is available on the LSB website. - Quarterly GDP data became available in 2022. - GDP on the consumption side became available in 2023, but only for nominal data as of June 23, 2023.	GDP data is published annually with a time lag of six to nine months.	Data collection techniques are weak due to resource constraints.		
Balance of Payments (BOP) and External Position	- BOP data is published on the BOL website on a quarterly basis. - Time-series data on international reserves is published on a quarterly basis and provides a monthly breakdown with a lag of three to five months. - Export and import data is reported by the Ministry of Industry and Commerce (MOIC). - Information on external positions is not published by the authorities.	- BOP data is released on a quarterly basis with a time lag of one to two quarters. - MOIC data is released every month.	- BOP is compiled on a quarterly basis by BOL according to BPM6. Improvements in the compilation of data from merchandise trade, external debt and FDI surveys are a work-in-progress. - External trade data is incomplete, especially on imports, as it covers only major items whose values are based on average prices of goods specified by the authorities in the past. - A breakdown of external trade data is published by MOIC every month, and historical data is unavailable.	- Consistency of trade data among government agencies could be improved. - Large discrepancy can be seen between trade data from national sources, international financial institutions and Lao PDR's major trading partners, in particular for import data. - Large errors and omissions during several periods make the analysis and interpretation of BOP data challenging.	Ongoing efforts enhance coverage of exports and imports, narrow data discrepancies between customs, BOL and MOIC, and address understated trade deficits.
State Budget and Government Debt	- Budget implementation data is released by the Ministry of Finance (MOF). - A debt statistic bulletin is published on the MOF website.	- The budget and its implementation report are published biannually in the Laotian language with a time lag of six months to one year. - Debt statistic bulletin is published annually with a time lag of six months.	The use of Government Finance Statistics (GFS) standards and procedures is weak. Data coverage is limited to budget operations. Off-budget activities are excluded from the fiscal data.	Persistent off-budget expenditure.	- Implementation of PFM is ongoing. - Continued capacity building is needed to improve timeliness, coverage and accuracy of fiscal data.
Inflation, Money Supply and Credit Growth	- Inflation data is published on the LSB website. - Monetary statistics are published on the BOL website. - Data on official and effective exchange rates (parallel rate) is available on the BOL website. - Data is available regarding credit, the breakdown of claims on government, credit to SOEs and credit to the private sector.	- Headline CPI data is released monthly. - Official exchange rates are reported daily, while effective exchange rate data is available only monthly with a delay of up to four months. - Monetary and credit data is released on a quarterly basis, and the monthly breakdown is published with a time lag of three to six months.	- CPI now encompasses all 18 provinces, extending the previous coverage of 12 provinces. The number of items was also expanded to 485 from 245, with weights generated from the 2012 Lao Social Indicator Survey. - The actual amount of bills that are denominated in U.S. dollars or other foreign currencies and are circulating in the economy is not captured in official monetary statistics. Money supply data comprises only deposits in banks (denominated in LCY and FCY) and bills in circulation (in LCY only).	Some items in the monetary survey, such as BOL's claim on commercial banks and commercial banks' liabilities with BOL, are not internally consistent.	Policy efforts to improve consistency in the monetary survey are ongoing.
Financial Sector Soundness Indicators	Selected indicators on financial soundness (FSIs) are published on the BOL website.	Quarterly and annual data is available on the BOL website, usually with a time lag of three to six months.	FSI indicators are generally compiled based on the IMF's FSI Guide. FSI indicators are available except those related to liquidity and market risks. However, underlying data and metadata are not available.	Some financial indicators, such as the interest rate margin, are not consistent with levels implied in individual bank balance sheets.	-

Notes:

(i) Data availability refers to whether the official data is available for public access by any means.

(ii) Reporting frequency refers to the periodicity with which the available data is published. Timeliness refers to how up to date the published data is relative to the publication date.

(iii) Data quality refers to the accuracy and reliability of the available data, taking into account the data methodologies.

(iv) Consistency refers to both internal consistency within the data series itself and its horizontal consistency with other data series of either the same or different categories.

(v) Other criteria might also apply, if relevant. Examples include but are not limited to potential areas of improvement for data adequacy.

Source: AMRO staff compilation. This preliminary assessment will form the "Supplementary Data Adequacy Assessment" in the EPRD Matrix.

Annexes: Selected Issues

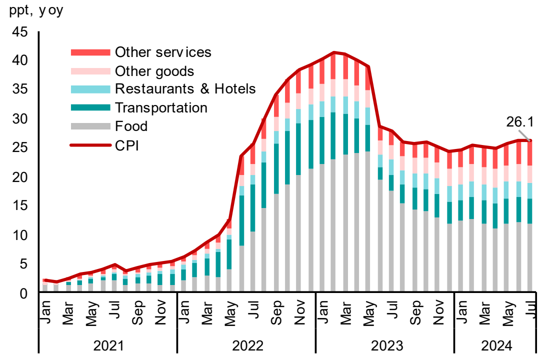
1. Inflation Dynamics: The Impact of People's Sentiments[94]

Inflation has surged sharply in Lao PDR in a way the economy had never experienced in the last two decades. Persistently high inflation has dampened real income and purchasing power, threatening macro-financial stability and growth. As such, the Laotian authorities identify containing elevated inflation as a critical policy goal. This selected issue attempts to clarify the drivers of recent high inflation and suggest areas where policymakers are recommended to focus on to achieve their policy goal. The assessment reveals the significant role that people's sentiments, namely expectations of inflation and kip depreciation, play in recent inflation dynamics. The Laotian authorities are recommended to implement policies directed toward anchoring such expectations.

Recent Inflation Dynamics

1. Lao PDR has been facing persistently high consumer price inflation. The consumer price index (CPI) in Lao PDR accelerated in early 2022 amid spikes in global commodity prices, especially oil, and sharp kip depreciation. Although inflation moderated after peaking at 41.3 percent on a year-on-year basis in February 2023, it remained elevated, hovering at around 25 percent (yoy) since August 2023 (Figure A1.1). This level and trend of inflation are exceptional compared with the other ASEAN+3 economies, where inflation had decelerated to less than 5 percent after the surge in 2022 (Table A1.1).

Figure A1.1. Consumer Price Inflation



Source: CEIC; AMRO staff calculations
Note: Monthly data is available up to July 2024.

Table A1.1. Inflation in ASEAN+3 Region (%, yoy)

Economies	2021	2022	2023	2024						
				Jan	Feb	Mar	Apr	May	Jun	Jul
Brunei	1.7	3.7	0.4	0.1	-0.5	-0.5	-0.2	-0.2	-0.3	
Cambodia	2.9	5.3	2.1	-0.5	-0.3	0.0	0.5	1.1	0.7	
China	0.9	2.0	0.2	-0.8	0.7	0.1	0.3	0.3	0.2	0.5
Hong Kong, China	1.6	1.9	2.1	1.7	2.1	2.0	1.1	1.2	1.5	
Indonesia	1.6	4.2	3.7	2.6	2.8	3.0	3.0	2.8	2.5	2.1
Japan	-0.2	2.5	3.3	2.1	2.8	2.7	2.5	2.9	2.9	
Lao PDR	3.8	23.0	31.2	24.4	25.4	25.0	24.9	25.8	26.2	26.1
Malaysia	2.5	3.4	2.5	1.5	1.8	1.8	1.8	2.0	2.0	
Myanmar	3.6	13.2	24.4							
Philippines	3.9	5.8	6.0	2.8	3.4	3.7	3.8	3.9	3.7	4.4
Singapore	2.3	6.1	4.8	2.9	3.4	2.7	2.7	3.1	2.4	
South Korea	2.5	5.1	3.6	2.8	3.1	3.1	2.9	2.7	2.4	2.6
Thailand	1.2	6.1	1.2	-1.1	-0.8	-0.5	0.2	1.5	0.6	0.8
Vietnam	1.8	3.2	3.3	3.4	4.0	4.0	4.4	4.4	4.3	4.4

Source: National authorities via CEIC; AMRO staff calculations
Note: Inflation numbers for 2021 to 2023 are period averages. Myanmar's inflation numbers are based on its fiscal year. Blank cells mean the data is unavailable.

[94] Prepared by Naoaki Inayoshi, Economist

2. The price increases in Lao PDR are broad-based. Food and transport prices, which account for more than half of the CPI basket weight, have been the main contributors to headline inflation. In 2023, these prices rose by 38.0 percent and 25.6 percent on average, respectively, and inflation remains heightened in 2024 (Table A1.2). However, it is important to note that almost all of the items in the CPI basket are experiencing double-digit inflation. The service sector and imported goods, such as medical-related items and clothing, are exhibiting strong price increase momentum.

Table A1.2. Inflation by CPI Basket Category (%, yoy)

CPI Basket: Categories	2021	2022	2023	2024						
				Jan	Feb	Mar	Apr	May	Jun	Jul
Foods & Beverages	3.0	22.0	38.0	25.3	25.5	23.6	22.0	23.1	23.7	23.5
Alcohol & Tobacco	4.5	14.2	24.8	22.2	25.0	26.4	28.5	29.6	28.8	29.4
Clothing & Footwear	3.9	16.3	27.6	33.4	35.1	36.2	37.6	31.3	29.5	27.9
Housing, Water, Light, Fuel Charges	3.0	16.4	21.1	19.1	20.4	21.9	24.3	27.3	32.5	34.1
Furnishings & HH Equipment	3.8	18.7	28.5	24.5	25.8	26.4	27.1	26.3	28.0	30.1
Medical Care	4.2	27.6	30.4	31.0	32.5	34.6	36.1	38.5	41.7	39.9
Transport	6.4	41.3	25.6	20.0	22.6	23.6	26.0	27.7	26.7	26.2
Telecommunication	4.2	7.7	10.6	6.2	5.6	5.7	5.2	3.4	3.5	4.1
Entertainment & Recreation	1.2	10.7	18.3	17.8	19.7	21.5	22.5	23.8	25.2	26.2
Education	0.5	6.4	10.9	15.3	17.0	19.3	20.7	21.6	24.7	27.8
Restaurants & Hotels	3.1	18.8	34.7	36.0	35.1	35.9	35.3	36.6	35.3	34.4
Miscellaneous	8.1	21.3	19.5	21.1	23.6	24.3	27.3	28.4	29.6	33.0

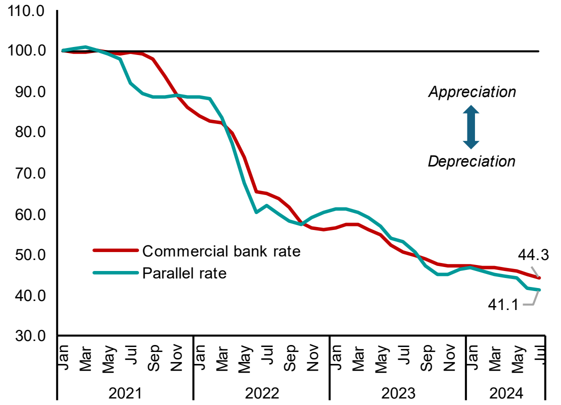
Source: Lao Statistics Bureau; AMRO staff calculations
Note: Inflation numbers for 2021 to 2023 are period averages.

Potential Inflation Drivers

3. Past studies found that the exchange rate of the kip, inflation in Thailand, and global oil prices have strong influence on price movements in Lao PDR. While the number of studies on inflation dynamics in Lao PDR is limited, AMRO (2017) empirically showed that both the foreign currency exchange rate, especially against the Thai baht, and the nominal effective exchange rate (NEER), as well as CPI inflation in Thailand were positively associated with Lao inflation. AMRO (2017) attributed this result to Lao PDR's high dependency on imports, mainly from Thailand. Later, AMRO (2020) also found that exchange rate shocks would have a more persistent effect on inflation, while the impacts of global oil price shocks on domestic prices were relatively short-lived. IMF (2023) estimated that the foreign exchange rate pass-through was about 25 percent in the short term and around 50 percent in the long term.

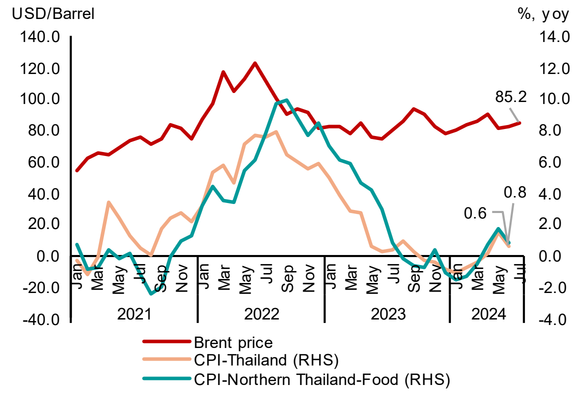
4. However, such factors may not fully explain the inflation dynamics recorded since August 2023. Without a doubt, the persistent kip depreciation will likely be consistently exerting stress on domestic prices (Figure A1.2), while pressures from other external drivers have moderated. For instance, global oil prices have moderated since H2 2022 (Figure A1.3). Moreover, overall inflation in Thailand and food prices in northern Thailand, where Lao PDR imports most of its food products, decelerated in 2023 (Figure A1.3). Nevertheless, the fact that domestic prices in Lao PDR have not come down and remain under strong inflationary pressure suggests the existence of other drivers.

Figure A1.2. Nominal Effective Exchange Rate (Jan 2021 = 100)



Source: BOL; CEIC; AMRO staff calculations
Note: Monthly data is available up to July 2024. The presumed share of currencies used for trade settlement in Lao PDR was applied as a time-varying weight to calculate the NEER instead of the conventional bilateral trade value since that may underestimate the weight of the LAK/USD exchange rate, which is merely 2.4 percent. As a result, the cross rates constructing this NEER are USD, THB, VND and CNY. The applied weights are 67.0 percent, 22.3 percent, 2.6 percent and 8.1 percent, respectively. The parallel NEER reflects the parallel rates of LAK/USD and LAK/THB.

Figure A1.3. Brent Price and CPI in Thailand



Source: CEIC; AMRO staff calculations
Note: Monthly data on Brent prices is available up to July 2024. Monthly data on CPI in Thailand covers up to June 2024.

5. **Sentiments on the ground, namely people's expectations of inflation and kip depreciation, may play a pivotal role in the recent inflation dynamics.** The unprecedented and prolonged sharp increases in domestic prices and the depreciation of the kip may have triggered and amplified expectations of further high inflation and kip depreciation. As a result, businesses continue to set prices that reflect future potential price increases, making the high inflation sticky in Lao PDR. To assess this point, we define inflation and kip depreciation expectations as below:

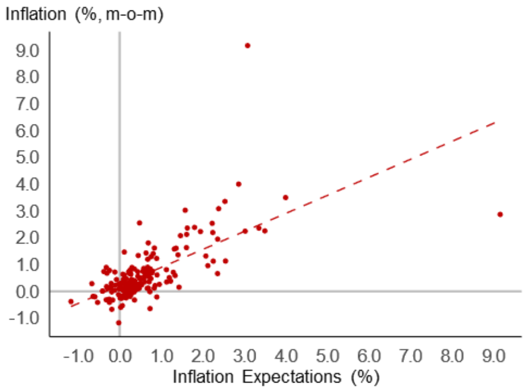
$$Inflation\ Expectations = \Delta ln\,(CPI)_t^e = \Delta ln(CPI)_{t-1} \quad (1)$$

$$Depreciation\ Expectations = \Delta\, ln\big(FX_{depreciation}\big)_t^e$$
$$= \Delta\, ln\big(FX_{gap}\big)_{t-1} = \Delta ln\left(\frac{FX_{parallel}}{FX_{bank}}\right)_{t-1} \quad (2)$$

where inflation expectations for month t, ($\Delta ln\,(CPI)_t^e$), are represented by a month-on-month CPI inflation of the previous month ($\Delta ln(CPI)_{t-1}$), and expectations of kip depreciation for month t, ($\Delta\, ln(FX_{depreciation})_t^e$), by the previous month's monthly change in gap between the parallel and commercial bank foreign exchange rates ($\Delta ln\left(\frac{FX_{parallel}}{FX_{bank}}\right)_{t-1}$) as proxies.[95] Figures A1.4 and A1.5 are scatter plots showing each type of expectations on the x-axis and the month-on-month CPI inflation on the y-axis from January 2010 to July 2024. The figures suggest a positive relationship between these expectations and inflation.

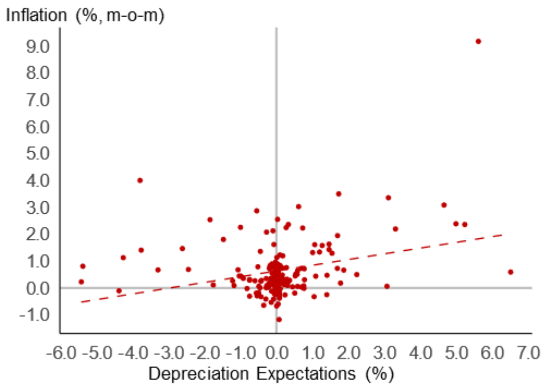
[95] In the case of the NEER, the numerator and the denominator are reversed ($\Delta ln\left(\frac{FX_{bank}}{FX_{parallel}}\right)_{t-1}$) since the increase in the NEER value indicates kip appreciation, which is opposite from the cross rates.

Figure A1.4. Inflation Expectations vs. Inflation



Source: Lao Statistics Bureau; AMRO staff calculations
Note: The dotted line represents the fitted line of the plot.

Figure A1.5. Depreciation Expectations vs. Inflation



Source: BOL; Lao Statistics Bureau; AMRO staff calculations
Note: The dotted line represents the fitted line of the plot. The depreciation expectations in this figure were computed using the gap between the parallel and commercial bank rates of the NEER.

Empirical Assessment

6. An empirical study is conducted to clarify further the role of people's sentiments on inflation. The following model is used to carry out an OLS regression analysis to quantitatively estimate the impact of inflation and kip depreciation expectations on the recent inflation dynamics. All variables are converted into logs and take the first difference (e.g. log difference from the previous month) so that each value represents a monthly change.

$$\Delta ln\,(CPI_{LA})_t = \beta_1 \Delta ln\,(CPI_{LA})_t^e + \beta_2 \Delta\, ln(FX_{depreciation})_t^e + \beta_3 \Delta ln(FX)_{t-1} + \beta_4 \Delta ln(M2)_{t-1} + \beta_5 \Delta ln(CPI_{TH})_{t-1} + \beta_6 \Delta ln(Brent)_{t-1} + \mu_{month} + \epsilon_t \quad (3)$$

t denotes the month t, $\Delta ln\,(CPI_{LA})$denotes the month-on-month CPI inflation in Lao PDR, $\Delta ln(CPI_{LA})^e$ denotes inflation expectations in Lao PDR, and $\Delta ln(FX_{depreciation})^e$ denotes kip depreciation expectations. Other covariates that are presumed to be influencing inflation are also included: $\Delta ln\,(FX)$ denotes the change in commercial bank's foreign exchange rate from the previous month's value; $\Delta ln\,(M2)$ shows the change in kip-denominated broad money from the previous month's value; $\Delta ln\,(CPI_{TH})$ represents the month-on-month food price inflation in northern Thailand; and $\Delta ln\,(Brent)$ is the change in Brent crude oil price in U.S. dollars from the previous month's value. Moreover, μ_{month} is a month fixed effect and ϵ_t is an error term. Since $\Delta ln(CPI_{LA})^e$ and $\Delta ln(FX_{depreciation})^e$ could be replaced by the previous equations (1) and (2), the above model can be transformed as below:

$$\Delta ln\,(CPI_{LA})_t = \beta_1 \Delta ln(CPI_{LA})_{t-1} + \beta_2 \Delta ln\left(FX_{gap}\right)_{t-1} + \beta_3 \Delta ln(FX)_{t-1} + \beta_4 \Delta ln(M2)_{t-1} + \beta_5 \Delta ln(CPI_{TH})_{t-1} + \beta_6 \Delta ln(Brent)_{t-1} + \mu_{month} + \epsilon_t \quad (4)$$

The analysis covers monthly data from January 2010 to March 2024 based on data availability.

7. The empirical results reveal the critical roles that expectations of inflation and kip depreciation play in the recent inflation dynamics. Table A1.3 summarizes the regression results using different foreign exchange rates for variables FX_{gap} and FX: NEER, LAK/USD and LAK/THB. In all cases, the results indicate inflation and kip depreciation expectations as important inflation drivers by showing positive coefficients with statistical significance at the 1 percent level. For instance, taking the result of the LAK/USD case, a 1 percent increase on a month-on-month basis in the CPI at month t could accelerate the CPI in the next month $(t+1)$

by 0.34 percent. Also, a 1 percent increase on a month-on-month basis in the gap between the parallel and commercial bank LAK/USD exchange rates at month t could increase the CPI at month $t+1$ by 0.14 percent. Foreign exchange rates and broad money were also identified as important inflation drivers, consistent with past studies. Food prices in northern Thailand were found to be statistically significant in the case of the NEER. The Brent oil price was statistically insignificant in all the cases. These results imply that the inflation dynamics in Lao PDR since August 2023 are driven more by domestic than global factors.

Table A1.3. Regression Results

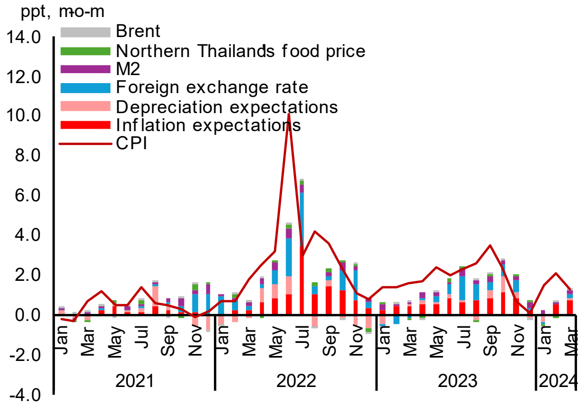
	Dependent variable: CPI Inflation		
	NEER	LAK/USD	LAK/THB
	(1)	(2)	(3)
Inflation expectations (β_1)	0.337***	0.339***	0.476***
	(0.084)	(0.083)	(0.072)
Depreciation expectations (β_2)	0.227***	0.139***	0.275***
	(0.060)	(0.043)	(0.072)
Foreign exchange rate (β_3)	0.160***	0.215***	0.101**
	(0.044)	(0.056)	(0.042)
M2 in LAK terms (β_4)	0.083**	0.084**	0.097***
	(0.036)	(0.036)	(0.036)
CPI inflation of food in northern Thailand (β_5)	0.167*	0.161	0.134
	(0.100)	(0.100)	(0.100)
Brent price in USD terms (β_6)	0.002	0.004	-0.001
	(0.005)	(0.005)	(0.006)
Month Fixed Effect	Yes	Yes	Yes
Observations	170	170	170
R^2	0.574	0.575	0.567

Note: Numbers in parentheses represent the standard error. *p<0.1,**p<0.05,***p<0.01.

Conclusion

8. Moving forward, the Laotian authorities are advised to enhance the anchoring of the public's inflation and kip depreciation expectations. It is hardly possible to identify all the inflation drivers and comprehensively explain the complex price-setting behaviors of the economy in a single model. The above model is not an exception. For instance, future studies may benefit by further analyzing the relationship between domestic production capacity and consumer price inflation, or by taking a closer look at how the expectations have formed in recent months. Different approaches such as vector autoregressive models or error correction models may also be considered to further clarify inflation dynamics by removing potential biases in the current OLS model. Nevertheless, the results from this study confirm the importance of focusing on people's expectations of inflation and kip depreciation to moderate the currently strong inflationary pressures. Both types of expectations firmly contribute to the recent inflation, their magnitudes having amplified in recent years (Figure A1.6). As discussed in the main text, the Bank of Lao PDR is encouraged to maintain its tight monetary policy stance to anchor inflation expectations and introduce more market-friendly foreign exchange policies to ease kip depreciation expectations.

Figure A1.6. Inflation Decomposition



Source: BOL; Lao Statistics Bureau; CEIC; AMRO staff calculations
Note: The calculations cover up to March 2024 due to data availability and are based on the LAK/USD exchange rate case of the regression results.

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2. Leveraging Electricity Sector to Ease External Public Debt in Lao PDR[96]

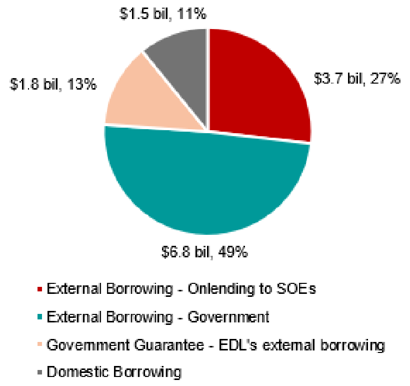
At the end of 2023, Lao PDR's external public debt, including government-guaranteed debt, stood at USD12.3 billion, or 96% of GDP, with annual debt servicing of more than USD1 billion expected in the coming years. Meanwhile, the country's access to capital markets for FCY funding has deteriorated, as highlighted by the downgrade of its sovereign credit rating to non-investment grade by the Thai credit rating agency in September 2023.

This selected issue provides an overview of the external public debt situation of Lao PDR and analyzes how the country's electricity sector could contribute to managing this debt. While some electricity SOEs are facing financial challenges as illustrated in Box B, the sector as a whole has potential to drive the country's economic growth[97] and contribute to resolving external public debt issues. Against this backdrop, the current selected issue mainly outlines how the government of Lao PDR could leverage the electricity sector in the short, medium and long term.

Overview of Lao PDR's External Public Debt

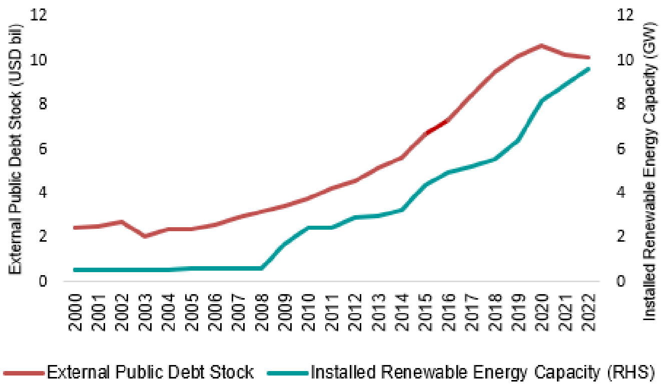
1. **The dominant component of Lao PDR's public debt is external public debt, which is government debt denominated in FCY.[98]** As of end-2023, the country's total public debt, including government-guaranteed debt, amounted to USD13.8 billion, equivalent to 108 percent of GDP, of which external public debt accounted for USD12.3 billion, or 96 percent of GDP. Further breaking down the external public debt, government borrowing makes up USD10.5 billion, and government-guaranteed debt, USD1.8 billion. More than a third of the government borrowing, comprising USD3.7 billion, were allocated to on-lending to SOEs in the electricity sector, including EDL. In addition, all the government guarantees were tied to EDL's own external borrowing (Figure A2.1).[99] Lao PDR's external public debt started to increase in the early 2000s and particularly after 2009, when the country began to develop renewable energy, especially hydropower, to fuel economic growth through export of electricity (Figure A2.2).

Figure A2.1. Composition of Public Debt as of end-2023



Source: LMOF; AMRO staff compilation

Figure A2.2. Increase in External Public Debt Stock and Renewable Energy Development

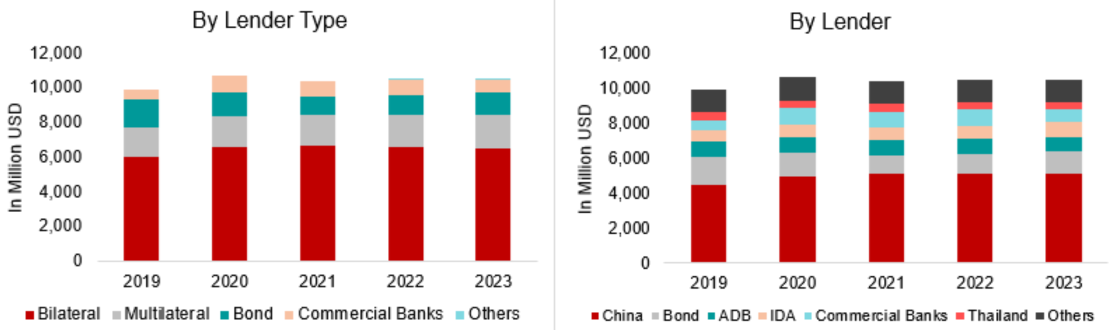


Source: CEIC; AMRO staff compilation

[96] Prepared by Akifumi Fujii, Economist.
[97] For details, see Selected Issue 1: Assessing Sustainability of Electricity Sector Growth in Lao PDR by Naoaki Inayoshi and Sota Nejime in AMRO Annual Consultation Report on Lao PDR 2023.
[98] In Lao PDR, public debt is classified based on the currency. Irrespective of creditors' residence, public debt denominated in FCY is considered external public debt, while public debt denominated in the kip is domestic public debt. According to AMRO staff estimates, domestic creditors were holding about 10 percent of external public debt, excluding government guarantees, at the end of 2023.
[99] In Lao PDR, the non-government guaranteed debt of SOEs, which totaled USD3.3 billion as of end-2023, is not included in the public debt. Out of the USD3.3 billion, USD2.3 billion is incurred by the Laos-China Railway and USD0.9 billion by EDL-Gen.

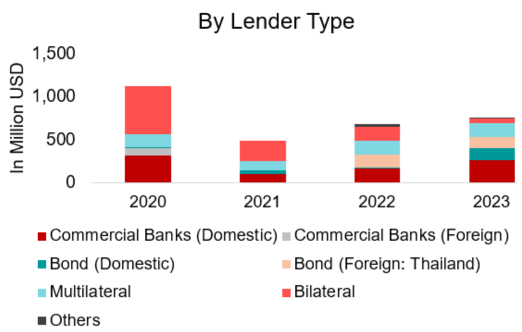
2. **While loans from China constitute almost half of Lao PDR's external public debt, domestic bank loans and domestic bond issuances have increased recently**. Multilateral lenders such as the Asian Development Bank (ADB) and the International Development Association (IDA) of the World Bank Group follow the lead of bilateral lenders including China (Figure A2.3). Because of greater constraints on borrowing through bilateral and multilateral channels, the Laotian government has increased commercial borrowing through domestic bank loans and domestic bond issuances in the past few years (Figure A2.4). Further, since bond issuances in Thailand have become very costly due to TRIS Rating's downgrade of the Lao sovereign credit rating in September 2023, the government has increased fundraising from the domestic market. As a result, short-term funding at high-interest has been on the rise (Table A2.1). However, 60 percent of the government's external borrowing is still made on concessional terms, with 85 percent of the external borrowing at fixed interest rates, indicating low exposure to interest rate fluctuation risks. By currency, borrowing in U.S. dollars accounts for 59 percent of the total external borrowing.

Figure A2.3. External Public Debt Stock by Lender



Source: LMOF; AMRO staff compilation
Note: "Bond" and "Commercial Banks" include both foreign and domestic investors and banks, although the breakdown is unknown.

Figure A2.4. External Public Debt Disbursement 2020-2023



Source: LMOF; AMRO staff compilation

Table A2.1. Cost and Maturity of Public Debt

	2020	2021	2022	2023
Interest Payment to GDP	1.59%	1.00%	1.89%	1.93%
Short-term Debt to Total Public Debt	11.06%	12.42%	15.15%	13.85%

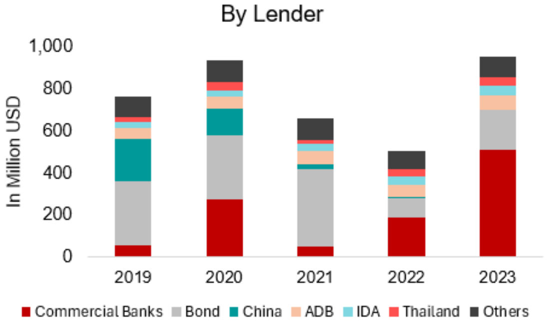
Source: LMOF; AMRO staff compilation

3. **Although Lao PDR was scheduled to repay more than USD1 billion annually from 2020 to 2023, it managed to secure major creditors' agreement to suspend repayments.** While fiscal revenues in FCY have exceeded pre-pandemic levels,[100] these have been insufficient to fulfill the repayment obligations. Furthermore, international reserves in the Bank of the Lao PDR (BOL) are too low to be tapped.[101] As a result, the government has found it

[100] Fiscal revenues in FCY consist of tax and non-tax revenues, including corporate income tax, lump-sum tax, royalty fees, concession fees, and interest payments from SOEs. Hydropower, mining, transport in the form of overflight fees, and cryptocurrency industries are the main sources. In 2023, these revenues surpassed USD400 million, higher than the pre-pandemic level of USD360 million in 2019.
[101] To increase the FCY supply in the market and the international reserves, the BOL implemented a new regulation mandating the repatriation and a minimum conversion requirement of export proceeds. For more details, see Box A.

necessary to borrow more in FCY to cover the shortfalls. However, as mentioned above, the borrowing options have gradually become limited. Against this backdrop, the government agreed with major creditors to suspend repayments totaling USD1,892 million[102] from 2020 to 2023 (Figure A2.5), and to commit to annual debt servicing of more than USD1 billion from 2024 to 2028. Given the commitment, fulfilling FCY liquidity shortfalls is a big challenge for the government of Lao PDR.

Figure A2.5. External Public Debt Service 2015-2023 (Actual)

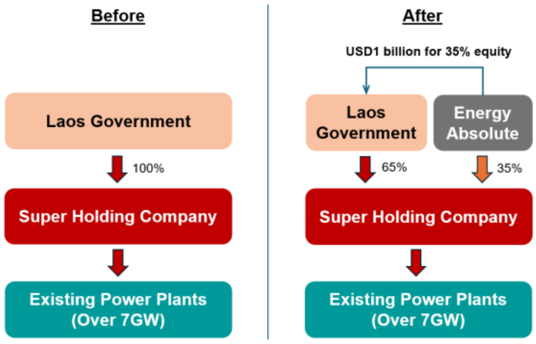


Source: LMOF; AMRO staff compilation

Strategies to Address Future External Debt Services – Leveraging Electricity Sector

4. The Lao government is carrying out a short-term funding strategy that involves partially selling and privatizing power plants by establishing a super holding company. The government will transfer more than 7GW of existing power plants to a new super holding company and sell 35 percent of its shares in the company to Energy Absolute, a Thai-based alternative energy firm (Figure A2.6).[103] The Lao government expects to earn USD1 billion from this equity sale and intends to use the proceeds for external debt repayment. Asset selection for transfer to the super holding company is now underway alongside negotiations with Energy Absolute. The Lao government aims to complete the transaction by the end of 2024.

Figure A2.6. Planned Scheme for Super Holding Company Transaction



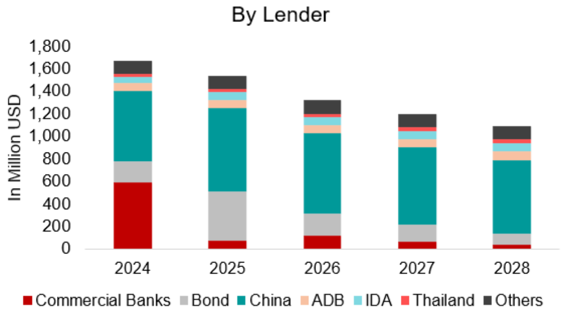
Source: AMRO staff compilation

5. Considering possible delays in closing the super holding company deal, the government is concurrently negotiating debt restructuring with major creditors. The temporary suspension of debt repayments from 2020 to 2023 has helped the country manage its foreign exchange liquidity. However, more comprehensive debt restructuring is desirable as debt servicing in excess of USD1 billion will continue for each of the next five years (Figure

[102] The USD1,892 million comprised suspended principal repayments of USD1,422 million and suspended interest payments of USD470 million.
[103] In May 2024, the Lao government concluded a joint development agreement with Energy Absolute regarding the super holding company.

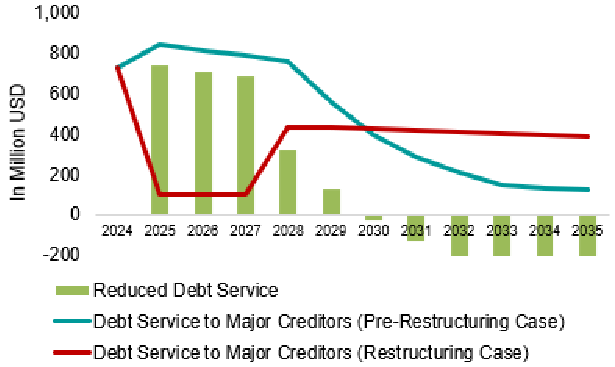
A2.7). According to AMRO staff estimates, sustainability of external public debt could be restored if the country were to conduct the following debt restructuring with major creditors: (1) suspending principal repayments from 2025 to 2027, (2) resuming principal repayments from 2028 in 15-year equal installments, and (3) reducing interest rates to 2 percent (Figure A2.8).

Figure A2.7. Scheduled External Public Debt Service 2024-2028



Source: LMOF; AMRO staff compilation

Figure A2.8. Level of Annual Debt Servicing under Different Scenarios



Source: LMOF; AMRO staff estimates
Note: Under the pre-restructuring case: (i) the projection on debt servicing is based on the outstanding debt as of end-2023, and (ii) the deferred principal and interest payments between 2020 and 2023 are assumed to be repaid to the major creditors over the weighted average maturity as of end-2023.

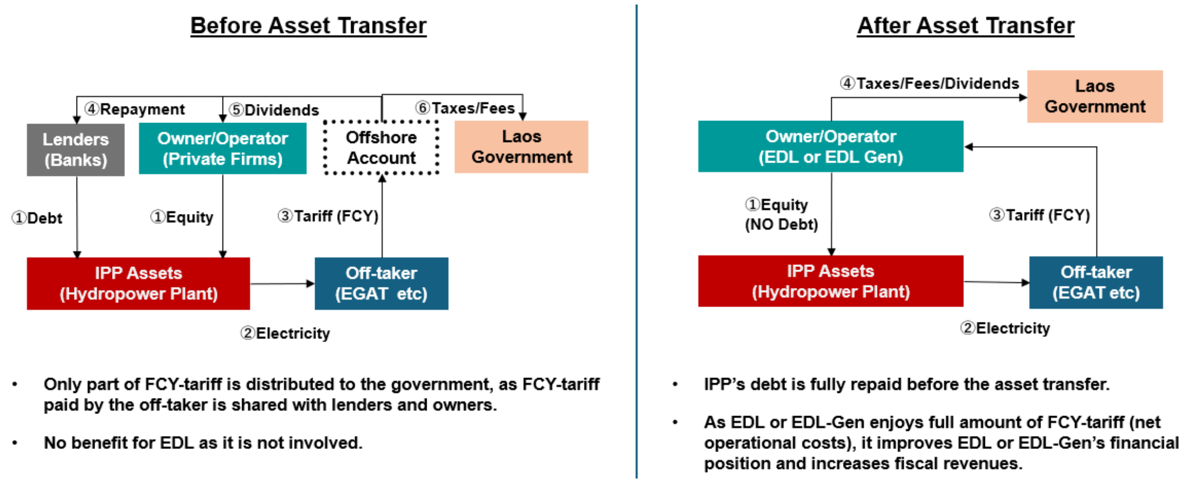
6. **In the medium term, it is also important to restore EDL's profitability to avoid additional fiscal burdens**. As mentioned in Box B, the Lao government has provided substantial government guarantees to EDL totaling USD1.8 billion. If EDL encounters difficulties in its debt repayment and calls for government guarantees, it will put more pressure on the government's FCY cash flow. To restore EDL's profitability, the government needs to consider a road map to increase electricity tariffs at least to cost recovery levels, in addition to EDL's cost-cutting efforts.[104]

7. **As an initiative over the longer term, the government should also consider how to monetize IPP assets developed under the Build-Operate-Transfer (BOT) scheme**. According to the BOT scheme, power plants will be transferred to the government at the end of the concessionary period. These IPP assets can benefit the government in the following ways. Firstly, most IPPs in Lao PDR export electricity to neighboring countries such as Thailand, earning a steady stream of foreign exchange. Secondly, IPP debts are usually fully repaid by the end of the concessionary period. Therefore, the Lao government could acquire profitable IPP assets without debt, presenting an opportunity to reap the full benefits of FCY incomes (Figure A2.9). However, if the government plans to take over IPP assets and operate them

[104] According to the Ministry of Finance of Lao PDR, EDL has reduced its workforce by roughly 1,000 employees out of about 6,000 in total.

through SOEs such as EDL or EDL-Gen, meticulous preparation would be warranted. This includes prior discussions with current concessionaires to sort out staff training and the handover, and negotiation of power purchase agreements with electricity off-takers. Since the first asset transfer is scheduled to happen in 2029, the government needs to start preparations now.

Figure A2.9. IPP Asset Transfers under BOT Scheme



Source: AMRO staff compilation

Conclusion

8. **Although the government of Lao PDR is facing challenges in managing external public debt, there is room to restore debt sustainability**. The electricity sector has the potential to help overcome these difficulties. The Lao government could improve the situation by steadily advancing short, medium and long term efforts as described above.

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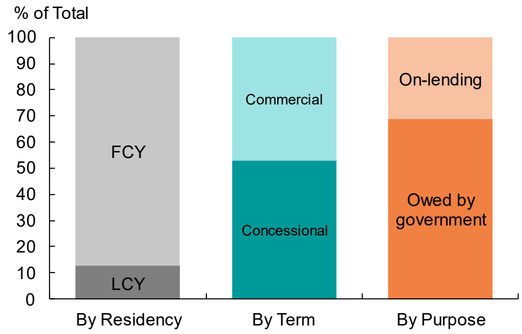
3. Debt Sustainability Analysis[105] [106]

Background

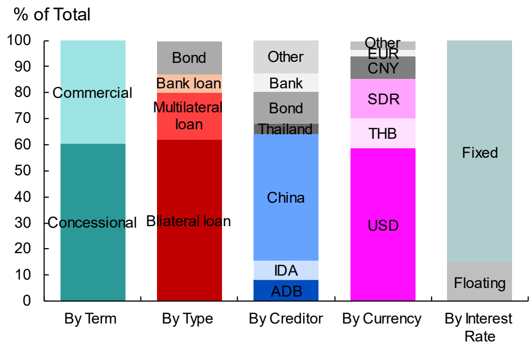
1. Lao PDR's public debt increased significantly in 2023, driven by rising domestic debt and external debt in kip terms.[107] Public debt had increased prior to the pandemic due to persistent fiscal deficits on the back of large public investments. In 2023, public debt almost doubled to an estimated 103 percent of GDP from 59 percent of GDP in 2018, driven by sharp currency depreciation, the settlement and recognition of arrears related to public infrastructure projects, and state-owned banks' recapitalization, amid an improved primary balance. Domestic debt stock in 2023 increased by 7 percent of GDP from 2022, mainly due to a public investment arrears settlement of LAK4.1 trillion and the recognition of remaining arrears amounting to LAK18 trillion.[108] With 87 percent of public debt denominated in FCY, a 30 percent depreciation of the Lao kip inflated the nominal value of external debt by 20 percent in 2023.[109] The external debt was 60 percent concessional, denominated in U.S. dollars and with fixed interest rates.[110] Bilateral loans made . up 62 percent of the external debt, with 48 percent held by Chinese creditors (Figures A3.1, A3.2).[111]

Figure A3.1. Public Debt Structure



Source: Ministry of Finance; AMRO staff estimates

Figure A3.2. Public External Debt Structure



Source: Ministry of Finance; AMRO staff estimates

2. Actual external debt repayments were lower than scheduled due to suspension of a significant portion of the repayment, while domestic debt repayments rose because of maturing bonds. The annual external debt service was originally scheduled at USD1.2 billion on average between 2020 and 2023. As fiscal revenues and borrowing in the domestic and foreign markets in FCY terms, fell short of the scheduled FCY debt service during the pandemic, the government suspended external debt repayments to major creditors, with cumulative deferred principal and interest repayments totaling USD1.422 billion and USD470 million, respectively, from 2020-2023.[112] The government also increased its FCY borrowings in the domestic market, mostly from banks, following the downgrade by the Thai-based credit rating agency TRIS Ratings in 2023. Despite the debt suspensions, actual FCY debt

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[105] Prepared by Ravisara Hataiseree, Economist, and Somphone Changdabout, Associate.
[106] The scope of public debt in this report and the debt sustainability analysis refers to government debt and excludes SOE debt.
[107] Between 2022 and 2023, external public debt increased from LAK187.3 trillion to LAK225.2 trillion, and domestic public debt from LAK25.7 trillion to LAK49.5 trillion.
[108] Public investment arrears amounted to LAK33 trillion, about LAK10 trillion of which was settled by triangulation bonds and investment bonds in 2021. In 2023, the government issued more triangulation bonds of LAK4.1 trillion and used the budget to clear another LAK1 trillion of public investment arrears. The amount remaining as of end-2023 was LAK18 trillion. The government issued yet more triangulation bonds, worth LAK3.9 trillion, in the first half of 2024.
[109] Although the nominal value of external debt in kip terms increased by 20 percent from 2022 to 2023, the external debt-to-GDP ratio declined from 87 percent to 85 percent mainly due to inflation, with the external debt in U.S. dollar terms remaining stable at USD10,517 million in 2022 and USD10,525 million in 2023.
[110] Concessional debt stock accounted for 60.4 percent of external public debt, slightly increased from 59.7 percent in 2022, in line with the government's efforts to limit commercial borrowing and rely more on concessional or non-debt financing sources to support projects and debt servicing. External public debt was largely held in U.S. dollars, accounting for 59 percent of total external debt. Around 85 percent of total debt is subject to fixed interest rates, alleviating interest rate risk.
[111] The public debt structure and external debt structure, shown in Figures 8.1 and 8.2, are based on the 2023 Debt Statistic Bulletin.
[112] Estimated deferred principal and interest payments included USD202 million in 2020, USD426 million in 2021, USD594 million in 2022, and USD670 million in 2023.

repayments nearly doubled from USD507 million in 2022 to USD950 million in 2023,[113] with amortization and redemption of commercial bank loans and bonds comprising 74 percent. Domestic debt repayments rose by 16 percent to LAK5.7 trillion in 2023 due to maturing Treasury bills and government bonds that had been issued for deficit financing and arrears clearance. The repayments were made against the backdrop of a relatively short government bond maturity profile due to the small domestic bond market, which is dominated by commercial banks in the absence of long-term institutional investors.

Baseline Debt and GFN Projections

3. Lao PDR's public debt-to-GDP ratio is projected to decline from its peak in 2023 but will remain high in the next several years. AMRO's baseline scenario assumes a more gradual pace of kip depreciation[114] and inflation over the medium term (Table A3.1). It is also assumed that the government will be able remain current on the schedule of debt repayment from 2024 onward but excluding the past suspended debt. The debt-to-GDP ratio is hence projected to decrease to 74 percent by 2028 from 103 percent in 2023, reflecting robust economic growth and continued primary surplus, and notwithstanding higher borrowing costs (Figure A3.3). The authorities plan to reduce public debt by about 5 percentage points by 2025 by strictly implementing debt management policies. This includes limiting new borrowing to prioritized projects which are expected to generate sufficient returns to repay debt, and by reducing the issuance of guarantees. However, the debt-to-GDP ratio is expected to remain higher than pre-pandemic levels in the medium term, and relative to the international benchmark of 41 percent of GDP for low-income countries.[115]

Table A3.1. Macroeconomic and Fiscal Indicators

	2018	2019	2020	2021	2022	2023	2024p	2025p	2026p	2027p	2028p
Macroeconomic indicators (%)											
Real GDP growth	6.2	5.5	3.3	3.5	4.4	4.2	4.5	4.6	5.0	5.0	5.0
GDP deflator	2.0	1.2	2.8	3.6	11.6	18.2	14.2	10.6	5.3	5.2	5.1
Headline Inflation	2.0	3.3	5.1	3.8	23.0	31.2	25.0	15.0	9.5	8.2	7.6
Effective interest rate	3.3	3.2	2.7	2.0	2.7	2.7	3.6	4.1	4.5	4.9	5.2
Exchange rate (LAK/USD, avg.)	8,403	8,689	9,054	9,744	14,316	18,707					
Fiscal indicators (% GDP)											
Revenue	16.2	15.6	12.7	14.7	14.8	17.4	17.0	17.3	17.2	17.1	16.9
Expenditure	20.9	18.8	17.9	16.0	15.0	16.6	17.7	18.3	18.3	18.4	18.4
Fiscal balance	-4.7	-3.3	-5.2	-1.3	-0.2	0.7	-0.7	-1.0	-1.1	-1.3	-1.4
Primary balance	-3.0	-1.5	-3.7	-0.1	1.6	2.9	2.5	2.5	2.4	2.3	2.2
Public debt	58.8	58.8	61.9	76.2	98.8	103.4	98.6	86.9	82.0	77.1	74.0
Gross financing needs	9.6	8.7	11.2	8.1	8.4	11.2	12.2	10.8	8.9	8.4	7.7

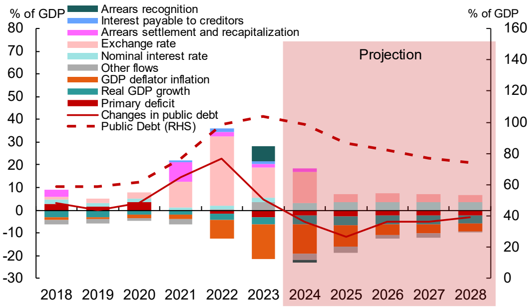
Source: LMOF; LSB; CEIC; AMRO staff estimates
Noted: The macroeconomic and fiscal indicators for 2024-2028 are based on AMRO staff estimates and projections.

4. The authorities expect GFNs to decline after 2024 due to a continued primary surplus and reduced reliance on debt financing. GFN movements are influenced by the debt repayment schedule, with the primary balance expected to remain in surplus over the medium term, supported by ongoing revenue reforms and economic growth. Using scheduled debt repayment figures published in the government's latest debt bulletin for 2024 to 2028, GFNs are projected to surge to 12.2 percent of GDP in 2024,[116] driven mainly by higher FCY financing needs. Indeed, without debt suspension, scheduled external debt service payments would average about USD1.4 billion annually between 2024 and 2028 (Figure A3.4). Challenges in securing FCY financing have been exacerbated by higher refinancing costs due to greater reliance on short-term debt rollovers and more difficulties in issuing bonds overseas, especially after the sovereign downgrade in September 2023. Against this backdrop, the government is

[113] Without external debt suspension, the scheduled repayment would have been USD1.62 billion in 2023.
[114] The inflation rate is expected to slow at a more gradual pace compared to the pace of kip depreciation due to inflation persistence and elevated inflationary expectations.
[115] The indicative threshold of 35 percent for the present value (PV) of debt-to-GDP ratio, suggested by the IMF and the World Bank, has been adjusted to 41 percent for the nominal value of debt-to-GDP ratio for more intuitive comparison with the projected nominal ratios. See AMRO's 2022 Lao PDR Annual Consultation Report, Box A1.2, for more details.
[116] The GFNs in 2024 would double from 12.2 percent of GDP to 25.4 percent of GDP if the suspended external debt of USD 1.892 billion from 2020-2023 is included in the repayment for 2024.

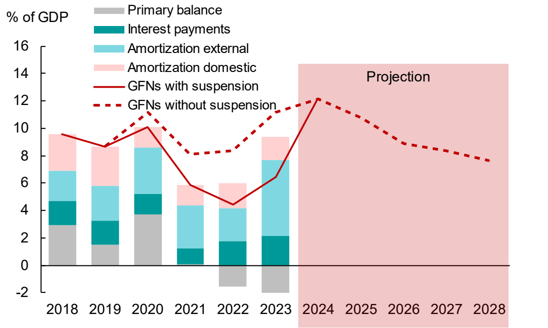
exploring non-debt financing sources such as asset privatization, and debt restructuring with major creditors to ease pressure on debt servicing and lower GFNs over the medium term. The debt service payments for domestic currency debt are projected to average LAK5.3 trillion per annum between 2024 and 2028.

Figure A3.3. Public Debt Dynamics



Source: Ministry of Finance; AMRO staff estimates
Note: Arrears settlement and recapitalization refer to bonds issued to clear public investment arrears and inject capital into SOEs, respectively. Arrears recognition refers to identified public investment arrears under government verification.

Figure A3.4. Gross Financing Needs Components



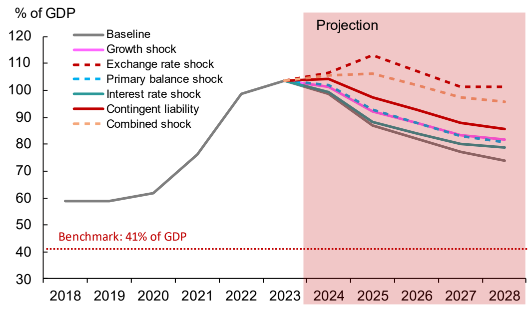
Source: Ministry of Finance; AMRO staff estimates
Note: Debt suspension to major creditors began in 2020 and is assumed to have ended in 2023. Amortization for external and domestic debt from 2024 onward follows the 2023 Debt Statistic Bulletin's schedule.

Macro-Fiscal Risks – Stress Tests

5. Stress test results suggest that Lao PDR's debt dynamics are particularly sensitive to kip depreciation and the materialization of contingent liabilities.[117] Further kip depreciation will continue to inflate the stock of public external debt in local currency terms, delaying debt reduction. If the kip were to depreciate by the same magnitude as in 2022-2023, the debt to-GDP-ratio could increase to 113 percent of GDP in 2025 (Figure A3.5). A weakening of the financial positions of SOEs would lead to contingent liabilities materializing, which would push up government debt. Despite robust fiscal consolidation plan, the primary balance could worsen due to lower-than-expected revenue. Likewise, the GFNs, which are already elevated, are sensitive to a sharp deterioration in the primary balance and to the materialization of contingent liabilities (Figure A3.6). While excluded from the stress test, the recognition of new arrears, if any, would lead to a spike in the debt stock and GFNs, further aggravating debt sustainability risks.

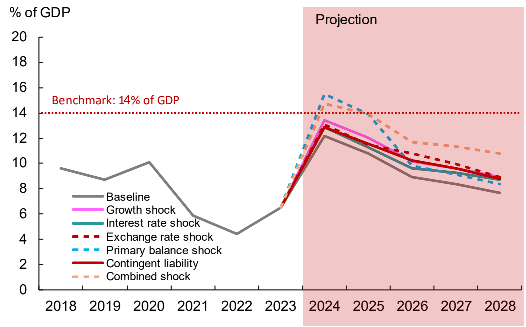
[117] The scenarios for the stress test are as follows: 1) Real GDP growth shock: one standard deviation, or a -1.6 percentage point shock in 2024 and 2025; 2) primary balance shock: one standard deviation, or a -2.6 percent of GDP shock in 2024 and 2025; 3) interest rate shock: a +3 percentage point shock from 2024; 4) exchange rate shock: a shock of 38.8 percentage points in kip depreciation in 2024 and 2025, comparable to the average magnitude of depreciation in 2022 and 2023; 5) contingent liability shock: a shock of 5 percent of GDP in 2024 and 2025, assuming 30 percent of guaranteed and non-guaranteed of SOEs debt, or 10 percent of GDP, will be realized as public debt during these two years; and 6) combined shock: combination of growth, primary balance, interest rate and exchange rate shocks, each at half the size of the individual shocks described in bullet points 1-4. The GFNs between 2018 and 2023 are actual, reflecting the debt suspension to major external creditors from 2020 to 2023. The current DSA assumes that no repayment of past suspended debt is made between 2024 and 2028.

Figure A3.5. Public Debt Stress Test



Source: Ministry of Finance; AMRO staff estimates

Figure A3.6. GFN Stress Test

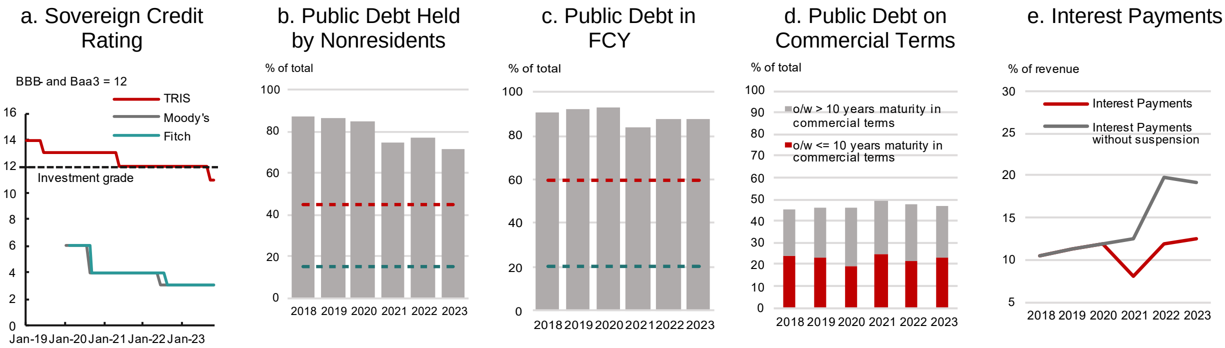


Source: Ministry of Finance; AMRO staff estimates
Note: Given the large portion of commercial borrowing, the GFN threshold for low-income countries with market access is applied at 14 percent of GDP to assess market-financing pressure, as suggested by the IMF and the World Bank.

Market Perception of Risk and Debt Profile Vulnerabilities

6. **While several aspects of the government's debt profile have improved, vulnerabilities remain (Figure A3.7).** Credit ratings for Lao government bonds were downgraded to below investment grade in September 2023 (Figure A3.7a), reflecting pressure from the sharp kip depreciation and high inflation on the government's capacity to service external debt amid low foreign reserves and limited financing options. The share of public debt held by nonresidents declined to 71 percent in 2023, its lowest in five years (Figure A3.7b). The share of public debt in FCY is now below pre-pandemic levels but remains elevated at 87 percent, with an increasing share of domestic debt in FCY (Figure A3.7c). Furthermore, public debt on commercial terms decreased from 50 percent of total public debt in 2021 to 47 percent in 2023, in line with the government's ongoing efforts to limit commercial borrowing and seek more concessional loans (Figure A3.7d). Despite a decline in the interest payment-to-revenue ratio from 2022 to 2023, the ratio remains elevated at close to 20 percent of government revenue, reflecting increased domestic debt requiring higher interest rates and the valuation effects of kip depreciation on interest payment in FCY (Figure A3.7e).

Figure A3.7. Debt Profile Vulnerabilities



Source: CEIC; Haver; TRIS; Ministry of Finance; AMRO staff estimates
Note: 1) --- Lower early warning (50 percent of the benchmark), --- upper early warning (75 percent of the benchmark).

Overall Assessment

7. **The results of the DSA indicate that the overall risks to public debt sustainability are high.** The public debt-to-GDP ratio is projected to decline going forward, but will remain highly vulnerable to a range of shocks, in particular kip depreciation and the materialization of contingent liabilities. An incurrence of new expenditure arrears could also undermine debt sustainability. While the authorities expect GFNs to fall after 2024, significant risks remain arising from high FCY financing needs and limited access to international capital markets. This implies a greater need to mobilize FCY financing from domestic sources, including tax and

nontax revenues. GFNs are also sensitive to sharp deteriorations in the primary balance. On a positive note, the government has achieved a primary balance surplus in recent years and plans to maintain it over the medium term.

8. In efforts to restore public debt sustainability, the stabilization of macroeconomic conditions is crucial. Measures to address difficult macroeconomic challenges must be prioritized, in particular efforts to reduce inflationary pressures and to restore exchange rate stability. Stabilized macroeconomic conditions can contribute to an improvement in the sovereign credit rating and increased market access at lower costs, alleviating the pressure on foreign reserves. Further development of domestic financial markets can facilitate bond issuances domestically. At the same time, stronger governance and fiscal discipline is needed to prevent arrears from building up again. To close the FCY financing gap, enhanced efforts are needed to boost financing from non-debt sources and to negotiate and reach agreement on a comprehensive debt restructuring plan with major creditors. SOE reforms also have to be accelerated to contain risks arising from contingent liabilities. To ensure a sustainable reduction of public debt, the government should prioritize expenditure allocation toward projects or programs that can boost potential growth.

Table A3.2. Heatmap of Public Debt Sustainability

		2018	2019	2020	2021	2022	2023	2024p	2025p	2026p	2027p	2028p
Public Debt												
Gross Financing Needs												
Debt Profile	Public Debt Held by Non-residents											
	Public Debt in Foreign Currency											
	Sovereign Credit Rating											

Source: AMRO staff estimates
Note:
1) For Public Debt, the cell is highlighted in green if the benchmark is not exceeded under all shocks or baseline, yellow if exceeded under any specific shock but not baseline, and red if the benchmark is exceeded under baseline.
2) For Gross Financing Needs, the cell is highlighted in red due to the debt suspension with major creditors and high financing risks. Despite the GFNs-to-GDP ratios under the stress test exercise is below the 14 percent threshold in baseline scenario and exceed the threshold under certain shocks in 2024 and 2025, financing risks in Lao PDR remain substantial. The financing capacity and availability in Lao PDR are largely constrained by the sovereign credit rating downgrade by TRIS, partial repayment of on-lending debt from SOEs, a shallow domestic market, and limited access to the international bond market.
3) For Debt Profile, the cell is highlighted in green if the country value is less than the lower early warning benchmark, red if the country value exceeds the upper early warning benchmark, and yellow if the country value lies between the lower and upper early warning benchmarks. For Sovereign Credit Rating, the cell is highlighted in red if the rating falls below investment grade.

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