INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/171

LAO PEOPLE'S DEMOCRATIC REPUBLIC

May 2023

2023 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR LAO PDR

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2023 Article IV consultation with Lao PDR, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its May 3, 2023 consideration of the staff report that concluded the Article IV consultation with Lao PDR.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on May 3, 2023, following discussions that ended on February 8, 2023, with the officials of Lao PDR on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on April 6, 2023.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the World Bank.
- A **Statement by the Executive Director** for Lao PDR.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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Washington, D.C.

PRESS RELEASE

PR23/166

IMF Executive Board Concludes 2023 Article IV Consultation with Lao People's Democratic Republic

FOR IMMEDIATE RELEASE

Washington, DC – May 22nd, 2023: The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Lao PDR.

Marked exchange rate depreciation following the global terms of trade shocks at the start of 2022 year brought high inflation and deteriorating living standards. Public debt has increased further, largely driven by currency depreciation, but also by additional government arrears, domestic bond issuances to recapitalize banks, and SOE debts.

The government has enacted measures intended to improve the public finances and to ease FX pressures. These include substantial fiscal consolidation, driven by expenditure cuts, a recovery in revenue collection, and by debt servicing deferrals. The central bank has tightened monetary conditions by issuing bonds and increased the policy rate and reserve requirements, and has also tightened exchange controls and prioritized access to FX.

The prospect is for a return to steady growth in 2023, supported by higher regional growth, particularly through tourism, exports of goods, and resource extraction. Falling global commodity prices would allow inflation to gradually fall. But even with higher growth and despite eliminating the primary fiscal deficit, public debt would remain at high levels for an extended period. The scale of public and external debt poses substantial risks to the outlook, including from significant financing needs, low foreign exchange liquidity and reserves, and the prospect of tight global financial conditions limiting external market access. The external environment remains uncertain; It is possible that net trade improves further, given the potential for a faster pick-up in services (e.g., logistics and tourism) and remittances, which would bring valuable foreign exchange earnings, but the external environment could be more adverse than expected in 2023.

Executive Board Assessment[2]

Executive Directors noted that the post-pandemic recovery has been challenging, marked by the acceleration in exchange rate pressures, substantial increase in inflation rates, and a worsening public debt ratio. While the near-term growth outlook appears positive, large public financing needs and liquidity pressures pose significant downside risks. Against this background, Directors encouraged the authorities to press ahead with adjustment policies and governance reforms, supported by Fund technical assistance, to address macroeconomic

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

imbalances and promote sustainable, inclusive, and more broad-based growth. Looking ahead, Directors encouraged the authorities to strengthen Fund engagement.

Directors emphasized the urgency of strengthening public finances and ensuring debt sustainability, given significant financing needs, difficult financing conditions, and large contingent liabilities. They welcomed the authorities' recent progress at balancing the primary budget, and called for further efforts toward a sustained, growth-friendly, and revenue-based consolidation, with spending prioritizing critical development and social needs. Directors considered that revenue measures should be focused on eliminating tax exemptions and reversing recent tax cuts, while paying particular attention to consistent application of taxes. Expenditure policies should be supported by comprehensive public financial management reforms, including for state-owned enterprises, to prevent further accumulation of arrears.

Directors agreed on the importance of continuing to tighten monetary conditions, given negative real rates and foreign exchange shortages. They noted the authorities' efforts to contain exchange market pressures, but cautioned against excessive reliance on administrative measures. Directors emphasized the need to strengthen the operational independence of the central bank and refrain from monetizing sovereign obligations.

Directors called for vigilance in light of risks and vulnerabilities in the financial sector. They advised strengthening banking regulation and supervision and building capital buffers to help address the solvency strains in the banking sector while calling for heightened monitoring of liquidity levels and contingency planning. Directors noted the injections of capital into two state-owned banks and welcomed the authorities' intention to end forbearance policies and implement corrective action measures in 2023.

Directors agreed that structural reforms are crucial to boost private sector development and durably sustain high growth rates. They called for measures to improve education and skills training and emphasized the urgency of improving governance and transparency. Directors welcomed progress on the AML/CFT regime and encouraged swift implementation of the Financial Action Task Force's mutual evaluation recommendations when published. They also urged progress on improving the quality, coverage, and timeliness of economic data.

Lao P.D.R.: Selected Economic and Financial Indicators, 2019–24

	2019	2020	2021	2022	2023	2024
			Est.	Proj.	Proj.	Proj.
GDP and prices (percentage change)						
Real GDP growth 1/	4.7	-0.4	2.1	2.3	4.0	4.0
GDP Deflator	3.3	5.1	3.8	17.6	16.1	3.5
CPI (annual average)	3.3	5.1	3.8	23.0	15.1	3.5
CPI (end year)	6.3	3.2	5.3	39.3	-1.4	7.6
Public finances (in percent of GDP)						
Revenue and Grants	15.4	13.0	15.0	14.9	15.1	15.1
Expenditure	18.8	18.6	16.3	16.5	18.5	18.6
Current Expenditure	12.6	12.0	11.1	11.0	13.0	13.1
Net acquisition of nonfinancial asset	6.2	6.6	5.2	5.5	5.5	5.5
Overall balance	-3.3	-5.6	-1.3	-1.6	-3.4	-3.5
Money and credit (annual percent change)						
Broad money	18.9	16.3	24.0	32.3	20.1	…
Bank credit to the economy 2/	7.4	4.3	11.5	42.5	3.6	…
Balance of payments						
Exports (in millions of U.S. dollars)	5,764	6,115	7,695	7,993	8,306	8,660
In percent change	8.9	6.1	25.8	3.9	3.9	4.3
Imports (in millions of U.S. dollars)	6,621	6,092	6,829	7,755	7,661	8,306
In percent change	-4.1	-8.0	12.1	13.6	-1.2	8.4
Current account balance (in millions of U.S. dollars)	-1,711	-953	-107	-912	-368	-863
In percent of GDP	-9.1	-5.1	-0.6	-6.0	-2.6	-6.2
Gross official reserves (in millions of U.S. dollars) 3/	998	1,320	1,267	1,101	1,092	1,457
In months of prospective goods and services imports	1.8	2.2	1.9	1.6	1.4	1.7
Exchange rate						
Official exchange rate (kip per U.S. dollar; end-of-period)	8,869	9,285	11,166	…	…	…
Real effective exchange rate (2010=100)	119	120	112	…	…	…
Nominal GDP						
In billions of kip	163,080	167,669	180,751	217,350	262,354	282,365
Memorandum items:						
Real GDP growth (published by authorities) 4/	5.5	3.3	…	…	…	…

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.
1/ Staff estimate 2019–20 numbers using leading indicators such as electricity and mining productions, harvest volumes in major crops, export of goods and services, and tourism revenues (due to concerns over data quality and availably).
2/ Includes the Bank of Lao P.D.R. lending to state-owned enterprises and subnational levels of government.
3/ Includes Swap drawings with the People's Bank of China (PBoC). Includes the Special Drawing Right (SDR) allocations of SDR 41.3 million in 2009 and SDR 101.4 million in 2021.
4/ Lao Statistics Bureau (LSB) data.

INTERNATIONAL MONETARY FUND

LAO PEOPLE'S DEMOCRATIC REPUBLIC

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION

April 6, 2023

KEY ISSUES

Context: Marked exchange rate depreciation following the global terms of trade shocks at the start of 2022 year brought high inflation and deteriorating living standards and caused substantial increases in the domestic currency values of public debt and bank liabilities. Nonetheless, growth continued, and the prospect is for a return to steady growth in 2023. But public debt is assessed to be unsustainable, and servicing government debt presents substantial risks to this outlook.

Recommendations:

- *Fiscal policy:* The authorities have achieved substantial improvement in the fiscal balance, which will need to continue for an extended period to help restore debt sustainability. Greater reliance on tax revenue mobilization would be better for growth. Persistent expenditure arrears necessitate urgent action on public financial management.

- *Monetary policy* should seek to raise retail interest rates through a combination of issuing central bank bonds and raising reserve requirements and the policy rate, to stabilize domestic currency usage and ease pressures on banks.

- *Financial policies:* Liquidity and solvency strains are evident in the banking sector. The supervisor should lay out a timetable to end loan forbearance and recognize losses, issuing instructions to banks with CAR below the regulatory minimum to raise capital.

- *Structural policies, governance, and statistics:* Complementary policies are crucial to facilitate greater private sector employment and growth and boost FX earnings. Governance should be improved including with greater transparency and consistent implementation of regulations; and tackling corruption concerns remains crucial. Improving the quality, coverage, and timeliness of data is crucial to improve understanding of the economic situation and hence investor perceptions.

Approved by
Sanjaya Panth (APD) and Geremia Palomba (SPR)

Discussions took place from January 26 to February 8, 2023. The staff team was comprised of Juliana Araujo, Alessia De Stefani, Federico Díez, Francois Painchaud (IMF resident representative), Alasdair Scott (head), Shogo Takahashi (all APD), Klakow Akepanidtaworn and Luisa Zanforlin (both ICD), and Deon Tanzer (CDOT). Anousa Kounnavong and Vimaly Savannarideth supported the mission from the IMF's office in Vientiane. Hibah Khan and Mariam Souleyman assisted from IMF HQ. Meetings were also attended, variously, by IMF Executive Director Rosemary Lim and Inthiphone Xaiyavong (OEDST).

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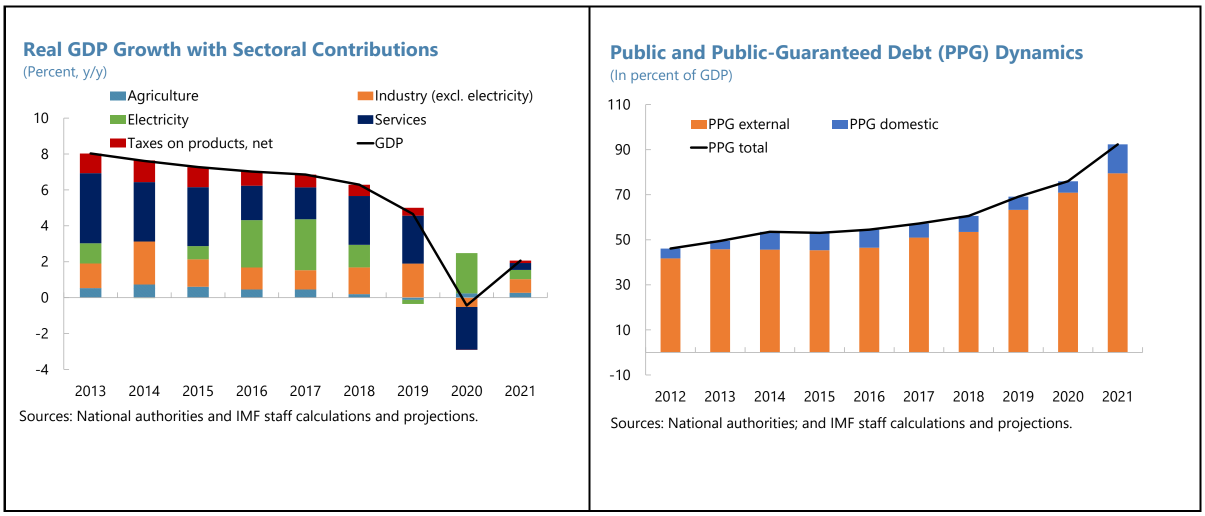
ANNEXES

CONTEXT

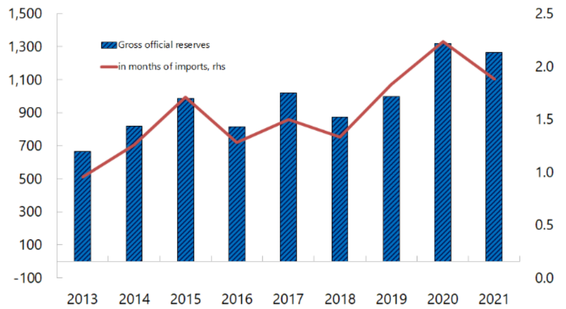
1. **2020 and 2021 saw pre-existing vulnerabilities aggravated by the impact of the COVID-19 pandemic**. Containment measures included restrictions on movement and border closures (Figure 1). GDP growth is estimated to have been nearly flat in 2020 and just over 2 percent in 2021. The economy had very limited market access from 2021 as concerns over public debt sustainability, slowing growth, low FX reserves, and tight FX liquidity grew. The central bank provided loans to the government in 2020 (repaid in 2021) and purchased government bonds from banks at the end of 2021 and increased its financing to banks. The parallel market exchange rate depreciated significantly in mid-2021 and the exchange rate premium widened (peaking at about 20 percent in mid-September), before narrowing to about 5 percent by the end of 2021 as the Bank of the Lao P.D.R. (BoL) allowed more official exchange rate flexibility.[1] Public debt escalated to just over 90 percent of GDP by end 2021, in large part owing to the issuance of public bonds to repay past expenditure arrears and recapitalize two public banks, and to exchange rate depreciation.[2]



[1] The kip/USD exchange rate band was widened from +/-0.25 percent to +/-1.5 percent in September 2021. Foreign exchange bureaus were also placed under the supervision of commercial banks to improve oversight and compliance.

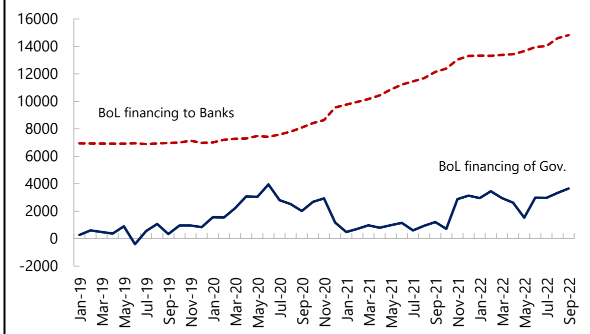
[2] In May 2020, the PBoC announced a three-year swap agreement with the BoL for RMB6 billion (about US$900 million). For the purposes of this Staff Report, the disbursements from this facility are counted as gross reserves. If the disbursements are tied to specific uses or not under full control of the BoL, then they should not be counted as such. Drawdowns from the swap line with the PBoC are included in public debt, as the swap is not for liquidity management operations in the course of day-to-day central bank activity, but balance of payments support to help shore up gross reserves—this adds about 2 percentage points of GDP to the debt ratio.

Gross Official Reserves
(US$ million)



Sources: National authorities and IMF staff calculations and projections.

Monetary Survey
(In billion of Kip)



Sources: National authorities and IMF staff calculations.

RECENT DEVELOPMENTS

2. **A gradual recovery was underway at the end of 2021,** driven mainly by industry and agriculture. Exports overall had improved by more than expected (Annex I and IX, Figure 4). Services remained suppressed by COVID-19 containment measures. At the start of 2022, services picked up, as mobility restrictions were eased[3] and the opening of the Lao-China high-speed railway and the Thanaleng Dry Port boosted transport and logistics sectors, in turn boosting wholesale and retail trade in the first half of 2022.

3. **The increase in global commodity prices in the first half of 2022 accelerated exchange rate pressures and increased inflation rates, substantially eroding living standards.**

- The terms of trade pressures arising from the sharp increases in commodity prices arising from the war on Ukraine accentuated concerns about aggregate demand, FX liquidity, and the fiscal position; although the authorities took steps to tighten monetary policy through the year (¶6), large differentials in real yields also added to exchange rate pressure. The Lao kip depreciated by roughly 50 percent against the US dollar and over 40 percent against Thai baht from December 2021 to December 2022; parallel exchange rate premia (against the USD) reached close to 30 percent during the middle of 2022, before narrowing to less than 5 percent by the end of the year. The kip/USD exchange rate band was further widened to +/4.5 percent in October 2022.[4]

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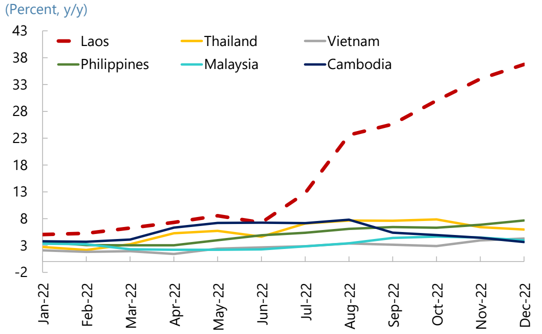
[3] Borders were fully re-opened in June 2022.

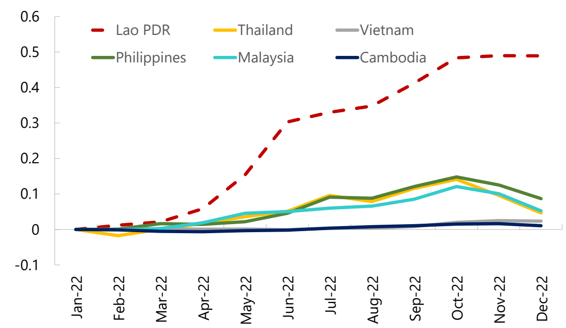
[4] The number of exchange rate bureaus was also significantly reduced in November 2022 before they were ordered to close in early 2023.

Consumer Price Index
(Percent, y/y)



Sources: CEIC

Exchange Rates
(January 2022=0)

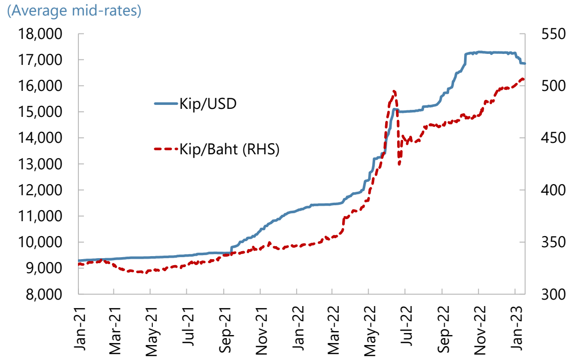


Sources: CEIC

- External shocks and exchange rate depreciation has brought higher import prices, especially for fuel and fertilizers.[5] Inflation has surged, to 41 percent y/y as of February 2023[6]; those items in the CPI basket with a larger share of imported goods have increased by considerably more.[7] Inflation in Lao is substantially higher than in neighboring countries; reflecting the depreciation (Annex VII), but also non-tradeable price increases—as of November, all broad sectors have registered double-digit increases, which likely reflects a strong expectations channel over and above the effects of terms of trade and exchange rates; measures of core inflation have also increased.

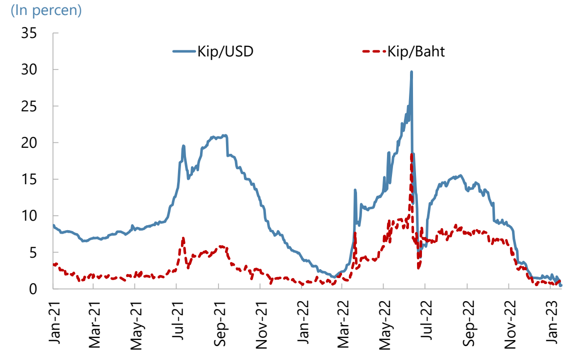
- Fuel shortages were experienced in May 2022, reflecting a combination of the widening exchange rate premium and local fuel prices capped in kip based on the official exchange rate.

Official Exchange Rate
(Average mid-rates)



Sources: National authorities and IMF staff calculations.

Parallel Market Exchange Rate Premia
(In percen)



Sources: National authorities and IMF staff calculations.

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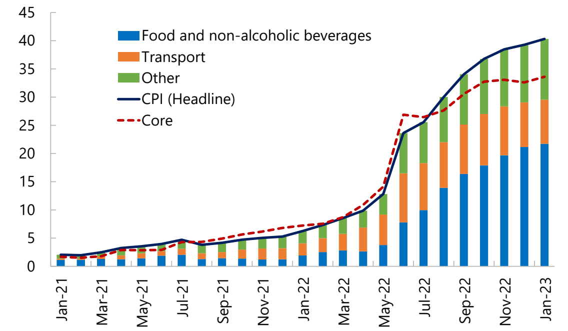
[5] Oil prices increased by around 40 percent while fertilizers increased by 70 percent in 2022 (on a y/y basis).

[6] The annual average rate for 2022 was 23 percent.

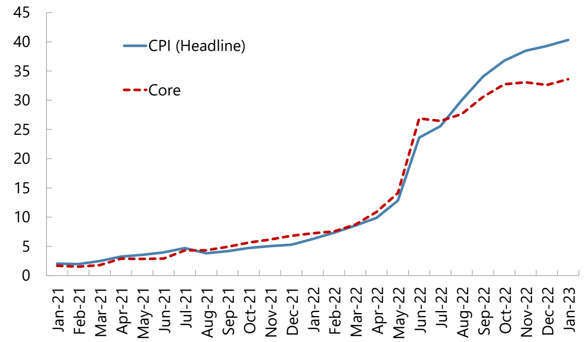
[7] Transport (16 percent of the CPI basket), increased by 50 percent y/y, food and non-alcoholic beverages (46 percent of the basket) by 47 percent YTD, and medical products by 48 percent.

Inflation and Main Contributors
(Percent, y/y)



Sources: National authorities and IMF staff calculations.

CPI Headline and Core Inflation
(Percent, y/y)



Sources: National authorities and IMF staff calculations.

- Living standards have deteriorated further. The World Bank reports that 43 percent of households have experienced a decline in real incomes since the onset of the pandemic. Inflation has been highest on essential goods, resulting in cuts to food consumption, education, health care.[8] Poverty rates have increased.[9] Household consumption rates have decreased.[10]

- With inflation surging, real interest rates are significantly negative, creating disincentives to save and hold kip, putting pressure on kip deposits (figure 2). Low interest rates are also adding to pressures on bank solvency.

- The economy also faced tighter global financial conditions in 2022. The real interest rate differential against USD-denominated assets worsened as global financial conditions tightened and as inflation increased by more in Laos, likely exacerbating exchange rate pressures.

4. Despite the adverse scenario, growth continued in 2022. The economy faced weaker-than-expected global demand in 2022. Export growth had been strong in 2021, due to items such as paper goods products, perhaps reflecting the opening of the Lao-China railway and the Thanaleng Dry Port, but was weaker in 2022. Nonetheless, real GDP growth is estimated to have been 2.3 percent in 2022, slightly exceeding growth in 2021, boosted in part by a rebound in tourism after the economy was reopened (Annex VIII). After the BoP pressures in the middle of the year, the exchange rate premium at the end of the year was small (around 1 percent).

[8] World Bank (2022), *Monitoring Household Welfare in Lao PDR*, Report n.5, April-May

[9] Rising inflation could have pushed an additional 2.9-3.7 percent of the Laotian population under the international poverty line (UNDP, 2022: *Addressing the Cost of Living Crisis in Developing Countries*). This is a significant increase from baseline: According to WB, the proportion of the Laotian population living in poverty was 18.3 percent in 2019 (World Bank, 2022: *Lao People's Democratic Republic Poverty Assessment 2020: Catching Up and Falling Behind*).

[10] See Consumer Sentiment and Business Tendency Survey, Macroeconomic Research Institute, March 2023. The MRI attributes lower consumption to caution over economic uncertainty and financial status.

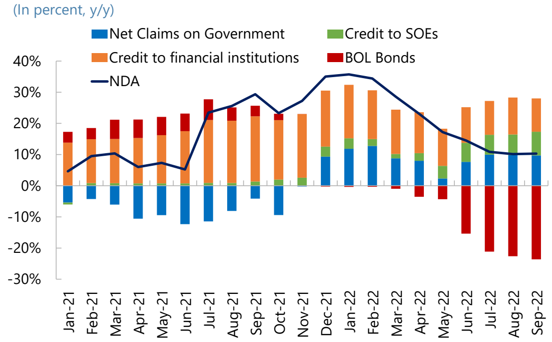
5. The government has responded with measures intended to improve the public finances and to ease FX pressures, in line with their National Agenda to address economic and financial difficulties (Annex V):

- Fiscal consolidation has been substantial, driven equally by expenditure cuts and recovery in revenue collection, and by interest payment deferrals. (Note, however, the persistence and size of past expenditure arrears, which are not included in the fiscal accounts on a cash basis.) The overall deficit improved by 4.3 percentage points of GDP in 2021. Revenue and grants reached 15 percent of GDP, closing the gap with pre-pandemic ratios.[11] Total non-interest spending declined to 15.1 percent of GDP, down from 16.8 percent in 2020, as a result of a moratorium on new public investment projects. Debt servicing to China was deferred.[12] Mid-year outturns for 2022 suggest that a primary balance in 2022 would be attainable.

- The BoL has tightened monetary conditions: the BoL's extension of credit to banks and the government has been fully offset by the issuance of BoL bonds in June 2022, although BoL bonds were only partially rolled over in January 2023 (Annex VI). The BoL has also increased its policy rate, from 3.0 percent at the start of 2022 to 7.5 percent by February 2023, and increased reserve requirements for kip from 5.0 to 5.5 percent and for FX from 5.0 to 8.0 percent in 2023.

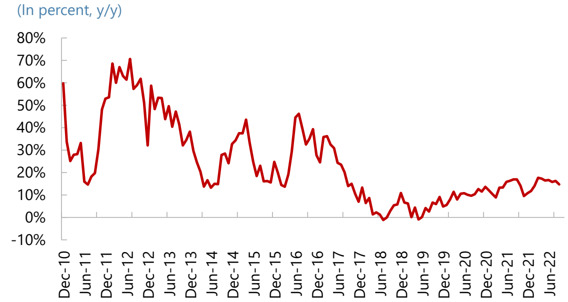
- The BoL has also tightened exchange controls, prioritized access to FX, closed FX bureaus, and strengthened FX repatriation and surrendering requirements, although the repatriation and surrendering requirements are not currently enforced.

Contribution to Growth of BoL Net Domestic Assets
(In percent, y/y)



Sources: National authorities and IMF staff calculations.

Banks Kip Credit Growth
(In percent, y/y)



Note: Bank credit includes net credit in Kip to the government, SOEs, the private sector, and other items net.
Sources: National authorities and IMF staff calculations.

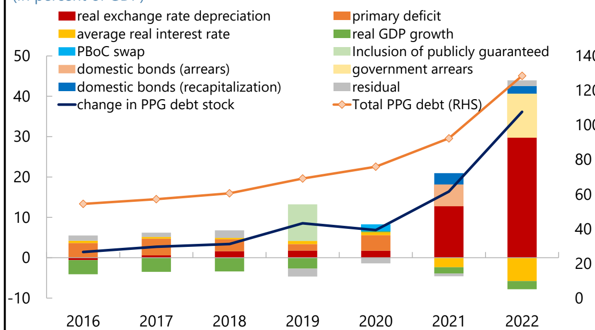
[11] At 25 percent y/y, growth in fiscal revenues has far outstripped nominal GDP growth in 2021, exceeding the average historical elasticity. This performance can be explained by a combination of fiscal policy (active revenue mobilization efforts, supported by IMF TA) and by the rebound from the historically low performance observed in 2020.

[12] Although the government does not provide public information on debt deferrals, debt servicing to China appears to have been deferred during the past three years (US$ 220 million in 2020, US$ 450 million in 2021, and US$ 610 million in 2022).

6. Despite eliminating the primary fiscal deficit, public debt has increased further. PPG debt increased by 16.4-percentage points of GDP from 2020 to 2021 and 36.2-percentage point of GDP from 2021 to 2022, largely driven by currency depreciation,[13] additional government arrears, and domestic bond issuances to recapitalize banks, and SOE debts. In February 2023, the government requested the National Assembly to approve the issuance of an additional Kip 8 trillion (around 3 percent of GDP) in arrears clearance bonds. This compares to Kip 23.5 trillion in potential additional obligations (verified and un-verified) discussed during the Article IV consultations (which are included in staff's debt estimates, adding about 11 percentage points of GDP to the 2022 PPG stock of debt). The authorities notified staff of a separate arrears item of Kip 10.5 trillion, but at the time of writing had not clarified whether this was additional to an item of the same value that had been added to staff's debt stock estimates previously.

Public and Public-Guaranteed Debt (PPG) Dynamics and its Contributions

(In percent of GDP)



Sources: National authorities; and IMF staff calculations and projections.

7. The external position is assessed to be weaker than the level implied by fundamentals and desirable policies. The trade balance switched to a surplus in 2021-2022 with a sharp rise in exports (Annex I and X, Figure 4), despite oil import pressures. Although the Covid-19 crisis had a significant impact on tourism and services exports, tourism and services imports also declined sharply, with the service balance remaining somewhat stable.

- While remaining steady in 2019-2021, FDI dropped by half in 2022H1 compared to 2021H1. After reversing in 2019, portfolio inflows went further into negative territory in 2020 and 2021 (remaining close to zero in 2022H1). Gross official reserves were down by US$170 million by end-August 2022 (from end-December 2021). Gross official reserves are projected to be US$1,101 million at end-2022, corresponding to 1.6 months of import coverage.[14]

- Since Jan 2021, the REER has depreciated by about 27 percent, and the REER model suggests that the external position in 2022 was *stronger* than that consistent with medium-term fundamentals and desirable policy settings (REER gap of -19.4 percent). However, staff puts more weight on the current account model.

- The current account position has improved considerably, but the net international investment position—estimated to be -143 percent of GDP—has been deteriorating and presents a substantial challenge to external sustainability. Given external risks from the large and negative NIIP, the IMF staff views the appropriate CA norm to be -4.0 percent of GDP. This implies that the NIIP is projected to improve by about 29 percent of GDP by 2028, in line with

[13] About three quarters of PPG debt is denominated in foreign currency.

[14] Estimated reserves include disbursements from a swap facility from the People's Bank of China (Annex I).

the external debt adjustment under the baseline (2022 Debt Sustainability Analysis). Taking this into account, the current account model indicates a gap of -2.0 percent of GDP, which implies a real effective exchange rate gap of 6.8 percent.

Authorities' Views

8. **The authorities agreed that Lao P.D.R. is experiencing economic and financial difficulties.** They agreed that the surge in inflation resulted from the significant exchange rate depreciation. They emphasized positive developments during the past year, including easing of supply pressures, the improvement in net trade, and the recent appreciation of the exchange rate. On that basis, they assessed that the real effective exchange rate was consistent with fundamentals. They assessed FX reserve coverage to be higher, based on their methodology which excludes some FDI-related imports.

OUTLOOK AND RISKS

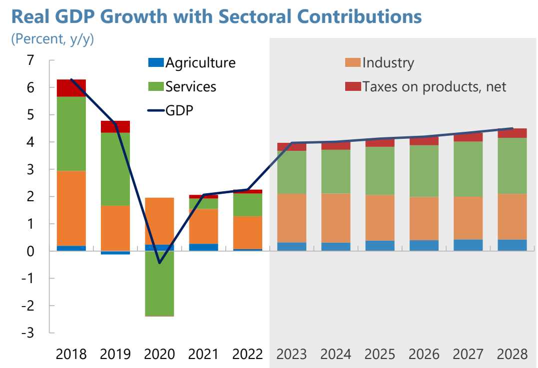
9. **The baseline outlook is for a period of stabilization, during which growth rates gradually pick up.**

- The baseline assumes that there are no further external shocks, nor do risks manifest in the domestic economy. In particular, staff assumes that (i) for 2023, terms of trade stabilize after improving somewhat in the second half of 2022, allowing growth to improve, notwithstanding tight global financial conditions and external demand; (ii) improvement in services after the reopening of borders in 2022 and hence that tourism picks up substantially[15]; and (iii) fiscal policy and monetary policy continue to be tight, with no further lending from the BoL to government.

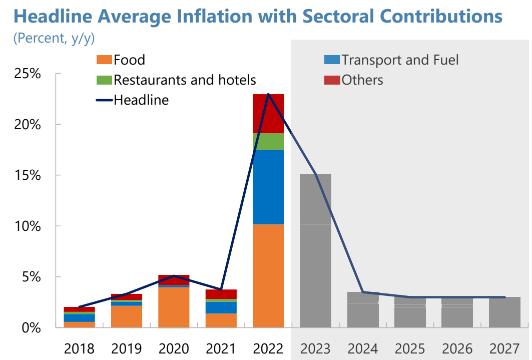
- Under these assumptions, growth recovers, at 4.0 percent in 2023, gradually increasing to staff's estimate of long-run potential of 4.75 percent. Note that, with no fiscal space, public capital spending remains subdued, precluding a return to pre-pandemic growth rates.

- Average inflation is projected to fall as global commodity prices decline and macroeconomic policies are tightened, converging to 3 percent by 2025. GDP deflator inflation is projected to be lower than CPI inflation in 2022, owing to negative terms of trade shocks in that year, and slightly higher than CPI inflation in 2023. Nominal GDP is expected to grow at double digits in 2023 and stabilize in the 7-8 percent range thereafter.

[15] Pre-pandemic tourism was around 4 million visitors per year. At the time of writing, visitor numbers were projected to reach 1.2 million in 2022, owing mainly to Thai and Vietnamese tourists and despite the lack of visitors from China.



Sources: National authorities and IMF staff calculations and projections.



Sources: National authorities and IMF staff calculations and projections.

10. The improvement in fiscal balances is assumed to remain.

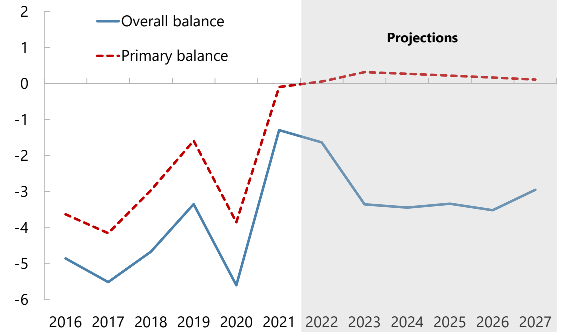
- Over the medium term, non-interest expenditure is expected to remain anchored at 2021 ratios to GDP (around 15 percent). A moratorium on new capital expenditure allows only existing projects to be completed.[16] Ratios of wages, benefits and other spending to GDP are also assumed to remain stable. Interest payments, however, are projected to increase significantly in the next few years, driving a rebound in overall expenditure (and the sizeable gap between primary and overall balances).

- The revenue gains seen in 2021 are expected to last, but the baseline assumes no further improvements.[17] No additional measures on profit taxation are planned, hence their outturn is expected to be stable over the medium term; income tax and VAT outturns may suffer from compression in real incomes, and the reduction of the VAT rate from 10 to 7 percent in January 2022 will also undermine revenue mobilization. A portion of the increase in dividends observed in 2021 is assumed to be temporary and grants gradually decline, in line with historical trends. Overall, these losses are compensated by a small increase in other revenues (royalties, non-tax), leaving total inflows constant around 15 percent of GDP.

[16] Projects of "high importance" may, however, be undertaken.

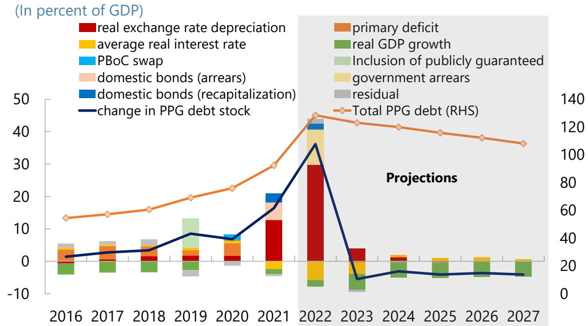
[17] An effort of reducing tax evasion is reflected in 2021 outturn and the achievement is expected to be stable in the future.

Fiscal Balance
(Percent of GDP)



Sources: National authorities and IMF staff calculations.

Public and Public-Guaranteed Debt (PPG) Dynamics and its Contributions
(In percent of GDP)

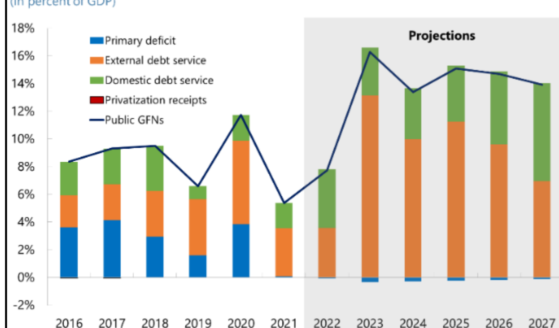


Sources: National authorities; and IMF staff calculations and projections.

11. Despite the improvements in the public finances, public debt would remain unsustainable under the baseline scenario. The assumptions of small primary surpluses and nominal growth rates exceeding nominal interest rates imply a steady reduction in PPG debt ratios over time. However, owing to the high starting point, debt remains above 100 percent of GDP the next 7 years and its present value is above the 35 percent net present value threshold for the next 20 years (Debt Sustainability Analysis). Paths in three of the four stress tests—the present value of debt to GDP, the debt service to exports ratio, and the debt service to revenue ratio—are above thresholds. Adjustment options are limited, and the primary surpluses required to reduce debt below risk thresholds within a few years are not socially feasible or desirable. (For example, to lower the debt-to-GDP ratio to around 60 percent by 2027, a 10 percent of GDP primary surplus would be needed each year from 2023.) Staff therefore judges that debt is unsustainable.

12. Financing needs increase substantially from 2023; limited access to external financing implies reliance on domestic financing. Gross financing needs increase to nearly 16 percent of GDP in 2023, and remain around that level for several years.[18] The increase arises mainly from external debt servicing that comes due in 2023 (including the swap line from the PBoC), which accounts for nearly 13 percentage points. Of this the majority is due to China. Smaller shares of external debt servicing are due to other bilateral creditors and to bondholders and commercial banks, with smaller share still to the ADB and World Bank.

Public Gross Financing Needs
(In percent of GDP)



Sources: National authorities; and IMF staff calculations and projections.

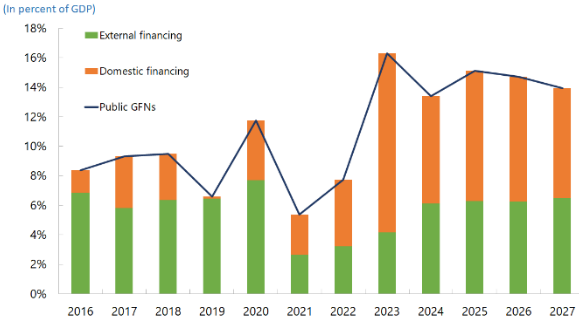
[18] The Minister of Finance told the National Assembly in December 2022 to that financing needs would be much higher in 2023, in part because of the inclusion of previously-deferred repayments.

Decomposition of GFNs in 2023

	mln in Kip	mln in USD	percent of GDP
GFNs in 2023	42,733,278.8	2,295.1	16.3%
Primary deficit	-838,129.1	-45.0	-0.3%
Debt service for domestic existing debt	6,332,375.8	340.1	2.4%
Debt service for domestic new debt	2,717,302.0	145.9	1.0%
Debt service for external existing debt	34,185,509.2	1,836.1	13.0%
of which: ADB	1,222,412.4	65.7	0.5%
WB	807,256.0	43.4	0.3%
Other multilateral	294,998.3	15.8	0.1%
China (including PBoC swap)	20,642,494.0	1,108.7	7.9%
Principal	11,310,760.4	607.5	4.3%
Interest (excluding swap interest)	3,466,736.2	186.2	1.3%
Swap interest	279,285.6	15.0	0.1%
PBoC swap repayment	5,585,711.8	300.0	2.1%
Other bilateral	2,552,613.2	137.1	1.0%
Bonds/Commercial bank	8,665,735.3	465.4	3.3%
Debt service for external new debt	336,221.0	18.1	0.1%

Sources: Country authorities; and staff estimates and projections.

Financing Sources
(In percent of GDP)



Sources: National authorities; and IMF staff calculations and projections.

- External market access is assumed to only gradually be regained over the course of several years. Disbursements from commercial bank loans and bond issuance in international markets are assumed to resume gradually, from about US$ 150 million in each of 2022 and 2023, about US$ 200 million in each of 2024 to 2026, and US$ 500 million for 2027 and beyond. Hence the share of domestic financing would have to increase to nearly 12 percent of GDP in 2023. The share of domestic debt in total PPG public debt is expected to increase from 14 percent in 2021 to about 37 percent in 2030.

- Assuming no further deferrals of debt servicing, no monetary financing, and in the absence of additional sources of financing (e.g. asset sales), domestic banks are assumed to fill the government remaining financing needs, resulting in significant crowding out of private credit.

13. **Risks tilted to the downside; with the main risks arising from stresses to meet the government's financing needs.** (Annex II).

- There is a significant risk that the interest rate increases required to induce investors to finance government would be very large, increasing domestic financing costs. Domestic investors might demand shorter maturity bonds, increasing government rollover and refinancing risks. This might put pressure on the BoL to partly monetize the deficit, causing the exchange rate to depreciate, inflation to increase, and the kip value of liabilities to increase again.

- Deteriorating banking asset quality could trigger liquidity shortages and exacerbate pressures on commercial bank balance sheets, causing a funding crisis for the government, both of which would cause the exchange rate and purchasing power to weaken further and domestic currency values of liabilities to increase.

- In addition, there remains the risk that the government would not be able to secure the foreign exchange to service external debt and to pay for imports without significant foreign exchange pressure.

- There is uncertainty about the extent of expenditure arrears, with the risk that there are additional liabilities to be serviced.

14. A manifestation of contingent fiscal liabilities would increase the debt burden. Risks arise from contingent liabilities from PPPs and SOEs, the materialization of potential arrears, and recapitalization needs from the banking sector (Debt Sustainability Analysis). Detailed information on the financial health of loss-making EDL and the extent of PPPs was not available at the time writing.

15. The external environment remains uncertain.

- It is possible that net trade improves further, given the potential for a faster pick-up in services (e.g., logistics and tourism) and remittances, which would bring valuable foreign exchange earnings.

- On the downside, the external environment could be more adverse than expected in 2023. The low level of FX reserves and high debt burden imply that the economy has very little room to absorb external shocks; the result would likely be more pressure on the exchange rate, tighter FX liquidity, and higher inflation.

16. The economy also faces medium-term structural risks. Employment is yet to return to pre-pandemic levels, against the assumption in the baseline that employment rates pick up to fulfil the potential growth rate of 4.75 percent;[19] similarly, the assumption of a gradual increase in productivity (TFP) might not be realized, given cuts to education and health spending. The country is highly vulnerable to natural disasters, particularly floods and droughts and animal diseases, which have significantly affected agriculture, forestry, water resources, food security, health, and economic growth.

[19] World Bank (2022), *Lao PDR Economic Monitor: Restoring Macroeconomic Stability to Support Recovery*, April.

Authorities' Views

17. The authorities emphasized the potential for recovery, which would be driven by the return of tourists, goods trade following railway and trade agreements, the re-opening of China, and future development of resource sectors, including new hydroelectric power plants. The authorities agreed that stabilizing the exchange rate would be crucial to contain inflation, but were more optimistic than staff about the decline in inflation. Based on assumptions of higher growth and fiscal balances than assumed by staff, and with debt starting at a lower level, they were more confident that debt sustainability could be restored quickly.

POLICY DISCUSSIONS

18. Policy discussions covered immediate actions to stabilize the economy and measures to build a more resilient economy over the medium term. Many of the actions taken by the authorities—allowing the exchange rate to accommodate market pressures and fiscal consolidation— have been appropriate and in line with recommendations in previous Article IV staff reports (Annex III).

19. Coordinated policies are needed. Although there are measures that the central bank can take (¶26), sustainable public finances and progress to boost productivity (and hence FX earnings) are essential to ease exchange rate pressures. Monetary tightening can help address debt vulnerability through its effect on the exchange rate. In turn, fiscal consolidation, in addition to directly lowering debt, can contribute to containing inflation by helping stabilize the exchange rate.

A. Fiscal Policy

20. Budget plans for 2022-2025 were not available at the time of writing. The government's 5-year plan is being revised. Preliminary plans for tax revenues were discussed, but plans for expenditures, grants, and financing were not available. Information on debt rescheduling agreements and plans for debt deferrals, including revised projections for principal and interest servicing to those in the Debt Bulletin, were also not available.

21. Developing a credible medium-term fiscal consolidation plan and a fiscal financing strategy are key to ensure macroeconomic stability.

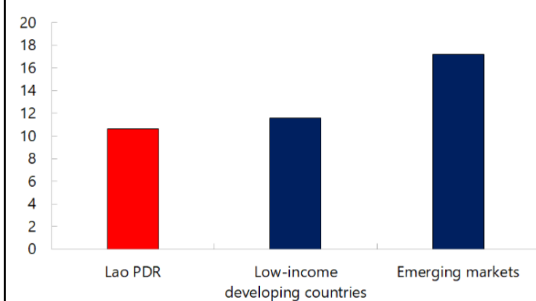
- The immediate policy priority should be to reduce immediate fiscal and financial risks (¶12-14, Annex 11). In the short-term, debt servicing needs will constrain the authorities' capacity to spend, including on social benefits and upgrading of key export-oriented infrastructure. Additional consolidation should instead be used to ease financing pressures, given the increase in financing needs in 2023. Fiscal resources could also be needed for bank recapitalizations and to support MoF's exposure to SOEs in the form of guarantees and on-lending.

- In the medium term, should financing pressures ease, additional consolidation gains could be directed at expenditures that are clearly growth enhancing (e.g. education, training, modernization of key export-oriented infrastructure), so long as the spending is administered appropriately. Spending on education and health is one of the lowest in the region and should be increased. Restoring some capital spending would help to reap the full benefits of previous spending (e.g. investment in high-current transmission lines to facilitate more exports of electricity to neighboring countries), but a return to the model of driving GDP growth through public capital spending is not recommended. Easing of financing pressures could also enable expansion of social protection, which is currently very limited.

22. Consolidation should as much as possible be based on tax revenue mobilization, where there is more scope for improvement. The MoF's current Five-Year Plan (which is currently being revised) shows fiscal consolidation based heavily on spending restraint, with no plan to increase social benefits. However, excessive reliance on spending austerity comes at the expense of growth: the inability to protect those most affected by increases in the prices of essential goods has likely suppressed private consumption, while cuts to capital spending have high fiscal multipliers and hold back medium-term potential growth.

23. Specific measures that could boost tax revenues include curbing tax exemptions, broadening tax bases, and improving tax administration. Even with the improvements in 2021 maintained, estimated tax revenues for 2022 would be slightly below those of other low-income countries and considerably below those of emerging market economies.

Tax Revenue
(In percent of GDP)



Sources: October 2022 World Economic Outlook Database for emerging markets and low income and developing countries, IMF staff estimations for 2022 for Lao PDR.

- Exemptions on VAT should be reversed to the previous 10 percent rate, which could add as much as US$ 150-200 million per year (or about 1 percent of 2021 GDP).[20] The corporate income tax gap—the difference between potential and actual revenue—is estimated to be as high as 90 percent.[21] Investment incentives could be improved by replacing the current profit-based tax incentive system with a cost-based system based on depreciation and additional tax deductions, rather than reduced rates.

- Reform of land taxation and introduction of a property tax, increasing excise on alcohol, tobacco, fuel and luxury goods.

[20] World Bank and Asian Development Bank (2022): *National Agenda on Addressing Economic and Financial Difficulties: Reform Roadmap.*

[21] See World Bank (2022), *Lao Economic Monitor: Tackling Macroeconomic Vulnerabilities*, October.

- Improving large taxpayers' compliance is a critical issue, as tax bills are negotiated on an ad hoc basis, and there is a lack of record-keeping and determination of precedents in application of tax rules. The recent decision to transfer tax collection of certain large taxpayers to nine provinces creates risks of less oversight and increased revenue leakage and is advisable to be reverted.

24. The authorities should accelerate their efforts to implement reform plans on improvements in public financial management:

- Some progress has been made (e.g., a public debt bulletin is annually published), but weaknesses in planning, allocation and implementation of budgets persist, highlighted by the accumulation of arrears on investment projects.[22] The authorities are working actively with development partners, including the IMF, to improve debt management and fiscal statistics. Nevertheless, greater PFM transparency is necessary, both to boost credibility in eyes of external investors, reduce vulnerabilities to corruption, and to help prevent the accumulation of further expenditure arrears. As a starting point, timely and comprehensive public procurement contracts should be published. Moreover, the governance, operational performance, and financial position of SOEs needs improvement, to reduce the debt servicing exposure of government, and reduce governance risks (¶38). Another important step will be implementing the new Financial Management Information System (FMIS) and Treasury Single Account (TSA), enabling the collection of timely, comprehensive, and reliable data used for governments' financial statements and fiscal performance monitoring.
- Developing a credible medium-term fiscal consolidation plan and corresponding fiscal financing strategy are key to ensure macroeconomic stability. The IMF stands ready to provide technical assistance to calibrate an appropriate medium-term fiscal framework.

Authorities' Views

25. The authorities remain committed to a tight fiscal stance. At the time of the mission, the authorities were revising their medium-term budget projections, but aimed to significantly increase the primary surplus in the immediate future, by increasing domestic revenues (from closing leakages on import duties; new excises; the improvement of personal income tax collection, and expected revenue growth from the Thanaleng Dry Port) and spending restraint (particularly on new capital expenditure and public wages). Negotiations with bilateral creditors are ongoing, both on interest and principal servicing. Debt reprofiling and larger primary surpluses would limit financing needs; the authorities plan to meet the remaining needs through asset sales (including concessions); external borrowing (including bond issuances on the Thai market); and domestic sources. The authorities noted that government arrears to the private sector were not counted until a bond was issued, under Lao law.

[22] Staff's estimates of public debt as of end-2022 include 23.5 trillion kip in arrears on old investment projects, in addition 9.6 trillion kip of 2021 cleared arrears by issuing domestic bonds.

B. Monetary and Exchange Rate Policies

26. The BoL should continue tightening monetary conditions. The BoL has appropriately mopped up liquidity in mid-2022, although BoL bonds were only partially rolled over in January 2023. It is crucial that the BoL continues to refrain from monetization, constrains expansion of reserve money,[23] and absorbs excess liquidity by issuing bonds. Reserve requirements could also be used, but the effects will need to be monitored closely for possible downsides.[24] The BoL would also need to raise nominal policy rates further, until expected real rates are positive, to support the expected decline in inflation and the exchange rate.

27. Monetary transmission would be improved by reforms to the monetary operation framework i.e. strengthening the assessment and forecast of liquidity, developing monetary instruments and an interest rate corridor. Overtime, these reforms would allow the BoL to improve its management of kip liquidity and support a more transparent and effective conduct of monetary policy based on the policy rate.

28. The authorities should continue to strive to unify the market and official exchange rates, to ease FX liquidity pressures. The authorities have implemented measures to exert greater control over foreign exchange, but some raise incentive risks.

- Exchange bureaus have been closed. Although this measure might increase the flow of FX through commercial banks, the risk is that, without an improvement in the supply of FX, the new policy would push those needing FX to black market providers, if the official exchange rate is not sufficiently flexible.[25]

- The authorities have noted that only about one third of FX earnings are repatriated to the country. The new FX management law adds to existing repatriation stipulations and introduces new requirements to report all earnings and route them through local banks and to surrender the proceeds from exports, although these are currently not enforced. Such measures can be counterproductive if relied on exclusively and/or used for extended periods, creating incentives for avoidance and deterring inward investment.[26]

[23] The National Assembly has approved a target growth rate for M2 of 26 percent y/y, which would exceed nominal GDP growth.

[24] Banks appear to be holding deposits at the BoL in excess of requirements already, therefore the immediate impact on monetary conditions is not clear and risks pushing banks to lower deposit rates—the opposite of what is needed. Increasing FX reserve ratios by more than kip ratios also risks exacerbating FX pressures at banks.

[25] Staff are currently assessing the jurisdictional implications of recent changes to the exchange system as part of a planned comprehensive jurisdictional assessment of Lao PDR's exchange system.

[26] The surrender requirements of export proceeds may constitute a potential capital flow management measure, and is being assessed under the Institutional View for the Liberalization and Management of Capital Flows.

Authorities' Views

29. The authorities agreed with the need to tighten monetary conditions, but gradually, as banks had maturity mismatches. A combination of policy rate and reserve ratio increases and bond issuances would be used. Closures of FX bureaus would help BOL tighten the FX management mechanism and increase FX liquidity at commercial banks. Currently, the authorities are in the process of drafting sub-legislation to implement the new law, improving the collaboration mechanism between custom and trade authorities in order to improve the effectiveness of the foreign exchange management capacity, which will strengthen foreign exchange management framework overall. The authorities emphasized that due care would be taken not to create disincentives for inward investment..

C. Financial Sector Policies

30. Despite data indicating some improvement in system-wide capital and asset quality, liquidity and solvency strains are evident in the banking sector. Aggregate financial statistics show a substantial improvement in system-wide capital ratios and reduction in NPLs in 2022 (Table VI), but this is likely because of interventions in two state-owned banks. Nonetheless, for most banks:

- Cash balances are low, and banks' liquidity ratios are also low even as compared to other dollarized economies.

- Profitability is low. FX-denominated revenues may have supported incomes, but overall the large depreciation and the following steep inflation have produced large valuation and financial losses, while rapidly eroding kip-denominated capital resources. Borrowers are continuing to struggle with repayments. Interest rate mismatches, delays in loan repayments, and wage increases are expected to depress profits. There are also very high shares of business-related expenses in 2022, likely relating to FX losses on account of the depreciation of the exchange rate.

- As a result, many banks may have Basel-compliant capital adequacy ratios below minimum requirements. One of the largest domestic bank, which is 60 percent state-owned, reported capital ratios of 5.7 percent in September 2022, below regulatory minimum of 8 percent. Two other state-owned banks were recently recapitalized by the government and partially privatized.

31. Forbearance policies have concealed profitability and solvency strains. The forbearance regime is still in place and there are as yet no firm plans to return to standard prudential practices. The process of recognizing losses appears not yet to have started; information about the outstanding stock of loans that were subject to forbearance was not available at the time of the consultation (for example, the number of times a loan has been restructured), raising questions about the extent of possible evergreening. (The credit bureau does not have the capability of registering the number of times a loan has been restructured and it is unclear to what extent it can detect evergreening practices.) Current levels of NPLs seem likely, therefore, to be significantly understated.

32. The significant exchange rate depreciation has inflated the domestic currency value of banks' balance sheets, as about 70 percent of loan books are FX-denominated. In addition, several banks report that depositors have been shifting to FX deposits, thus exacerbating term mismatches on FX balance sheets. As a result, kip-denominated capital resources have shrunk by comparison, adding further stress on solvency levels.

33. To mitigate risks, the authorities should

- Continue to raise interest rates, to preserve depositor confidence and prevent withdrawals or large shifts into FX, which would exacerbate exchange rate pressures. Preserving positive real rates would also help support profitability of banks against raising costs and thus help restore prudential buffers.

- Recommend profits to be retained, to support solvency, given the large increase in FX-denominated assets against current capital.

- Request banks to report detailed information on restructured loans still subject to forbearance and to immediately assess necessary provisions and likely write-offs on a forward-looking basis (i.e. not just whether regulations about size of current NPLs are met).

- Design and communicate a gradual but clear exit from forbearance policies (i.e. set dates), to preserve borrower discipline.

- Issue instructions to banks to raise capital and set aside higher provisions.

- Improve the prompt and corrective action framework, linked to the framework for exceptional liquidity provision (ELA) and continue developing risk-based supervision, the related regulatory environment, and the bank restructuring framework to ensure the authorities will be able to act effectively in situations of banking distress.[27] The supervisor should revise the regulations of net open positions in FX to ensure FX-related risk levels are contained on banks' balance sheets.

Authorities' Views

34. The authorities emphasized that the banking system was profitable and well capitalized, with a system-wide CAR of 18 percent. FX liquidity pressures would be eased by

[27] A deposit insurance fund became operational in 2020 and a World Bank Project loan has provided a first disbursement towards supporting the established target ratio after a new fee structure and coverage amount has been established. Relatedly, the framework to address insolvent banks was established in 2019, although supporting regulation which would make efficient use of deposit fund resources is still being developed. Progress on the risk-based supervision has been slow; and newly drafted regulations have not yet been enacted.

recent measures. Banks were not experiencing liquidity issues. Some were experiencing problems with credit quality; data on outstanding restructured loans are being prepared.

D. Structural Policies, Governance, and Data

35. Complementary structural policies are crucial for supporting growth and employment and addressing macroeconomic imbalances.

- Growth before the COVID-19 pandemic was driven by high levels of investment in resource sectors. However, there was very little growth in employment and productivity. Going forward, the need to sustain a tight fiscal stance for an extended period implies that a return to high levels of public investment is not possible. More will be needed from private sector growth, also to boost FX revenues.

- Specific challenges facing private sector firms include: (i) skills shortages in high-growth firms (which tend to be young, medium-sized and to operate in the construction, manufacturing and hospitality sectors); (ii) firms reacting to competition from informal firms by downsizing and becoming informal themselves; (iii) access to finance; (iv) and administrative burdens.[28] Lao P.D.R. would benefit from structural policies to boost growth in private enterprises: reducing the regulatory burden on small businesses; consistent and a simplified transparent implementation of tax and regulation across all businesses; increasing registration and labor formality[29]; and improved educational attainment and skills training.

36. Implementation of governance and anti-corruption measures remains inadequate:

- There are significant weaknesses in the management of public institutions. Enforcement of the existing regulatory framework and the monitoring of performance are lacking. Some progress has been made on public financial management (e.g., a public debt bulletin was published), but otherwise there are weaknesses in planning, allocation, and implementation of budgets. Full operationalization of the FMIS based on a sound Chart of Account as well the implementation of Treasury Single Account will be critical to improve budget preparation, the predictability and control of budget execution, as well as transparency and accountability. Improvements in the governance of SOEs, building on the ongoing corporate governance assessments of EDL and Lao Airlines, will be especially important.

- An Anti-Corruption Law (2012) criminalizes several activities, including public sector abuse of power, embezzlement, passive bribery, fraud, deception in bidding or concessions, but effectiveness of implementation is unclear.

[28] See World Bank, 2021, "Lao P.D.R.: Building an Economy That Works Again", © World Bank.

[29] For example, the ADB estimates that licenses need to be renewed every year; 70 percent of businesses pay informal charges for the licenses; 70 to 90 percent of firms do not have business registrations or tax licenses; and informal charges account for about 5.6 percent of businesses' revenues.

37. Effective governance reform is best underpinned by transparency and consistent implementation:

- The State Inspection and Anti-Corruption Authority (SIAA) provides an annual report to the National Assembly—publishing the report and cases pursued would improve enforcement.
- Transparency about public financial management (such as implementation of Chart of Accounts) would enhance institutional capacity in the management of public resources and boost credibility in eyes of external investors, reducing potential vulnerabilities to corruption. Covid-19-related public procurement contracts, names of awarded firms, and their beneficial owners, should be published. The State Audit Organization should audit Covid-19-related expenses and publish its report. The BoL is not an operationally-independent central bank; it could improve transparency with published financial statements audited by a recognized and independent agency and implementation of the IMF's central bank transparency code. The regulatory framework for banking supervision is not aligned with Basel Core Principles. Financial stability in Lao P.D.R. would greatly benefit from greater transparency in terms of banks' governance, related party lending, and individual bank's reporting, especially under International Financial Reporting Standards (IFRS). Transparency is lacking about industrial policies (e.g., on extractive industries).
- Improvements in transparency would help improve the business climate. For example, transparency in investor protection and resolution of disputes is weak—publishing court judgments would help to bring greater predictability of decision-making and address corruption vulnerabilities within the legal system. More detailed and more timely information about Lao P.D.R.'s economic and financial challenges (e.g. the size of expenditure arrears, size of financing needs, the financial health of SOEs) as well as the authorities' detailed plans on how to tackle these challenges (e.g. revenue mobilization, financing assumptions, and/or debt rescheduling assumptions) would facilitate better assessments of the country's growth potential.

38. Implementation of the AML/CFT framework warrants being expedited. The authorities stated that a national risk assessment was updated and should undertake measures to mitigate the identified risks. The authorities indicated that they are amending the AML/CFT law. Hence, it would be important to implement it swiftly, especially as Lao P.D.R.'s assessment against the FATF standards by the Asia-Pacific Group (APG) for Money Laundering, which also includes an assessment of the effectiveness of the AML/CFT framework, is currently at an advanced stage. The authorities should focus on addressing the identified shortcomings in line with the expected recommendations.

39. Improving the quality, coverage and timeliness of economic data is critical (Informational Annex). Although some progress has been made in terms of data publication (e.g. the Debt Bulletin) and data provision (e.g. preliminary IIP data), serious shortcomings significantly hamper surveillance, especially regarding national accounts, government finance, financial sector, and external sector statistics. For example, timely and accurate data on expenditure arrears is missing; the timeliness, valuation principles and the detail of monetary and financial statistics could be improved; and while the BoL publish some FSI data it could report FSIs to the IMF to help ensure that the data undergo quality review before dissemination. Modernization of PFM systems will help control, monitor and minimize arrears. Further TA by development partners and accelerated efforts by the authorities are required to improve statistics. IMF TA currently focuses on government finance statistics and external sector statistics. The WB will also provide support to the Lao Statistics Bureau to undertake a statistical system modernization.

Authorities' Views

40. The authorities emphasized their desire to improve the business environment, statistics and AML/CFT implementation. The authorities are in the process of the second FATF mutual evaluation, and would adopt the ME report in July 2023. The authorities would work to address concerns raised over insufficient regulation to regulate and oversight over non-bank financial institutions. The authorities are working with developments partners to improve statistics.

STAFF APPRAISAL

41. The economic recovery faced new challenges in 2022. The proximate causes were external—the sharp increases in commodity prices early in the year—but the degree of exchange rate depreciation compared to that seen in neighboring countries indicates that weaknesses in economic fundamentals have also played a significant part. The result has been very high inflation that has substantially damaged real incomes.

42. The outlook for steady growth in 2023 and beyond is positive. Growth in 2022 is nonetheless estimated to have been 2¼ percent. The resumption of tourism and a rebound in income from goods trade and resource extraction, supported by higher regional growth, bodes well for continued growth in 2023, led by exports, albeit with constraints from worker and skills shortages. Falling global commodity prices would allow inflation to gradually fall.

43. Unsustainable public debt and rising vulnerabilities pose substantial risks to the outlook. Even with primary surpluses maintained at current levels, public debt would remain very high for an extended period and financing needs significant. In the absence of substantial external financing, financing needs would have to be met domestically, raising risks of crowding out private investment or forcing monetary financing, putting further pressures on the exchange rate and setting progress on debt reduction back. Against this background, low foreign exchange liquidity and reserves, limited external market access and limited domestic capital markets compound risks.

44. Preventing these risks from manifesting will require concerted action to improve the public finances and raise productivity. Monetary policy can support exchange rate stability by facilitating market interest rates that encourage stable bank funding in domestic currency;

higher interest rates and a stable exchange rate would also improve FX liquidity and bank solvency. But exchange rate stability will likely only be durably achieved with actions to improve the public finances and to improve economy-wide productivity. To that end, sustained efforts are required to mobilize revenues and improve public financial management (especially to prevent further expenditure arrears), and structural reforms to facilitate greater private sector employment and growth and boost FX earnings.

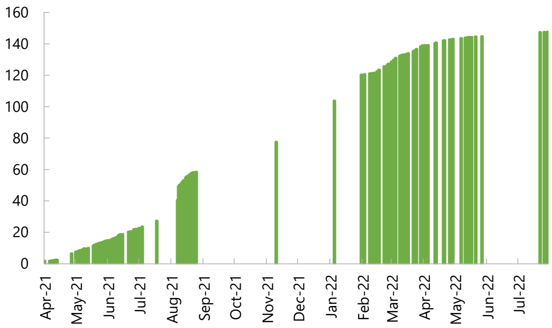
45. Improvements in governance and transparency would also improve Lao P.D.R.'s prospects. Accelerating efforts to improve the management of public institutions and the implementation of laws, transparency, and official statistics would support a more favorable business climate; addressing financial management (including in SOEs) is essential to prevent further accumulation of expenditure arrears by the government and reduce vulnerabilities to corruption. Shortcomings in data provision significantly hamper surveillance: although significant steps have been taken to improve availability (e.g. the publication of the regular debt bulletin), but more is needed in national accounts, government finance, financial sector, and external sector statistics.

46. It is proposed that the next Article IV consultation with the Lao P.D.R. be held on the standard 12-month cycle.

Figure 1. COVID-19 Containment and Mobility

As vaccinations coverage expanded…

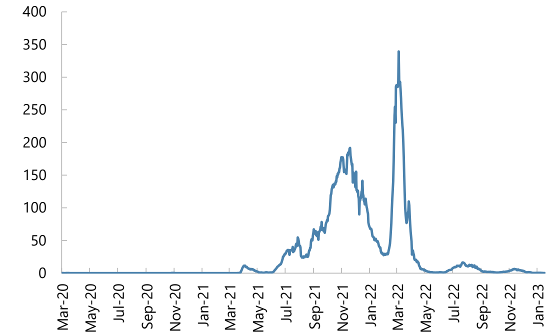
Total Vaccinations per Hundred People



Source: Our World in Data, and IMF staff calculations.

…Covid-19 cases came down.

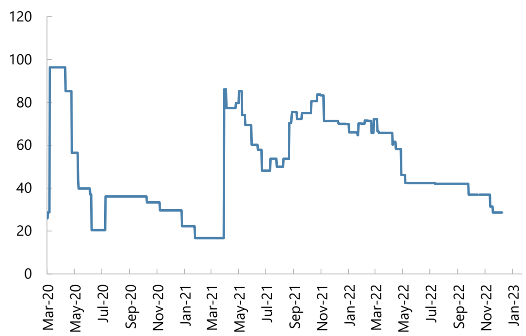
New Cases per Million People



Source: Our World in Data, and IMF staff calculations.

Allowing to relax containment policy stringency,…

Stringency Index

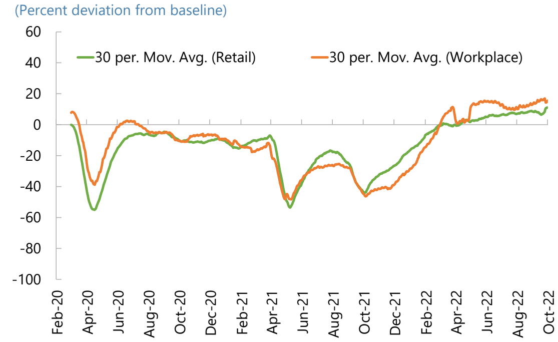


Source: Our World in Data, and IMF staff calculations.

…increase mobility,…

Google Mobility Tracker

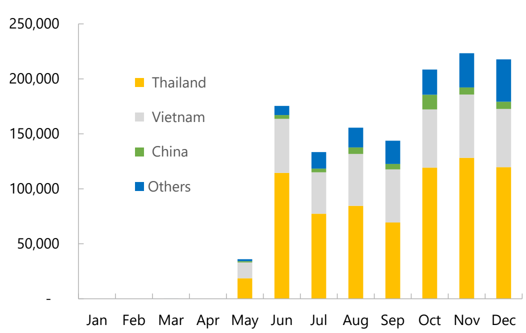
(Percent deviation from baseline)



Source: Google Mobility Tracker.

…and reopen to international tourism…

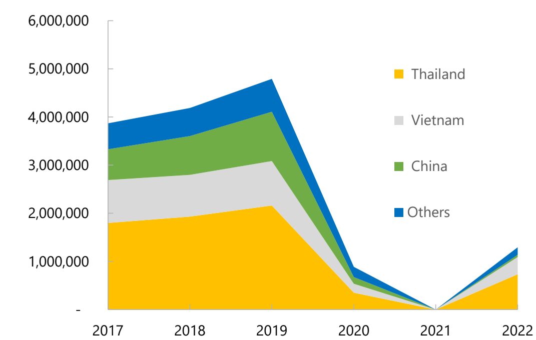
Arrivals of International Visitors in 2022



Source: National authorities, and IMF staff calculations.

…although there is substantial room for recovery.

Historical Arrivals of International Visitors

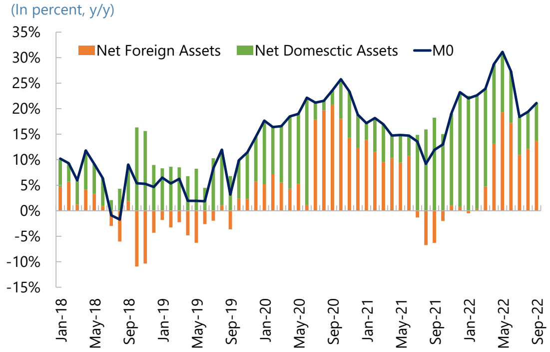


Source: National authorities, and IMF staff calculations.

Figure 2. Monetary Developments

Reserve money has grown robustly, …

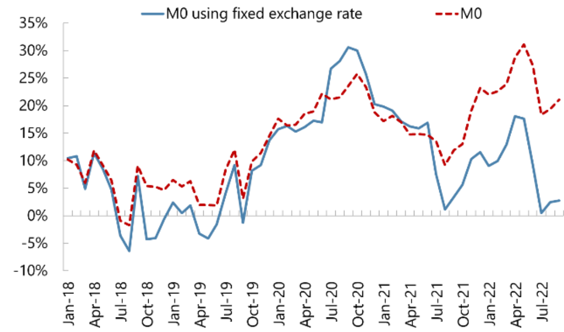
Reserve Money Growth and Contribution of NFA and NDA
(In percent, y/y)



Sources: National authorities and IMF staff calculations.

Controlling for the exchange rate depreciation, M0 growth would have been lower recently.

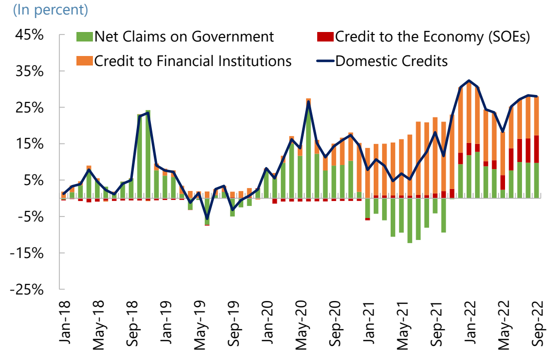
Reserve Money Growth
(In percent, y/y)



Sources: National authorities and IMF staff calculations.

Domestic assets expanded significantly in 2022 supported by BoL's lending to the government and banks

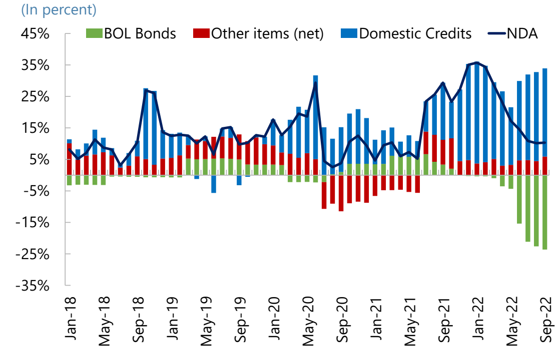
Contribution to Growth of BoL's NDA
(In percent)



Sources: National authorities and IMF staff calculations.

and BoL issued bonds to mop up excess liquidity….

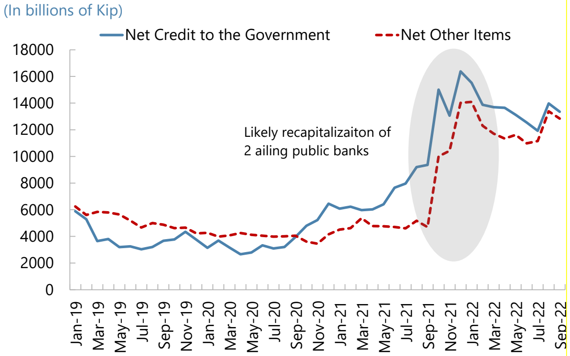
Contribution to Growth of BoL's NDA
(In percent)



Sources: National authorities and IMF staff calculations.

Banks's credit in kip to the government has been facilitated by BoL liquidity, but likely fueled by the recapitalization of 2 ailing public banks …

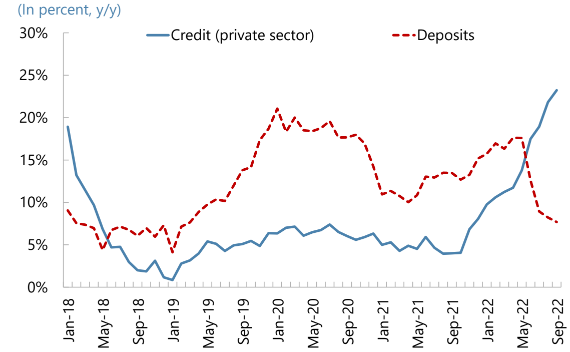
Banks' Exposure to the Government
(In billions of Kip)



Sources: National authorities and IMF staff calculations.

…while significantly high inflation, low nominal kip deposit rates, the kip depreciation and the BoL high-yield bonds have discouraged kip deposits but supported loan demand.

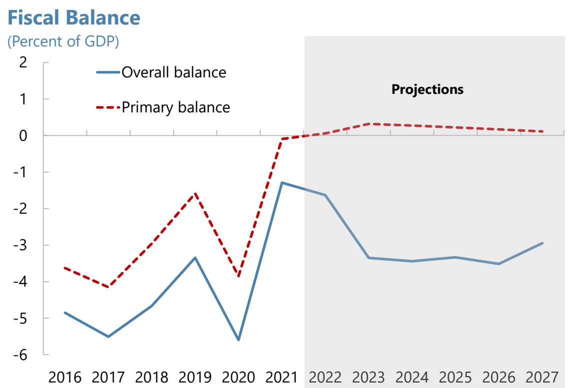
Kip Credit and Deposit Growth
(In percent, y/y)



Sources: National authorities and IMF staff calculations.

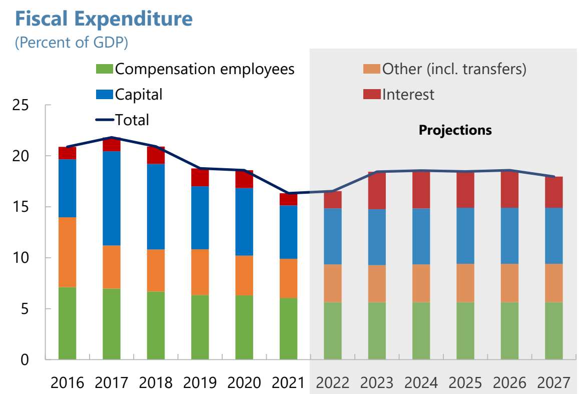
Figure 3. Fiscal Sector Developments and Outlook

Strong fiscal consolidation led to primary balance in 2021. A small primary surplus is expected in MT…



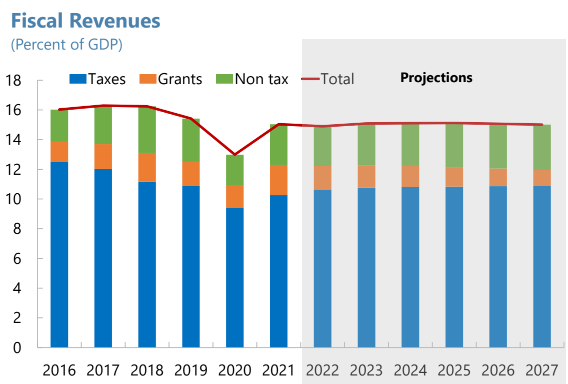
Sources: National authorities and IMF staff calculations.

…driven by a compression of public spending, especially capital expenditure …



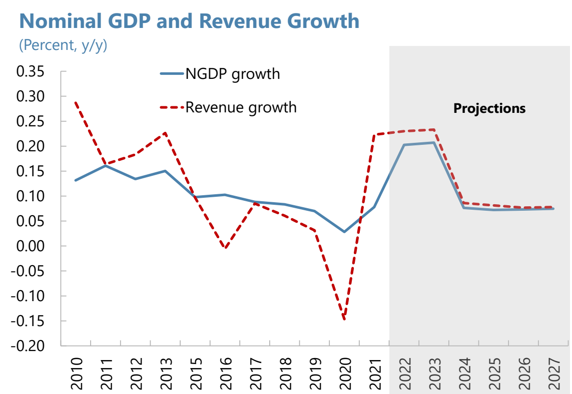
Sources: National authorities and IMF staff calculations.

…and by a stabilization of the significant revenue gains obtained in 2021…



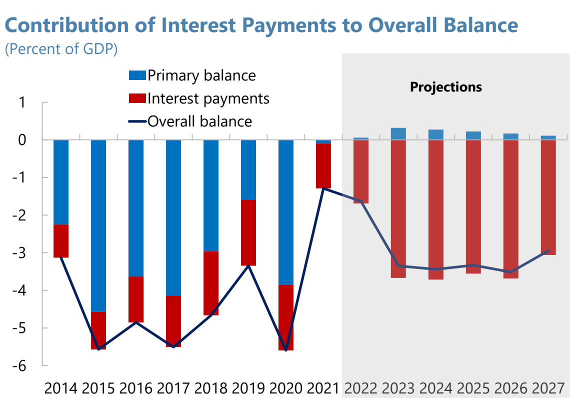
Sources: National authorities and IMF staff calculations.

… albeit future revenue mobilization is unlikely, and revenue growth is expected to be aligned with output growth.



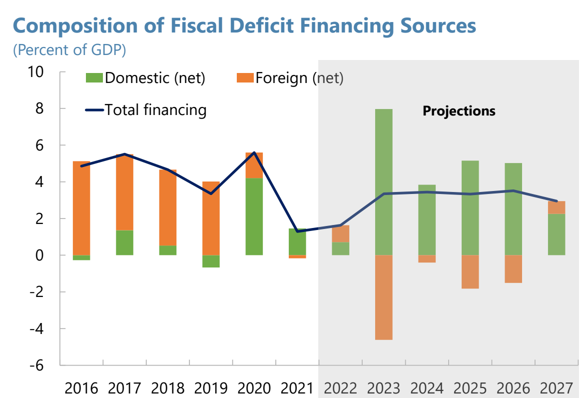
Sources: National authorities and IMF staff calculations.

Rising interest payments drive a wedge between overall and primary balances.…



Sources: National authorities and IMF staff calculations.

…resulting in significant financing needs, which will increasingly depend on domestic sources.

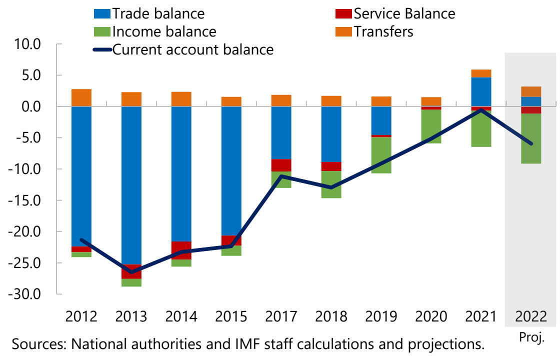


Sources: National authorities and IMF staff calculations.

Figure 4. External Sector Developments

After the trade balance switched to surplus in 2021, the current account deficit widened in 2022 with income repayment pressures.

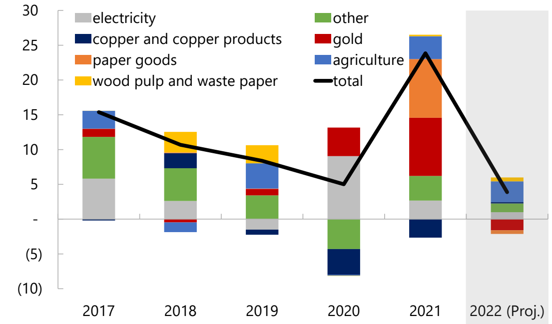
Current Account Balance
(Percent of GDP)



Sources: National authorities and IMF staff calculations and projections.

Export values increased substantially in 2021 on the back of a temporary rise in gold and paper goods exports, subsiding in 2022…

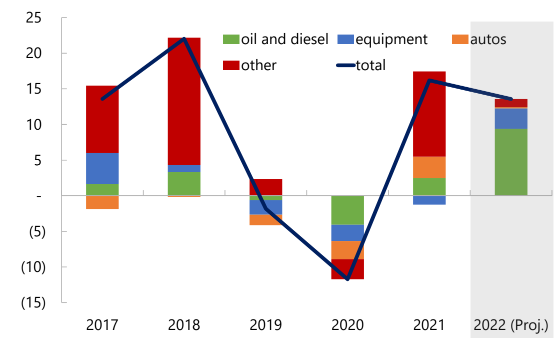
Contribution to Export Growth
(In percent)



Sources: National authorities and IMF staff calculations.

…while strong growth in 2021 was sustained in 2022 due to high energy prices …

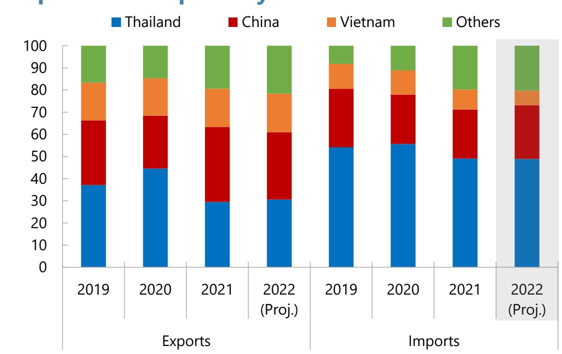
Contribution to Import Growth
(In percent)



Sources: National authorities and IMF staff calculations.

…with Thailand, China and Vietnam remaining Lao P.D.R.'s main trading partners.

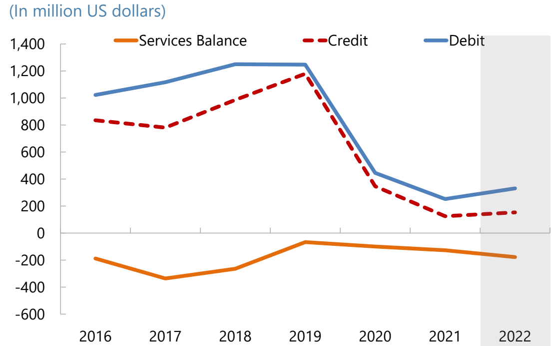
Exports and Imports by Destination



Sources: National authorities and IMF staff calculations.

Meanwhile, the services balance remained stable since the Covid-19 shock, with a sharp drop in tourism inflows accompanied by a collapse in outflows.

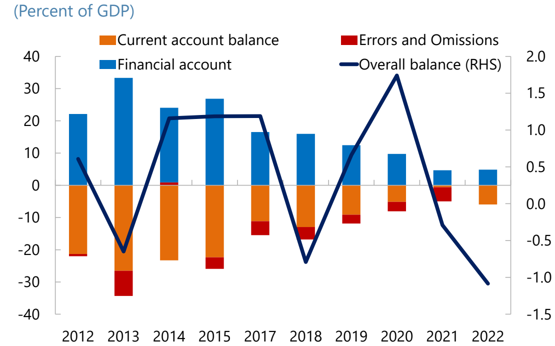
Services Balance
(In million US dollars)



Sources: National authorities and IMF staff calculations.

Overall, the current account deficit exceeded net financial flows in 2021-2022 wiping out a large part of the 2020 reserve accumulation (due to the PBoC swap inflow).

Balance of Payments
(Percent of GDP)

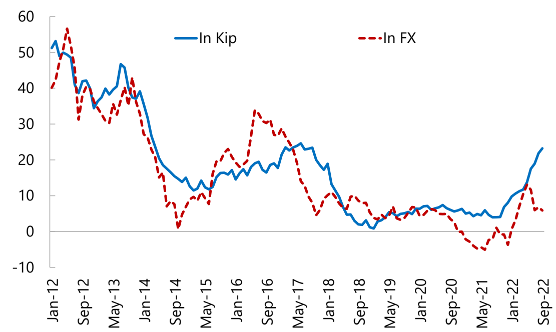


Sources: National authorities and IMF staff calculations.

Figure 5. Financial Sector Developments

After declining during the pandemic, credit growth has picked up since mid-2021.

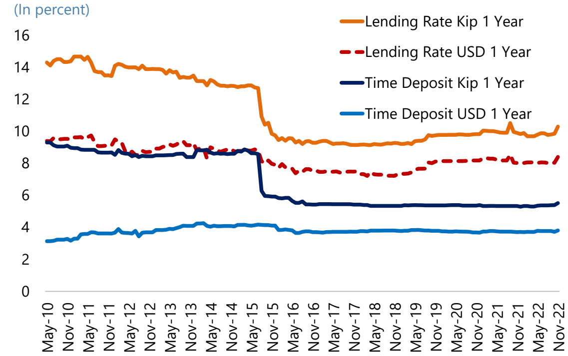
Credit Growth to the Private Sector
(In percent)



Source: National authorities; and IMF staff calculations.

Despite BoL actions on reference interest rates, they have not passed through to deposit rates, suggesting liquidity competition across banks...

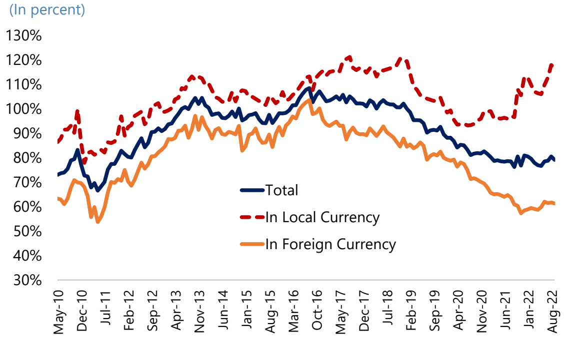
Lending-deposit Rate Spread: Kip and US Dollar
(In percent)



Sources: CEIC; and IMF staff calculations.

and also being reflected in the banking sector's sluggish risk appetite...

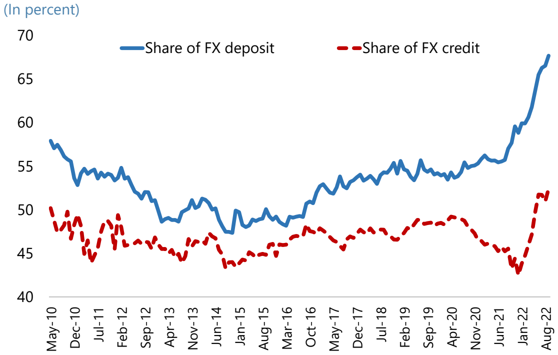
Commercial Banks: Loan-to-Deposit Ratios
(In percent)



Sources: National authorities; and IMF staff calculations.
Note: Loans include net lending to the government and credit to the economy.

...in a largely dollarized environment.

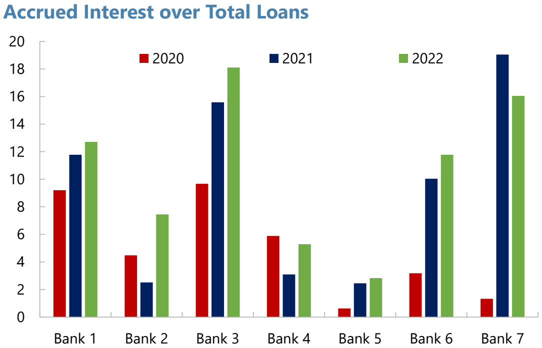
Commercial Banks: FX Share in Credit and Deposit
(In percent)



Sources: National authorities; and IMF staff calculations.

Across the system, NPLs appear to be dispersed...

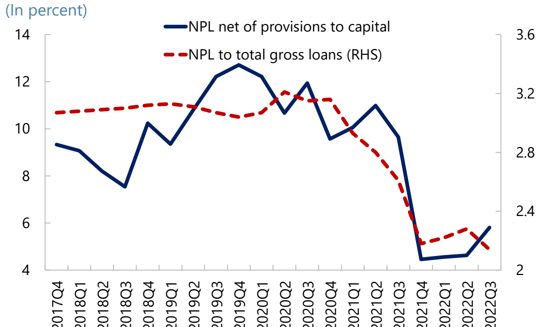
Accrued Interest over Total Loans



Sources: Bank's financial statements as of September 2022 and IMF staff calculations.

...while regulatory forbearance has kept them at low levels.

Nonperforming Loans
(In percent)



Sources: National authorities and IMF staff calculations.

Table 1. Lao P.D.R.: Medium-Term Macroeconomic Framework, 2019–28

	2019	2020	2021 Est.	2022 Proj.	2023 Proj.	2024 Proj.	2025 Proj.	2026 Proj.	2027 Proj.	2028 Proj.
Output and prices	(Percent change, unless otherwise indicated)									
Real GDP growth 1/	4.7	-0.4	2.1	2.3	4.0	4.0	4.1	4.2	4.3	4.5
GDP Deflator	3.3	5.1	3.8	17.6	16.1	3.5	3.0	3.0	3.0	3.0
Consumer prices (annual average)	3.3	5.1	3.8	23.0	15.1	3.5	3.0	3.0	3.0	3.0
Consumer prices (end-period)	6.3	3.2	5.3	39.3	-1.4	7.6	3.0	3.0	3.0	3.0
GDP per capita (in U.S. dollars)	2,603	2,529	2,496	2,047	1,858	1,814	1,888	1,981	2,081	2,189
Public finances	(In percent of GDP)									
Revenue and Grants	15.4	13.0	15.0	14.9	15.1	15.1	15.1	15.1	15.0	15.0
Tax and nontax revenue	13.8	11.5	13.0	13.3	13.6	13.7	13.8	13.9	13.9	14.0
Grant	1.6	1.5	2.0	1.6	1.5	1.4	1.3	1.2	1.1	1.0
Expenditure	18.8	18.6	16.3	16.5	18.5	18.6	18.5	18.6	18.0	17.9
Current Expenditure	12.6	12.0	11.1	11.0	13.0	13.1	13.0	13.1	12.5	12.4
Net acquisition of nonfinancial assets	6.2	6.6	5.2	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Overall balance	-3.3	-5.6	-1.3	-1.6	-3.4	-3.5	-3.4	-3.6	-3.0	-3.0
Money and credit	(Percent change)									
Broad money	18.9	16.3	24.0	32.3	20.1	…	…	…	…	…
Credit to the economy	7.4	4.3	11.5	42.5	3.6	…	…	…	…	…
Balance of payments	(In millions of U.S. dollars)									
Current account balance	-1,711	-953	-107	-912	-368	-863	-1,151	-1,320	-1,263	-1,021
In percent of GDP	-9.1	-5.1	-0.6	-6.0	-2.6	-6.2	-7.8	-8.4	-7.6	-5.8
Exports	5,764	6,115	7,695	7,993	8,306	8,660	9,163	9,734	10,336	11,187
Imports	6,621	6,092	6,829	7,755	7,661	8,306	9,125	9,808	10,523	11,207
Services and income (net)	-1,151	-1,227	-1,199	-1,399	-1,316	-1,518	-1,510	-1,565	-1,413	-1,334
Transfers	298	252	226	250	303	301	321	319	337	333
Capital and Financial account balance	2,350	1,817	867	746	359	1,228	1,319	1,210	1,502	1,436
Of which: FDI	1,102	1,091	1,072	561	758	954	993	1,055	1,101	1,150
Debt and debt service 2/	(In percent of GDP)									
Public and public guaranteed debt	69.1	76.0	92.4	128.5	123.1	120.1	116.0	112.4	108.3	104.3
External debt	107.4	119.4	128.1	164.8	154.5	148.2	135.0	124.5	118.3	113.7
External public and public guaranteed debt	63.3	70.9	79.5	104.5	93.5	87.6	79.6	73.4	69.7	67.0
External public debt service (in millions of U.S. dollars)	760.4	1154.8	659.6	548.3	1854.1	1394.3	1654.2	1502.2	1157.5	1115.3
In percent of exports of goods and services	11.0	17.9	8.4	6.7	20.4	14.7	16.5	14.0	10.2	9.1
Gross official reserves										
In millions of U.S. dollars 3/	998	1,320	1,267	1,101	1,092	1,457	1,625	1,516	1,754	2,170
In months of imports	1.8	2.2	1.9	1.6	1.4	1.7	1.8	1.5	1.7	1.9
Memorandum items:										
Nominal GDP (in billions of kip)	163,080	167,669	180,751	217,350	262,354	282,365	302,785	324,941	349,204	375,838
Official exchange rate (kip per U.S. dollar; end-of-period)	8,869	9,285	11,166	17,238	…	…	…	…	…	…
Real GDP growth (published by authorities) 4/	5.5	3.3	…	…	…	…	…	…	…	…

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.

1/ Staff estimate 2019–20 numbers using leading indicators such as electricity and mining productions, harvest volumes in major crops, export of goods and services, and tourism revenues (due to concerns over data quality and availably).

2/ Includes publicly-guaranteed debt in the stock of external debt for which data was missing prior to 2020, and Swap drawings with the People's Bank of China (PBoC).

3/ Includes Swap drawings with the People's Bank of China (PBoC). Includes the Special Drawing Right (SDR) allocations of SDR 41.3 million in 2009 and SDR 101.4 million in 2021.

4/ Lao Statistics Bureau (LSB) data.

Table 2a. Lao P.D.R.: Central Government Operations, 2019–28

(In billions of kip)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Revenue and Grants	**25,144**	**21,781**	**27,177**	**32,380**	**39,572**	**42,658**	**45,790**	**48,966**	**52,423**	**56,196**
Taxes	17,748	15,765	18,534	23,081	28,260	30,566	32,826	35,278	37,963	41,008
Income and profit taxes	3,856	3,179	4,227	4,783	5,773	6,213	6,663	7,150	7,684	8,270
Income taxes	1,646	1,451	1,494	1,496	1,806	1,944	2,084	2,237	2,404	2,587
Profit taxes	2,209	1,728	2,733	3,287	3,967	4,270	4,579	4,914	5,281	5,683
VAT	5,413	4,721	5,709	6,465	8,104	8,822	9,460	10,152	10,910	11,742
Excise duties	4,972	3,602	4,288	5,806	7,058	7,596	8,145	8,742	9,394	10,111
Import duties	979	1,070	1,182	2,416	2,916	3,139	3,366	3,612	3,882	4,178
Royalties	1,158	882	1,679	2,569	3,151	3,441	3,740	4,063	4,417	4,804
Mining	620	563	1,200	1,942	2,345	2,524	2,706	2,904	3,121	3,359
Hydropower	538	319	479	626	806	917	1,034	1,159	1,296	1,445
Other taxes	1,370	2,312	1,449	1,043	1,259	1,355	1,453	1,559	1,676	1,903
Nontax revenues	4,763	3,451	4,966	5,821	7,376	8,139	9,028	9,788	10,619	11,429
Of which: Dividends 1/	976	656	1,475	1,374	1,659	1,785	1,914	2,054	2,208	2,376
Grants	2,632	2,565	3,678	3,478	3,935	3,953	3,936	3,899	3,841	3,758
Total Expenditure	**30,600**	**31,163**	**29,508**	**35,928**	**48,500**	**52,654**	**56,106**	**60,549**	**62,885**	**67,377**
Current Expenditure	20,524	20,040	20,043	23,974	34,071	37,124	39,453	42,677	43,679	46,706
Compensation of employees	10,346	10,572	10,947	12,263	14,802	15,931	17,084	18,334	19,703	21,205
Transfers	3,571	3,431	3,388	3,774	4,555	5,102	5,671	6,086	6,441	6,932
Interest payments	2,868	2,932	2,163	3,673	9,766	10,765	10,988	12,130	10,850	11,374
Of which: External	2,428	2,100	1,762	2,976	7,207	6,928	6,458	6,098	4,150	4,406
Other recurrent	3,738	3,105	3,546	4,264	4,947	5,325	5,710	6,127	6,685	7,195
Net acquisition of nonfinancial assets	10,076	11,123	9,465	11,954	14,429	15,530	16,653	17,872	19,206	20,671
Domestically financed	4,248	3,390	3,682	6,059	5,651	2,157	1,950	1,866	7,041	6,243
Externally financed	5,829	7,733	5,782	5,896	8,778	13,373	14,704	16,005	12,165	14,428
Net lending/borrowing	**-5,457**	**-9,382**	**-2,331**	**-3,548**	**-8,928**	**-9,996**	**-10,316**	**-11,583**	**-10,462**	**-11,181**
Net acquisition of financial assets	-124	-1,640	0	0	0	0	0	0	0	0
Domestic	-124	-1,640	0	0	0	0	0	0	0	0
Foreign	0	0	0	0	0	0	0	0	0	0
Net incurrence of liabilities	5,333	7,742	2,331	3,548	8,928	9,996	10,316	11,583	10,462	11,181
Domestic	2,473	4,590	2,632	1,555	21,039	14,191	18,918	16,480	8,034	5,480
Foreign	2,860	3,151	-301	1,994	-12,111	-4,195	-8,602	-4,897	2,428	5,702
Discrepancy	0	0	0	0	0	0	0	0	0	
Memorandum items:										
Primary balance	-2,588	-6,450	-168	125	838	770	673	547	388	192
Fiscal balance	-5,457	-9,382	-2,331	-3,548	-8,928	-9,996	-10,316	-11,583	-10,462	-11,181
Nominal GDP (in billions of kip)	163,080	167,669	180,751	217,350	262,354	282,365	302,785	324,941	349,204	375,838

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.

1/ Includes dividends from mining and hydropower projects.

Table 2b. Lao P.D.R.: Central Government Operations, 2019–28
(In percent of GDP)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Revenue and Grants	**15.4**	**13.0**	**15.0**	**14.9**	**15.1**	**15.1**	**15.1**	**15.1**	**15.0**	**15.0**
Taxes	10.9	9.4	10.3	10.6	10.8	10.8	10.8	10.9	10.9	10.9
Income and profit taxes	2.4	1.9	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Income taxes	1.0	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Profit taxes	1.4	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
VAT	3.3	2.8	3.2	3.0	3.1	3.1	3.1	3.1	3.1	3.1
Excise duties	3.0	2.1	2.4	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Import duties	0.6	0.6	0.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Royalties	0.7	0.5	0.9	1.2	1.2	1.2	1.2	1.3	1.3	1.3
Mining	0.4	0.3	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Hydropower	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Other taxes	0.8	1.4	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Nontax revenues	2.9	2.1	2.7	2.7	2.8	2.9	3.0	3.0	3.0	3.0
Of which : Dividends 1/	0.6	0.4	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Grants	1.6	1.5	2.0	1.6	1.5	1.4	1.3	1.2	1.1	1.0
Total Expenditure	**18.8**	**18.6**	**16.3**	**16.5**	**18.5**	**18.6**	**18.5**	**18.6**	**18.0**	**17.9**
Current Expenditure	12.6	12.0	11.1	11.0	13.0	13.1	13.0	13.1	12.5	12.4
Compensation of employees	6.3	6.3	6.1	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Transfers	2.2	2.0	1.9	1.7	1.7	1.8	1.9	1.9	1.8	1.8
Interest payments	1.8	1.7	1.2	1.7	3.7	3.8	3.6	3.7	3.1	3.0
Of which: External	1.5	1.3	1.0	1.4	2.7	2.5	2.1	1.9	1.2	1.2
Other recurrent	2.3	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9
Net acquisition of nonfinancial assets	6.2	6.6	5.2	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Domestically financed	2.6	2.0	2.0	2.8	2.2	0.8	0.6	0.6	2.0	1.7
Externally financed	3.6	4.6	3.2	2.7	3.3	4.7	4.9	4.9	3.5	3.8
Net lending/borrowing	**-3.3**	**-5.6**	**-1.3**	**-1.6**	**-3.4**	**-3.5**	**-3.4**	**-3.6**	**-3.0**	**-3.0**
Net acquisition of financial assets	-0.1	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic	-0.1	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	3.3	4.6	1.3	1.6	3.4	3.5	3.4	3.6	3.0	3.0
Domestic	1.5	2.7	1.5	0.7	8.0	5.0	6.2	5.1	2.3	1.5
Foreign	1.8	1.9	-0.2	0.9	-4.6	-1.5	-2.8	-1.5	0.7	1.5
Discrepancy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:										
Primary balance	-1.6	-3.8	-0.1	0.1	0.3	0.3	0.2	0.2	0.1	0.1
Fiscal balance	-3.3	-5.6	-1.3	-1.6	-3.4	-3.5	-3.4	-3.6	-3.0	-3.0
Nominal GDP (In billions of kip)	163,080	167,669	180,751	217,350	262,354	282,365	302,785	324,941	349,204	375,838

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.

1/ Includes dividends from mining and hydropower projects.

Table 3a. Lao P.D.R.: Balance of Payments, 2019–28
(In millions of U.S. dollars)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Current Account	**-1,711**	**-953**	**-107**	**-912**	**-368**	**-863**	**-1,151**	**-1,320**	**-1,263**	**-1,021**
Merchandise trade balance	-857	23	866	237	645	355	38	-74	-188	-20
Exports, f.o.b.	5,764	6,115	7,695	7,993	8,306	8,660	9,163	9,734	10,336	11,187
Imports, c.i.f.	6,621	6,092	6,829	7,755	7,661	8,306	9,125	9,808	10,523	11,207
Services (net)	-67	-99	-127	-178	-21	-86	-133	-225	-228	-244
Of which: Travel	709	254	261	281	576	620	668	719	774	834
Income (net)	-1,084	-1,128	-1,072	-1,221	-1,295	-1,432	-1,377	-1,341	-1,185	-1,089
Interest payments	432	474	267	251	802	723	639	568	410	340
Of which: Public	295	295	142	173	342	303	259	216	100	76
Transfers (net)	298	252	226	250	303	301	321	319	337	333
of which: Private (net)	117	47	47	61	106	108	111	113	115	117
of which: Official (net)	181	205	179	189	197	193	210	207	222	216
Capital account	**15**	**13**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Financial account	**2,335**	**1,805**	**865**	**744**	**357**	**1,226**	**1,317**	**1,209**	**1,500**	**1,434**
Direct investment (net)	1,102	1,091	1,072	561	758	954	993	1,055	1,101	1,150
Portfolio investment	-41	-257	-310	-44	-145	-172	-127	88	184	287
Other investment	1,274	970	103	228	-256	444	451	66	215	-3
Public sector	738	566	-27	116	-906	-205	-416	-234	115	267
Disbursements	1,214	1,426	491	491	588	852	926	976	1,076	1,176
Amortization	476	860	518	376	1,494	1,057	1,342	1,210	961	909
Banking sector (net)	-140	-278	0	0	0	0	0	0	0	0
Other flows	676	683	130	112	650	649	867	300	100	-270
Errors and omissions	**-515**	**-542**	**-814**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Overall balance	**124**	**322**	**-54**	**-166**	**-9**	**366**	**168**	**-109**	**238**	**416**
in percent of GDP	0.7	1.7	-0.3	-1.1	-0.1	2.6	1.1	-0.7	1.4	2.3
Financing	**-124**	**-322**	**54**	**166**	**9**	**-366**	**-168**	**109**	**-238**	**-416**
Central bank net foreign assets	-124	-322	54	166	9	-366	-168	109	-238	-416
Assets (increase -)	-124	-322	54	166	9	-366	-168	109	-238	-416
Liabilities (reduction -)	0	-3	0	0	0	0	0	0	0	0
Gross official reserves 1/	998	1,320	1,267	1,101	1,092	1,457	1,625	1,516	1,754	2,170
In months of prospective imports of goods and services	1.8	2.2	1.9	1.6	1.4	1.7	1.8	1.5	1.7	1.9

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.
1/ Includes Swap drawings with the People's Bank of China (PBoC). Includes the Special Drawing Right (SDR) allocations of SDR 41.3 million in 2009 and SDR 101.4 million in 2021.

Table 3b. Lao P.D.R.: Balance of Payments, 2019–28

(In percent of GDP)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Current Account	**-9.1**	**-5.1**	**-0.6**	**-6.0**	**-2.6**	**-6.2**	**-7.8**	**-8.4**	**-7.6**	**-5.8**
Merchandise trade balance	-4.6	0.1	4.7	1.6	4.6	2.5	0.3	-0.5	-1.1	-0.1
Exports, f.o.b.	30.7	33.0	41.5	52.2	58.9	62.1	62.3	62.3	62.2	63.2
Imports, c.i.f.	35.3	32.9	36.8	50.7	54.4	59.6	62.1	62.7	63.3	63.3
Services (net)	-0.4	-0.5	-0.7	-1.2	-0.1	-0.6	-0.9	-1.4	-1.4	-1.4
Of which: Travel	3.8	1.4	1.4	1.8	4.1	4.5	4.5	4.6	4.7	4.7
Income (net)	-5.8	-6.1	-5.8	-8.0	-9.2	-10.3	-9.4	-8.6	-7.1	-6.2
Interest payments	2.3	2.6	1.4	1.6	5.7	5.2	4.3	3.6	2.5	1.9
Of which: Public	1.6	1.6	0.8	1.1	2.4	2.2	1.8	1.4	0.6	0.4
Transfers (net)	1.6	1.4	1.2	1.6	2.2	2.2	2.2	2.0	2.0	1.9
of which: Private (net)	0.6	0.3	0.3	0.4	0.8	0.8	0.8	0.7	0.7	0.7
of which: Official (net)	1.0	1.1	1.0	1.2	1.4	1.4	1.4	1.3	1.3	1.2
Capital account	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Financial account	**12.4**	**9.7**	**4.7**	**4.9**	**2.5**	**8.8**	**9.0**	**7.7**	**9.0**	**8.1**
Direct investment (net)	5.9	5.9	5.8	3.7	5.4	6.8	6.8	6.8	6.6	6.5
Portfolio investment	-0.2	-1.4	-1.7	-0.3	-1.0	-1.2	-0.9	0.6	1.1	1.6
Other investment	6.8	5.2	0.6	1.5	-1.8	3.2	3.1	0.4	1.3	0.0
Public sector	3.9	3.1	-0.1	0.8	-6.4	-1.5	-2.8	-1.5	0.7	1.5
Disbursements	6.5	7.7	2.7	3.2	4.2	6.1	6.3	6.2	6.5	6.6
Amortization	2.5	4.6	2.8	2.5	10.6	7.6	9.1	7.7	5.8	5.1
Banking sector (net)	-0.7	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other flows	3.6	3.7	0.7	0.7	4.6	4.7	5.9	1.9	0.6	-1.5
Errors and omissions	**-2.7**	**-2.9**	**-4.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Overall balance	**0.7**	**1.7**	**-0.3**	**-1.1**	**-0.1**	**2.6**	**1.1**	**-0.7**	**1.4**	**2.3**
Memorandum items:										
Current account (w/o official transfers)	-10.1	-6.3	-1.5	-7.2	-4.0	-7.6	-9.3	-9.8	-8.9	-7.0

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.

Table 4. Lao P.D.R.: Monetary Survey, 2016–23

	2016	2017	2018	2019	2020	2021	2022	2023
							Proj.	Proj.
	(In billions of kip, unless otherwise indicated)							
Bank of Lao P.D.R. (BoL)								
Net foreign assets	**6,120**	**7,839**	**6,853**	**8,225**	**11,576**	**11,796**	**15,345**	**18,414**
In millions of U.S. dollars	746	945	803	927	1,247	1,056	890	921
Net domestic assets	**14,716**	**14,974**	**17,019**	**19,100**	**20,893**	**28,214**	**26,596**	**29,132**
Government (net)	-5	-743	406	839	1,173	3,129	3,731	3,731
Claims	1,095	1,347	1,344	2,747	2,509	5,026	6,754	6,754
Deposits	-1,099	-2,090	-938	-1,908	-1,336	-1,897	-3,022	-3,022
State-owned enterprises	6,454	6,425	6,343	6,379	6,243	6,908	8,786	10,965
Banks	6,468	6,757	7,040	6,981	9,554	13,309	13,872	13,525
BoL securities	-2,903	-3,357	-3,453	-2,886	-2,193	-2,251	-7,671	-7,671
Other items (net)	4,701	5,891	6,682	7,787	6,116	7,119	7,878	8,582
Reserve money	**20,835**	**22,812**	**23,873**	**27,325**	**32,469**	**40,011**	**41,941**	**47,545**
Currency in circulation	7,837	8,823	9,200	10,990	12,195	13,386	10,810	12,977
Deposits	12,998	13,989	14,672	16,335	20,274	26,624	31,131	34,568
Monetary survey								
Net foreign assets	**-11,268**	**-7,769**	**-9,248**	**-7,260**	**-2,051**	**4,441**	**5,145**	**6,174**
In millions of U.S. dollars	-1,374	-936	-1,083	-819	-221	398	298	309
Of which: Commercial banks	-2,120	-1,881	-1,886	-1,746	-1,468	-659	-577	-991
Net domestic assets	**77,808**	**82,447**	**90,179**	**103,447**	**113,946**	**134,283**	**178,381**	**214,153**
Government (net)	4,373	1,723	6,588	4,587	7,630	19,506	17,003	47,915
Credit to the economy	66,199	73,365	75,396	81,007	84,481	94,206	134,197	139,056
Of which: Private credit	53,028	60,539	63,197	68,544	72,301	79,963	112,259	115,218
Other items (net)	7,235	7,360	8,194	17,852	21,836	20,571	27,182	27,182
Broad money	**66,539**	**74,678**	**80,930**	**96,186**	**111,895**	**138,724**	**183,526**	**220,327**
Currency outside banks	5,534	6,638	7,149	8,581	9,312	10,490	7,892	7,892
Kip deposits	29,303	31,486	33,887	40,135	45,865	52,839	54,664	57,490
Foreign currency deposits (FCDs)	31,702	36,554	39,894	47,470	56,718	75,395	121,077	145,015
	(Annual percent change)							
Reserve money	**-1.4**	**9.5**	**4.6**	**14.5**	**18.8**	**23.2**	**4.8**	**13.4**
Broad money	**10.9**	**12.2**	**8.4**	**18.9**	**16.3**	**24.0**	**32.3**	**20.1**
Credit to the economy	**20.9**	**10.8**	**2.8**	**7.4**	**4.3**	**11.5**	**42.5**	**3.6**
Credit to the private sector	**22.0**	**14.2**	**4.4**	**8.5**	**5.5**	**10.6**	**40.4**	**2.6**
Deposit growth	**12.7**	**11.5**	**8.4**	**18.7**	**17.1**	**25.0**	**37.0**	**15.2**
Memorandum items:								
Loan/deposit (percent)	97.9	98.4	93.6	85.2	76.3	68.1	71.4	63.3
Gross official reserves (in millions of U.S. dollars) 1/	815	1,018	874	998	1,321	1,267	1,082	1,119
Dollarization rate (FCDs/broad money; in percent)	47.6	48.9	49.3	49.4	50.7	54.3	66.0	65.8
Gross reserve/Reserve Money (percent)	32.1	37.0	31.3	32.4	37.8	35.4	44.5	47.1

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.

1/ Defined as foreign assets of the Bank of the Lao P.D.R. Includes the Special Drawing Right (SDR) allocations of SDR 41.3 million in 2009 and SDR 101.4 million in 2021. Includes Swap drawings with the People's Bank of China (PBoC).

Table 5. Lao P.D.R.: Selected Financial Soundness Indicators (FSIs), 2019–2022

(In percent)

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3
Capital Adequacy														
Regulatory capital to risk-weighted assets	14.3	13.2	11.8	13.9	13.9	13.1	13.2	13.3	12.5	12.9	17.5	19.6	18.6	18.5
Capital to assets (leverage ratio)	10.3	9.9	8.3	10.0	10.7	10.1	10.4	10.5	9.7	10.0	14.1	17.0	15.3	14.6
Asset Quality														
Nonperforming loans net of provisions to capital	10.8	12.2	12.7	12.2	10.7	11.9	9.6	10.1	11.0	9.7	4.5	4.6	4.6	5.8
Nonperforming loans to total gross loans	3.1	3.1	3.0	3.1	3.2	3.2	3.2	2.9	2.8	2.6	2.2	2.2	2.3	2.1
Earnings and Profitability														
Return on equity	13.9	21.5	25.0	23.5	19.5	14.5	12.0	3.3	7.5	9.3	11.6	5.9	14.1	15.8
Return on assets	1.0	1.5	1.7	1.1	1.0	0.7	0.6	0.1	0.4	0.5	0.7	0.5	1.2	1.4
Interest margin to gross income	30.2	27.7	27.7	23.8	22.9	21.0	18.8	15.6	10.4	13.4	12.0	22.9	9.0	10.5
Non-interest expenses to gross income	40.9	39.8	40.4	60.9	67.6	70.9	74.4	79.1	87.0	83.4	84.5	73.7	88.5	85.3

Source: National Bank of Lao P.D.R.

Annex I. External Sector Assessment

Overall Assessment: *The external position of LAO P.D.R in 2022 is assessed to be weaker than the level implied by fundamentals and desirable policies. The assessment is based on: a very large and deteriorating negative net international investment position which poses risk to the country's external sustainability; the EBA CA model which suggest that the external position in 2022 was weaker than that consistent with medium-term fundamentals and desirable policy settings; reserves being below adequate levels. The assessment for 2022 is constrained by data availability and remains subject to considerable uncertainty around the degree of the temporary nature of these factors and the impact of Covid-19 developments.*

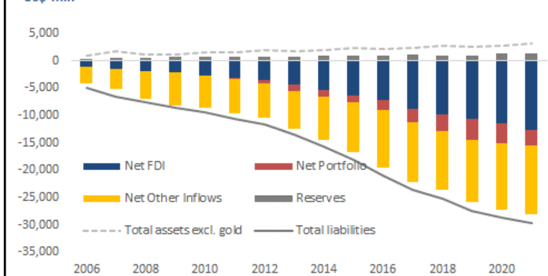
Potential Policy Responses: *Continued tight fiscal policy, fiscal consolidation based on tax revenue mobilization, and continued official exchange rate flexibility would help stabilize external debt, help regain market confidence and build reserves. Structural policies to reduce skills shortages, target informality, reduce start-up costs for investment and improve transparency would contribute to improve external competitiveness and diversification.*

Foreign Assets and Liabilities: Position and Trajectory

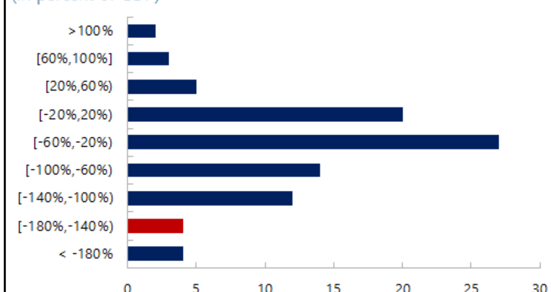
Background. Lao P.D.R.'s net international investment position reached -143 percent of GDP in 2021 based on estimates from Lane and Milesi-Ferretti (2022). International investment position (IIP) official data are not currently available.[1] About half of the stock of international liabilities is in the form of debt (mostly classified as "other flows"). Lao P.D.R's NIIP lies below the threshold of -50 percent of GDP indicated by Catao and Milesi-Ferretti (2013) as a significant crisis predictor and is among the bottom 10 percent of a sample of 90 EMDEs.

Assessment. A very large and deteriorating negative net international investment position poses risk to the country's external sustainability. Some compensating factors are that about half of the stock of liabilities are composed of FDI and borrowing is long-term. Notwithstanding, the Debt Sustainability Analysis (DSA) assesses external debt to be unsustainable under the current baseline (2022 Debt Sustainability Analysis).

Net IIP, excludes gold
US$ mln



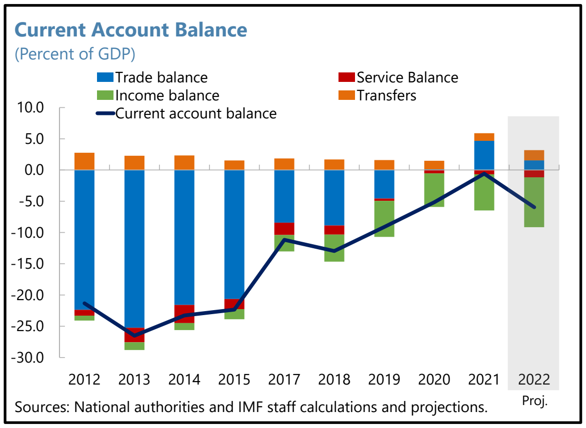
Frequency Distribution of Net IIP, 2021
(In percent of GDP)



Source: Lane, Philip R. and Gian Maria Milesi-Ferretti, External Wealth of Nations database (based on Lane, Philip R. and Gian Maria Milesi-Ferretti, 2018, "The External Wealth of Nations Revisited: International Financial Integration in the Aftermath of the Global Financial Crisis," IMF Economic Review 66, 189-222.

Current Account

Background. The current account deficit as a share of GDP has sharply narrowed from an average of about 13 percent in 2013-2019 to 0.6 percent in 2021 and is expected to deteriorate to 6.0 percent in 2022. Part of the adjustment started in 2019, prior to the Covid-19 crisis, due to a compression in imports linked to the slowdown in economic activity.



Exports rose sharply by 8.5 percent of GDP in 2021 (due to export value growth, Figure 4 and Annex IX) and expected to rise by 10.7 percent of GDP in 2022 (largely due to a drop in US$ GDP). Electricity and agriculture exports played a dominant role in 2021-2022 combined with temporary factors such as the significant rise in gold and paper good exports in 2021 (Figure 4). Meanwhile, import values picked up with oil and diesel imports driving most of the increase in 2022 due to energy price increases (Figure 4). All in all, the merchandise trade balance reached a surplus of 4.7 percent of GDP in 2021 and is expected to narrow to 1.6 percent of GDP in 2022.

Although the Covid-19 crisis had a significant impact on tourism and services exports, tourism and services imports also declined sharply, with the service balance remaining somewhat stable. Despite the sharp trade balance improvement, the income deficit has been on an increasing trend more than doubling from an average of 2.1 percent of GDP in 2015-2017 to 5.3 percent of GDP in 2018-2021 and further deteriorating to 8.0 of GDP in 2022, reflecting rising external debt and repayments linked to FDI (e.g. hydro projects). While the current account in 2022 is expected to deteriorate with imports growing faster than exports due to the rise in energy prices, 2022 projections are subject to a high degree of uncertainty against the backdrop of large external shocks. Over the medium-term, the current account deficit is projected to widen with the resumption of imports after the strong compression during the covid crisis, a gradual tourism recovery, and a worsening income balance.

	CA model 1/	**REER model**
	(in percent of GDP)	
CA-Actual	**-6.0**	
Cyclical contributions (from model) (-)	0.3	
COVID-19 adjustors (-) 2/	-0.1	
Additional temporary/statistical factors (-)	0.0	
Natural disasters and conflicts (-)	0.1	
Adjusted CA	**-6.3**	
CA Norm (from model) 3/	**-6.7**	
Adjustments to the norm (-)	2.7	
Adjusted CA Norm	**-4.0**	
CA Gap	**-2.3**	**6.6**
o/w Relative policy gap	0.5	
Elasticity	-0.3	
REER Gap (in percent)	**6.8**	**-19.4**

1/ Based on the EBA-lite 3.0 methodology
2/ Additional cyclical adjustment to account for the temporary impact of the remittances (0.07 percent of GDP).
3/ Cyclically adjusted, including multilateral consistency adjustments.

Assessment. Using the EBA-lite current account model, staff estimates the current account norm to be -6.7 percent of GDP in 2022. However, given external risks from a large and negative NIIP, the IMF staff views the appropriate CA norm to be -4.0 percent of GDP. This implies that the NIIP is projected to reach −85 percent of GDP over a twenty-year horizon (compared to -113 percent of GDP with the unadjusted CA Norm), though with high uncertainty, as zero valuation effects are assumed. The implied adjustment in the NIIP by 2028 is about 29 percent of GDP in line with the external debt adjustment under the baseline (2022 Debt Sustainability Analysis).

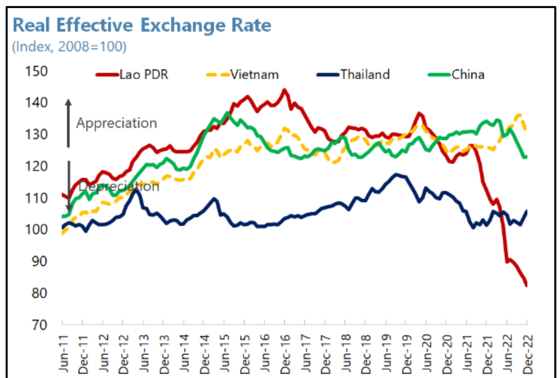
This results in a current account gap of -2.3 percent of GDP which translates into a real effective exchange rate (REER) gap of 6.8 percent. The contribution of the policy gap to the norm is 0.5 percent as positive contributions. The result of the CA model suggests that the external position in 2022 was weaker than the level implied by fundamentals and desirable policies.

The following adjustments to the current account were made to take into account features not fully captured in the regression model:

Remittances adjustor (component of Covid-19 adjustors) of 0.07 percent to account for a fall in remittances relative to projection of 0.2 percent of GDP (a transitory fall in remittances, increases the adjusted current account balance); and tourism adjustor of zero (component of Covid-19 adjustor)[2];

Real Exchange Rate

Background. In line with other countries in the region, the REER appreciated during the first half of 2020 (by 4.0 percent), what was followed by a depreciation during the second half of the year (of almost 7 percent). Since Jan 2021, the REER has depreciated by about 27 percent, decoupling from other countries in the region.



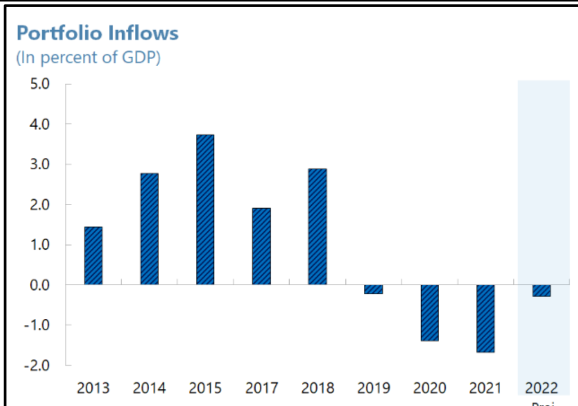
Sources: IMF International Financial Statistics; and IMF staff calculations.

Assessment. The EBA-Lite REER model produces a more negative REER gap than the current account model (-19.4 percent) for 2022. The result of the REER model suggests that the external position in 2022 was stronger than that consistent with medium-term fundamentals and desirable policy settings.

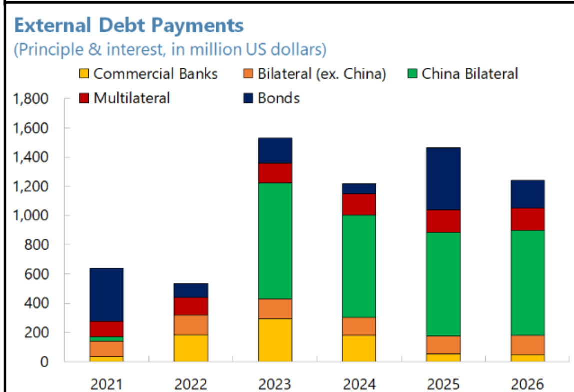
Capital and Financial Accounts: Flows and Policy Measures

Background. While remaining steady in 2019-2021, FDI dropped by half in 2022H1 compared to 2021H1.[3] After reversing in 2019, portfolio inflows went further into negative territory in 2020 and 2021 (remaining close to zero in 2022H1). Notwithstanding a recent limited bond issuance in Thailand, Fitch downgraded Lao to CCC-, citing worsening liquidity risks, and announced that it will stop rating Lao P.D.R. on commercial grounds. Other multilateral, bilateral and commercial financing fell to about US$500 million in 2021 from around US$1.1 billion in 2020 (excluding the swap with the PBoC).

Assessment. The sovereign's external debt repayment profile remains challenging, with an average of US$1.3 billion due in 2022-2025, including interest and principal, with more than half of external repayments due to China.



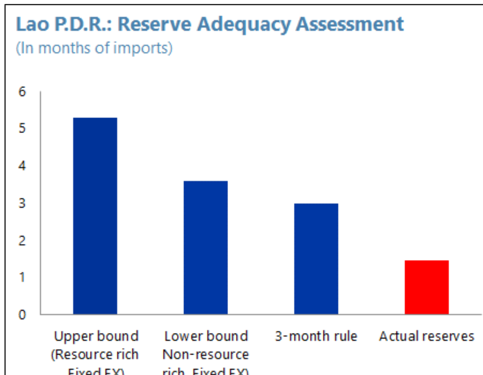
Sources: National authorities and IMF staff calculations and projections.



Sources: Lao authorities.

FX Reserve Levels

Background. Gross official reserves stood at US$1,263 at end-2021 (down from US$1,320 million at end-2020), corresponding to 1.9 months of import coverage. Further FX pressures in 2022 were accompanied by reserve losses of US$170 million by end-August 2022 (from end-December 2021). Gross official reserves are project to be US$1,101 million at end-2022, corresponding to 1.6 months of import coverage.



Source: IMF staff calculations; and National authorities.

On May 20, 2020, the BoL entered a three-year swap agreement for the amount of RMB6 billion (about US$900 million) with the People's Bank of China (PBoC).[4] There is currently no detailed information available on the swap arrangement, but 2020 gross official reserves appear to include US$300 million of the swap.[5] Swaps that include a clause restricting the use of resources (e.g., facilitating transactions on trade and investment with China), should be excluded from gross official reserves.[6] In August 2021, Lao P.D.R. received about US$145 million as part of the general SDR allocation, equivalent to around 11 percent of Lao P.DR.'s gross international reserves, helping support reserves. By September 2022, the authorities had sold 79 percent of its August 2021 SDR allocation in exchange for dollars.

The de jure exchange arrangement is a managed float, and the de facto exchange rate arrangement is classified as "other managed".

Assessment. Reserve adequacy metrics for low-income countries suggest that the optimal level of reserves for Lao P.D.R. is around 3 ½ to 5 ½ months of import coverage. Over the medium-term import coverage is expected to be around 1.9 reflecting import recovery, protracted market access normalization and dwindling FDI. Staff continue to assess reserve coverage as below adequate levels suggested by IMF adequacy metrics.[7]

[1] Lao P.D.R does not currently provide international investment position (IIP) data to the Fund. While the BOL has continued the compilation and conducted its 4th annual IIP survey, IIP data is still produced for BOL internal use only.

[2] For Lao net services have not changed since 2019, although both receipts and expenses have declined sharply.

[3] On-going TA is helping address some data challenges related to coverage of Lao's DI statistics.

[4] http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4068122/index.html

[5] An increase in GIR in July 2020 suggests that a deposit of US$300 million has been transferred to the BOL as part of the swap arrangement.

[6] Technical assistance report, LAO P.D.R. Report on External Sector Statistics Mission, May 2021.

[7] The authorities' methodology assesses reserve coverage to be higher (over three months of imports) by excluding imports related to FDI given that most of the FDI related projects use their own funding unrelated to the reserves in the central bank.

Annex II. Risk Assessment Matrix[1]

Nature/source of the shock	Likelihood	Impact	Policies to minimize impact
		Conjunctural risks and scenarios	
Abrupt global slowdown or recession.	Medium/ High	Global and idiosyncratic risk factors combine to cause a synchronized sharp global growth slowdown, with outright recessions in some countries, spillovers through trade and financial channels, and downward pressures on some commodity prices.	Options are extremely limited, as the economy lacks fiscal space to support the economy. A credible commitment to economic reform would mitigate effects on investment and growth to some extent.
Intensifying spillovers from Russia's war in Ukraine	Medium	Further sanctions resulting from the war and related uncertainties exacerbate trade and financial disruptions and commodity price volatility.	Similarly, the economy lacks FX reserves to defend the currency. A credible financing plan, supported by revenue-based consolidation, would help prevent further damaging exchange rate depreciation.
Government funding stresses	High	The crowding out of domestic credit growth if domestic banks are to finance the government generates a credit crunch that impairs recovery, or the government rollover and refinancing risks increase, forcing the central bank to substantially increase funding to the government, resulting in more exchange rate depreciation and inflation if unsterilized or higher interest rates if offset.	Reversal of VAT cuts and improvements to tax implementation, to bolster confidence in ability to meet financing needs through revenue gathering.
		Structural risks	
Deepening geo-economic fragmentation and geo-political tensions	High	An increase in geopolitical tensions in the region could disrupt trade and damage confidence, possibly affecting export markets and/or FDI.	Continue to promote export market diversification, relying on the growing importance of regional markets.
Long-term labor market scarring	Medium	Employment rates to not pick up to fulfil the potential growth rate of 4.75 percent, and/or TFP does not	Reforms to promote private sector business environment.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

		improve, given cuts to education and health spending.	
Natural disasters related to climate change.	**Medium**	More frequent natural disasters deal severe damage to infrastructure (especially in smaller vulnerable economies) Lao P.D.R. is extremely vulnerable to extreme weather events, including floods and drought. Changing monsoon patterns pose a severe threat to agricultural production, a crucial source of income for the most vulnerable segments of the population and an important source of export revenue.	Develop plans for adaptation, through investment in climate-resilient infrastructure, reforestation and focus on securing agricultural production/food security. In the long run, it is crucial to budget for support to households and firms affected by extreme weather events

Annex III. Implementation of Past Advice

Recommendation	Actions taken	Technical Assistance
	Fiscal	
Gradual fiscal consolidation based on revenue mobilization	- Fiscal consolidation has been substantial, driven equally by expenditure cuts, revenue collection, and interest payment deferrals. - Work is ongoing on domestic revenue mobilization (DRM) and tax administration. - The VAT rate cut was not reversed, but the authorities are considering it. - Tax exemptions have not been reviewed and there is no estimate of foregone revenues. - No progress on Treasury Single Account (TSA). - Other measures and ongoing TA include: i. Mining tax policy settings. ii. Risk-based audit (RBA) has been approved. iii. Tax Administration Law instructions. iv. International taxation. v. Instructions for the Excise Tax Law adopted in February 2022. vi. Property tax law (an upgrade from the Land tax decree). vii. VAT on digital services and reviewing legislation on transfer pricing	IMF, WB/EU, ADB and JICA IMF WB, EU, DFAT IMF IMF, WB, EU Authorities WB, EU, DFAT WB, EU, DFAT
Strengthening public financial management	- Some progress on budget preparation and implementation, and public procurement. The Ministry of Finance is piloting medium-term budget plans and annual budget ceilings. - Other measures and ongoing TA include: i. Implementation of Financial Management Information System (FMIS) has not started pending procurement of the system. ii. Upgrade of GFIS to GFIS+ under piloting.	WB, EU, ABD, and DFAT WB, IMF

	iii. TA to improve general government accounting and reporting and expansion of Chart of Accounts is ongoing. iv. Improvement in compilation of budget in compliance with GFS is ongoing. v. Alignment of spending priorities with SDGs is ongoing	IMF, UN, WB, JICA and multi donors IMF Authorities
Strengthening debt management	- The debt recording system was upgraded (DMFAS 6.0) and external and domestic debt are recorded, including some part of on-lending and guarantees. - An annual official Debt Bulletin is now published. - Other measures and ongoing TA include: i. Corporate governance assessment of EDL and Lao Airlines were completed. ii. Assessment of direct and contingent liabilities is ongoing. iii. Improvements in compilation and dissemination of public sector debt statistics are ongoing. iv. Institutional arrangements and operational practices for public debt and contingent liabilities management are under review.	WB, ADB WB, EU, DFAT IMF, ADB, JICA IMF IMF
Building resilience to natural disasters	- Work to enhance preparedness for disaster recovery and resilience is ongoing. - Preparation of the national disaster risk reduction strategy.	Multi-donors ADB
	Monetary	
Modernizing monetary governance, rebuilding reserves supported by greater exchange rate flexibility	- The BoL widened the exchange rate band, facilitating greater exchange rate flexibility. - The Foreign Exchange Management Law was amended to introduce surrendering requirements. Repatriation and surrendering requirements are not currently enforced.	Authorities IMF Authorities

Improving monetary policy framework	- The BoL has tightened monetary conditions by issuing bonds and raising policy and reserve requirement rates. - Workshops on liquidity management and monetary operations. - Possible TA programs to improve monetary policy decision-making process through development of Forecasting and Policy Analysis System (FPAS), and streamline monetary policy implementation.	Authorities IMF IMF
Improving the payment system	- The BoL has received IMF technical assistance on Strengthening Oversight of Crypto Trading. - Preparatory Survey on a blockchain based modern payment infrastructure.	IMF JICA
	Financial	
Strengthening banking regulation and supervision and building capital buffers	- No improvement in asset classification, provisioning standards and financial sector indicators (FSIs). - Implementation and dissemination of a risk-based supervision manual is ongoing. - Work on transition to Basel II and IFRS accounting and reporting standards is ongoing. - Secondary regulations for the implementation of the 2019 Commercial Bank Law, including regulation on CAR, are being drafted. - Training on Internal Capital Adequacy Assessment Process (ICCAP) and Supervisory Review Process (SRP) of Basel Pillar 2. - Ongoing TA on Early warning system and future support on enhanced liquidity monitoring and emergency liquidity assistance (ELA)	IMF WB WB IMF WB
Developing debt securities market	- Progress has been made to standardize issuance of government securities with a pre-specified target and a regular auction schedule.	MOF, ADB Stock Exchange

	- Trading infrastructure has improved but compilation of statistics and publication of information require improvement. - Authorities have received technical assistance on developing the debt securities market.	ADB, UNCDF, UNDP
Putting in place crisis management and prompt corrective action frameworks	- Work on implementation guidelines for prompt corrective actions and bank resolution is ongoing. - Stress testing and early warning systems are under development. - TA to establish a Financial Stability Committee.	WB WB, AMRO WB
Implementing the AML/CFT agenda	- Technical compliance documents and effectiveness related documents have been shared with the assessors from the Asia/Pacific Group. The assessment report will be discussed in June by APG members, and published thereafter. - Updated national risk assessment.	UNODC, WB, ADB WB
Inclusive and sustainable growth		
Reducing corruption-related vulnerabilities	- Limited progress has been made in terms of improving transparency and the business environment.	ADB
Data and statistics		
Improving quality and timeliness of economic statistics	- Preliminary IIP shared with IMF staff, but with a lag, for 2015-2019 only. - Ongoing work to improve: i. Government Finance Statistics and Public Sector Debt Statistics ii. External sector statistics. iii. Annual GDP by expenditure estimates and of quarterly GDP by production estimates. iv. Improving national accounts, price, and sectoral statistics. v. Improving poverty, labor, and social statistics.	IMF, WB IMF IMF WB WB, ADB, UNFPA

Annex IV. Capacity Development Strategy

1. **Risk-based supervision:** The BoL has long engaged in risk-based supervision to improve its on-site and off-site oversight. A risk-based supervision manual was officially approved. There is ongoing IMF TA on an Internal Capital Adequacy Assessment Process.

2. **Digital assets:** As part of a national efforts to transform into a digital economy and pursue growth, Lao P.D.R. has recently enacted legislation to pilot the mining and crypto trading activities. Recently the BoL received technical assistance from the IMF on crypto assets oversight, particularly to help the BoL understand better crypto asset risks and augment its capacity to manage those risks through its regulatory and supervisory activities.

3. **Liquidity management and monetary policy:** To improve monetary policy, the BoL requested technical assistance on liquidity management in addition to on-going capacity development on the macroeconomic framework. Liquidity management is one of the most important foundation toward improving monetary operations. The BoL has also received IMF support on FX operations and market-based reference exchange rates.

4. **Macroeconomic framework and forecasting:** The BoL has also requested technical assistance to develop a Forecasting and Policy Analysis System (FPAS) to strengthen its monetary policy framework. A scoping mission for a potential FPAS technical assistance was undertaken in early 2023. There has also been a request from the authorities for technical assistance to support the development of a macroeconomic framework tool, a debt dynamic tool to analyze the debt path, and the re-initiation a multi-agency macroeconomic management working group (MOF, LBS, MPI, LASES, BoL). A mission is tentatively scheduled for July 2023.

5. **Debt management:** Faced with a high stock of public debt, the authorities are taking steps to modernize debt management. IMF TA delivered medium-term key recommendations to strengthen the institutional framework, enhance operational capacity, manage debt-related contingent liabilities, and has helped the authorities to better understand the IMF-WB DSA framework and to improve debt statistics. The IMF stands ready to support the authorities to better manage its debt.

6. **Revenue mobilization:** To strengthen revenue collection, the authorities have received IMF TA on improving compliance risk management, compliance improvement program, HQ functions, auditing, integrity of the tax registry, debt collections, and on improving cooperation between the Lao Customs Department and Lao Tax Department. IMF TA on revenue mobilization is ongoing.

7. **Statistics:** The authorities have taken steps to improve their statistics and have engaged with the IMF on including improving government finance statistics, public sector debt statistics, the chart of account, national accounts, improving the collection and reporting of external sector statistics to international best practice. (See also Statistical Issues, Informational Annex.

Annex V. Government Policies and the National Agenda[1]

The National Agenda to Addressing Economic and Financial Difficulties was launched in late 2021. It covers the period 2021-2023 and is aimed at restoring macroeconomic stability. It remains a top priority in the country's policy agenda to avert a severe economic crisis and support the implementation of development priorities listed in the National Socio-Economic Development Plan (NSEDP) for 2021-2025.

1. **The National Agenda focuses on five priorities:** (i) revenue mobilization, (ii) expenditure efficiency and debt management, (iii) rule of law (iv) financial and monetary stability; and (v) export promotion and sets the overall direction, targets, and measures to be undertaken. However, some of the measures are not sufficiently specific and the external and domestic economic environment has considerably changed and deteriorated since its endorsement.

2. **A Reform Roadmap to support the implementation of this National Agenda has therefore been formulated with the support from Development Partners** led by the WB and ADB in collaboration with government agencies. The Roadmap focuses on reviewing progress towards the achievement of the National Agenda's targets and proposing more specific reforms to ease macroeconomic vulnerabilities and support growth. Reform actions would be undertaken within the timeframe of the National Agenda and will also supports the implementation of the NSEDP Financing Strategy for 2023-2025.

3. **Several indicators of the National Agenda have improved-compared to the 2020 baseline -but many remain off-track.** The assessment of the achievement of the National Agenda's targets reveals that economic activity has been subdued; fiscal space remains limited (despite debt service deferrals); public debt is high, external imbalances have weakened the currency, and banking sector vulnerabilities are masked by forbearance measures. The Reform Roadmap thus recommends six priority reforms among 37 recommendations, which are considered fundamental to avoiding a deep economic and social crisis.

Two priority reforms under the National Agenda's Revenue Mobilization Pillar:

i. Revise the Law on Investment Promotion to curb tax incentives and exemptions

ii. Restore the value-added tax (VAT) rate to 10 percent and reduce VAT exemptions

Three priority reforms under the National Agenda's Expenditure Efficiency and Debt Management Pillar:

iii. Reprioritize spending towards the social sectors

iv. Strengthen the governance of public-private partnerships (PPPs)

[1] Prepared by staff of the resident representative office in Vientiane.

v. Pursue the restructuring of public debt

One priority reform under the National Agenda's Financial Monetary Stability Pillar:

vi. Enhance bank liquidity monitoring and operationalize emergency arrangements.

Annex VI. Recent Monetary Developments[1]

1. **Reserve money (M0) expanded robustly in 2020-22.** Reserve money growth reached its peak of 31.1 percent in May 2022, which is the highest level since November 2014.

2. **Accounting issues may have exaggerated the growth of reserve money.** Reserve money equals Net Foreign Assets (NFA) plus Net Domestic Assets (NDA). The evolution of NFA in Kip has been greatly impacted by the significant exchange rate depreciation, boosting reserve money. Typically, the impact of exchange rate fluctuations on NFA would be offset in NDA (via Other Items Net (OIN)), leaving reserve money broadly unaffected by exchange rate fluctuations. This does not appear to be the case recently. More detailed information on the composition of OIN and the currency-composition of BoL's liabilities, which are unavailable, would be required to better inform the analysis. Hence, the monetary policy stance may be better assessed by focusing on NDA.

3. **Domestic liquidity conditions loosened, especially in 2021, before the BoL started to take steps to tighten monetary policy.** NDA has grown robustly since mid-2021, fueled by BoL's extension of domestic credit, especially to financial institutions and purchases of government bonds.[2] The BoL's extension of credit to the government during the first year of the pandemic was mostly normalized in 2021, before re-intensifying in late 2021 as BoL purchased government bonds from banks. In mid-2021, the BoL's financing to banks increased sharply (in parallel with increasing banks' net claims on the government, reflecting to a large extent bank recapitalization and arrears clearance bonds), and this level of financing remain elevated through 2022. In June 2022, the BoL issued almost Kip 5,000 billion worth of bonds (6-month maturity, 20 percent annual interest) to absorb excess liquidity, which slowed NDA growth sharply. The BoL also raised its policy rate from 3.0 percent of 7.5 percent recently. In January and February 2023, the BoL announced that it would issue Kip 1,000 billion in BoL bonds when the June 2022 bonds mature, in effect boosting reserve money by Kip 3,500 billion (compared to a full roll over of the June 2022 bonds).

4. **In the banking sector, nominal deposit and credit growth reflects rising inflation, the large currency depreciation, government and SOEs' financing needs, and the expansion of reserve money.** Growth of Kip credit has picked up significantly owing the government's expenditure arrears clearance bonds as well as the bond issuance to recapitalize public banks. To a large extent, the increasing exposure of the banking sector to the government was accompanied by a concomitant decline in banks' Other Items Net. The pick-up in Kip credit to the private sector and the slowdown in Kip deposit growth may reflect rising inflation, depreciation pressures, and more recently, significantly negative Kip real interest rates. Kip deposit growth has also likely been impacted by BoL bond issuance, with an interest rate much

[1] Prepared by Vimaly Savvanarideth.

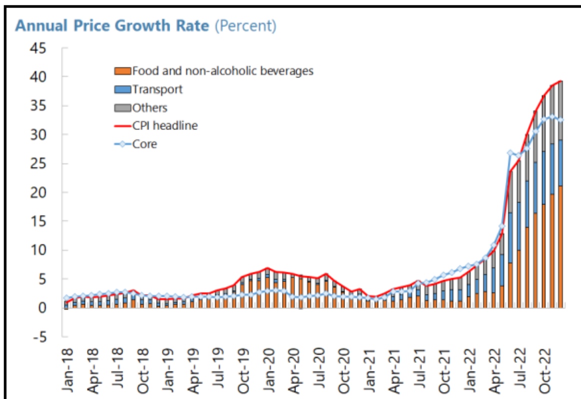
[2] Note that the Kip counterpart of the PBoC swap reduced significantly the growth of NDA between July 2020-June 2021 through OIN.

higher than deposit rates at banks. Credit growth in FX has picked up recently, which may reflect additional credit needs to finance oil imports. Deposit growth in FX has consistently outpaced credit growth, allowing banks to reduce their net foreign borrowing. Given the exchange rate depreciation, dollarization of the banking system has increased.

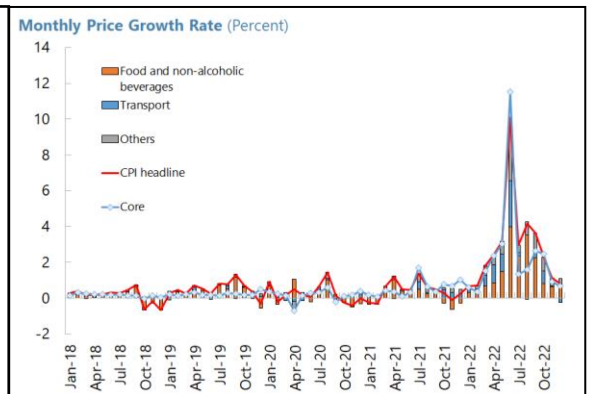
Annex VII. Inflation and the Exchange Rate[1]

Lao P.D.R. experienced a sharp increase in inflation and a significant depreciation of the Kip in 2022. This annex quantifies exchange rate pass-through (ERPT) to inflation. The baseline analysis suggests that the short-term ERPT is around 25 percent while the cumulative 12-month effect is around 50 percent. This implies that about two-thirds of inflation seen recently can be explained by exchange rate depreciation.

1. Lao P.D.R. experienced unprecedented inflation in 2022. Annual (y/y) inflation rates for CPI headline and core have surpassed 30 percent since mid-2022 and CPI headline inflation was around 40 percent in December 2022. Food and non-alcoholic beverages has accounted for a large portion of CPI increases over the recent years. After 2021, however, Transport was the main contributor to the CPI hike. Monthly inflation rates also show that Lao P.D.R. suffered from a rapid price increase especially in mid-2022: the price growth rates for CPI headline and core reached their highest levels in June 2022, above 10 percent. While monthly rates have declined since then, the average m/m rates in 2022 for CPI and core inflation were 2.8 percent and 2.4 percent, respectively.



Sources: National authorities; and IMF staff calculations.



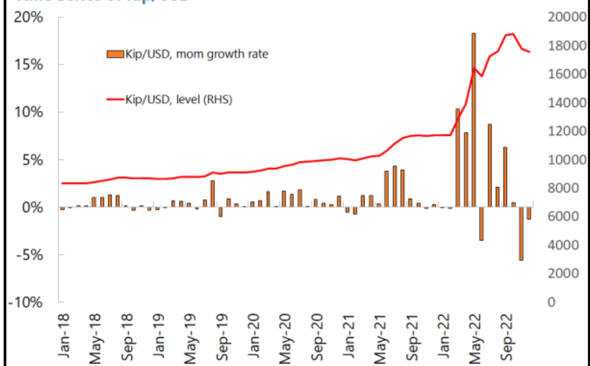
Sources: National authorities; and IMF staff calculations.

2. Simultaneously, Lao P.D.R. was hit by a drastic currency depreciation in 2022. Until the end of 2021, both Kip/USD and Kip/Baht in the parallel market had showed a moderate upward trend. In 2021, the average monthly depreciation rate was 1.3 percent for USD and 0.2 percent for Baht. In the beginning of 2022, however, both FX rates started to depreciate rapidly, and FX rates as of end-2022 depreciated by 49.8 percent for Kip/USD and 44.2 percent for Kip/Baht from end-2021. FX rates started to depreciate drastically in March 2022, after which the rapid hike of m/m inflation rates happened. Towards the end of 2022, the depreciation slowed down and the parallel ER appreciated, which coincides with a slowdown of m/m inflation rates as

[1] Prepared by Shogo Takahashi.

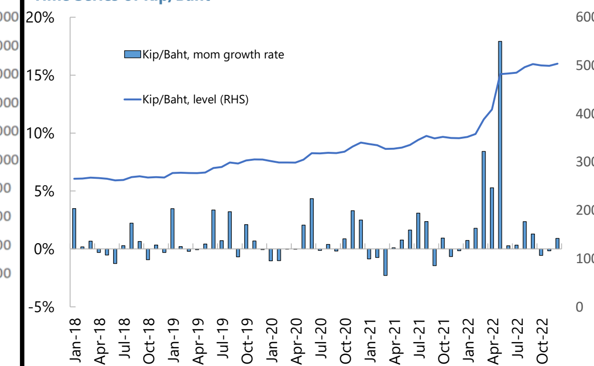
of end-2022. As a result, the 2022 average depreciation rate was 3.6 percent for USD and 3.2 percent for Baht.

Time Series of Kip/USD



Sources: National authorities; and IMF staff calculations.

Time Series of Kip/Baht



Sources: National authorities; and IMF staff calculations.

- Before presenting the formal regression analysis to estimate the ERPT effect, there are two issues worth discussing.

- *Time lags:* the correlation between monthly inflation rates (for CPI headline and core) and monthly depreciation rates suggest a strong relationship with ER and prices, with some time lags. The correlation with one-month lag of ER depreciation rate is the highest, and is followed by the relatively high correlation with two- and three-month lags. This appears to show a sticky price adjustment in response to exchange rate changes.

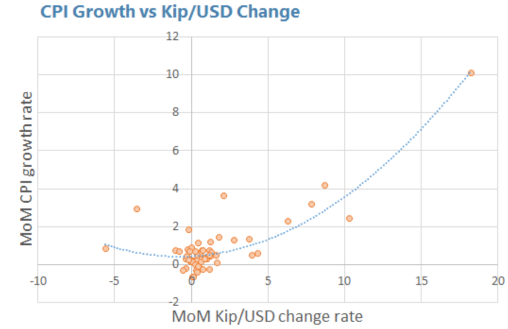
Unconditional Correlation (MoM Inflation vs MoM FX Depreciation Rate)

Lag	CPI		Core	
(Month)	Kip/USD	Kip/Baht	Kip/USD	Kip/Baht
t	0.223	0.220	0.168	0.224
t-1	0.611	0.565	0.770	0.716
t-2	0.392	0.336	0.456	0.351
t-3	0.427	0.417	0.465	0.387
t-4	0.206	0.289	0.170	0.212
t-5	0.214	0.240	0.200	0.192
t-6	0.129	0.188	0.150	0.102
t-7	0.105	0.123	0.104	0.067
t-8	0.149	0.142	0.102	0.100
t-9	0.228	0.009	0.177	-0.006
t-10	0.380	0.123	0.472	0.137
t-11	0.415	0.105	0.462	0.179
t-12	0.393	0.117	0.440	0.129

Sources: National authorities; and IMF staff calculations

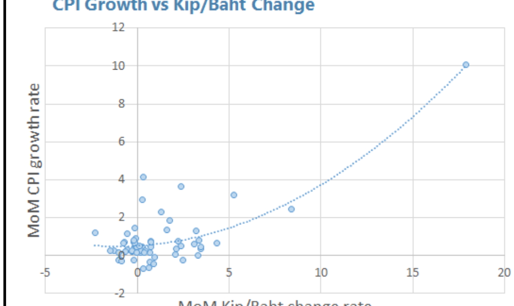
- *Nonlinearity/asymmetry:* the ERPT effect may involve nonlinearities in the sense that modest currency depreciations may not raise prices because firms try to avoid price increasing to keep their competitiveness in the markets, in contrast to large depreciation episodes.

CPI Growth vs Kip/USD Change



Sources: National authorities; and IMF staff calculations.

CPI Growth vs Kip/Baht Change



Sources: National authorities; and IMF staff calculations.

Furthermore, the ERPT effect may be asymmetric: the absolute effect is lower (higher) when the currency appreciates (depreciates). The text figures show patterns consistent with this nonlinearity.

M/M Growth Rate Of Exchange Rates And Price Indices

Parallel ER from BOL	*Jan-21*	*Feb-21*	*Mar-21*	*Apr-21*	*May-21*	*Jun-21*	*Jul-21*	*Aug-21*	*Sep-21*	*Oct-21*	*Nov-21*	*Dec-21*
USD	-0.55%	-0.75%	1.25%	1.21%	0.37%	3.77%	4.35%	3.95%	0.88%	0.43%	-0.16%	0.27%
Baht	-0.86%	-0.74%	-2.29%	0.10%	0.77%	1.63%	3.09%	2.37%	-1.44%	0.94%	-0.66%	-0.15%
CPI M/M growth	-0.25%	-0.30%	0.68%	1.21%	0.49%	0.47%	1.36%	0.59%	0.50%	0.28%	-0.10%	0.23%
Core M/M growth	0.18%	0.08%	0.42%	0.37%	0.11%	0.32%	1.68%	0.64%	0.36%	0.78%	0.67%	1.01%
Parallel ER from BOL	*Jan-22*	*Feb-22*	*Mar-22*	*Apr-22*	*May-22*	*Jun-22*	*Jul-22*	*Aug-22*	*Sep-22*	*Oct-22*	*Nov-22*	*Dec-22*
USD	-0.07%	-0.13%	10.32%	7.84%	18.28%	-3.53%	8.73%	2.12%	6.30%	0.48%	-5.59%	-1.26%
Baht	0.74%	1.78%	8.42%	5.28%	17.91%	0.28%	0.33%	2.36%	1.29%	-0.56%	-0.16%	0.91%
CPI M/M growth	0.68%	0.69%	1.84%	2.44%	3.18%	10.09%	2.95%	4.16%	3.62%	2.31%	1.14%	0.82%
Core M/M growth	0.58%	0.37%	1.52%	2.36%	3.04%	11.54%	1.33%	1.60%	2.65%	2.46%	0.92%	0.66%

Sources: National authorities; and IMF staff calculations.

3. **A regression analysis is conducted to quantify the ERPT effect in Lao P.D.R.**[2] The analysis uses two types of sample groups; (i) only observations at the aggregate CPI level, and (ii) price indices from all CPI subgroups to utilize a larger sample for regressions.[3] The regression controls for other covariates affecting price indices (credit provision to the economy, global food price index, global fuel price index, and M0).[4] In addition to using OLS, the analysis uses a least absolute deviation (quantile) regression as robustness check to address the concern for potential outliers.[5] The regression model uses variables in logs to make their interpretation easier and uses first differences (log-change from the last month) for all log-variables to remove the time trend. Given the discussion above, the baseline regression includes 12-month lags of ER variables. The baseline regression model is as follow:

$$\Delta\text{logPrice Index}_{i,t} = \sum_{j=1}^{12} \beta_{1\mathrm{j}} \Delta logER_{t-j} + \sum_{j=1}^{12} \theta_{\mathrm{j}} \Delta logER_{t-j} \times Depreciation\ Dummy_{t-j} + \gamma_1 \Delta\text{logCredit}_{t-1}$$

$$+ \gamma_2\ \Delta\text{logG food P}_{t-1} + \gamma_3\ \Delta\text{logG fuel P}_{t-1} + \gamma_4\ \Delta\text{logM0}_{t-1} + \delta_i + \mu_{month} + \varepsilon_{i,t}$$

where i denotes price subgroups (such as Food and non-alcoholic beverages, etc.), t denotes time (e.g., Sep 2022), $\Delta\text{logER (USD or BHT)}$ is a change of log ER rate (Kip/USD or Kip/Baht) from the last month value, $\Delta\text{logCredit}$ is a change of log of credit provision from the depository corporation sector from the last month value, $\Delta\text{logG food P}$ ($\Delta\text{logG fuel P}$) is a change of the log of global food (fuel) price index from the last month value, ΔlogM0 is a change of M0 from the last month, δ_i is price group fixed effect, μ_{month} is month fixed effect, and $\varepsilon_{i,t}$ is an error term. The analysis also considers the asymmetry discussed above by including interactions of depreciation

[2] The analysis uses parallel market rates monitored by the BoL, which covers the period from Dec 2004.

[3] The sample includes 12 subgroup price indices (Food and non-alcoholic beverages, Transport, etc).

[4] Ideally, one should control covariates that depict marginal costs of production, but the analysis did not include these due to limited data availability.

[5] This analysis uses STATA code of "qreg" for the regression with 50percent quantile.

dummies and ER variables. In this case, the ER depreciation effect in time *t-j* can be captured by $\beta_{1j} + \theta_j$.

4. The baseline OLS regression implies that the short-term (1-month) ERPT is around 20-30 percent of the currency depreciation rate, and the long-term (12-month cumulative) ERPT is around 40-60 percent of currency depreciation.

- *Short-term effect:* Without considering asymmetry, OLS regression indicates that if a 1 percent depreciation in Kip/USD (Kip/Baht) happens in time *t*, the monthly inflation rate of CPI headline in the next month (t+1) will increase by 0.25 (0.23) percent. Controlling for asymmetry between depreciation and appreciation yields slightly higher coefficients: the estimate is 0.32 for USD and 0.35 for Baht. These impacts are consistent with the recent m/m inflation in 2022: on March 2022, for example, Kip/USD depreciated by 10.32 percent, and M/M inflation of CPI headline for April 2022 recorded 2.44 percent. Using all subgroups' observation yields similar estimates for both currencies. The LAD regression yields qualitatively similar yet quantitatively smaller estimates than OLS: considering the asymmetry, 1 percent depreciation in Kip/USD (Kip/Baht) in time t will lead to an increase of the inflation rate in the next month (t+1) by 0.13-0.26 (0.10-0.20) percent.

- *Cumulative effect:* Adding up all coefficients of ER variables will provide information on how much a 1 percent depreciation in period *t* changes prices in the next 12 months. The estimates show that the cumulative effect is larger than the short-term effect, in all variations. The OLS regression implies that if a 1 percent depreciation in Kip/USD (Kip/Baht) happens in month *t* (and there are no other depreciation shocks afterward), the inflation rate of headline CPI between *t* and *t*+12 will increase by 0.5 (0.6) percent.[6] LAD estimates are lower than the OLS case but not so different when considering the asymmetry: a 1 percent depreciation in Kip/USD (Kip/Baht) in month *t* will lead to an increase of the inflation rate of headline CPI between *t* and *t*+12 by 0.4 (0.4-0.5) percent.

[6] ERPT in Baht appears to be larger than USD: one possibility is that global prices in the RHS are denominated in USD and therefore the ER effect may appear implicitly in the other regressors.

Regression Results: OLS

Time lag of FX rate variables	Baseline (not include quadratic terms)							
	Using only CPI observations				Using all subgroups' observations			
	Kip/USD		Kip/Baht		Kip/USD		Kip/Baht	
	No control for asymmetry	Control asymmetry	No control for asymmetry	Control asymmetry	No control for asymmetry	Control asymmetry	No control for asymmetry	Control asymmetry
$\beta_{11}(+\theta_1)$	0.252***	0.315***	0.228***	0.345***	0.231***	0.299***	0.219***	0.331***
Short-term effect	(0.0849)	(0.072)	(0.0875)	(0.080)	(0.0359)	(0.040)	(0.0330)	(0.042)
$\sum_{j=1}^{12} \beta_{1j}(+\theta_j)$	0.498***	0.478***	0.621***	0.651***	0.362***	0.440***	0.461***	0.520***
	(0.108)	(0.135)	(0.110)	(0.126)	(0.047)	(0.060)	(0.047)	(0.065)
Cumulative effect								

Regression Results: LAD

Time lag of FX rate variables	Baseline (not include quadratic terms)							
	Using only CPI observations				Using all subgroups' observations			
	Kip/USD		Kip/Baht		Kip/USD		Kip/Baht	
	No control for asymmetry	Control asymmetry	No control for asymmetry	Control asymmetry	No control for asymmetry	Control asymmetry	No control for asymmetry	Control asymmetry
$\beta_{11}(+\theta_1)$	0.102**	0.259**	0.0245	0.203***	0.0712***	0.128***	0.0371***	0.097***
Short-term effect	(0.0451)	(0.117)	(0.0306)	(0.065)	(0.00921)	(0.024)	(0.00510)	(0.017)
$\sum_{j=1}^{12} \beta_{1j}(+\theta_j)$	0.356***	0.414**	0.409***	0.534***	0.168***	0.274***	0.142***	0.321***
	(0.084)	(0.209)	(0.067)	(0.141)	(0.013)	(0.026)	(0.012)	(0.028)
Cumulative effect								

5. **The estimates imply that exchange rate movements account for most of the price changes**. Taking a coefficient of 0.5 as a benchmark, the 50 percent depreciation of the kip against the US dollar would imply an inflation of 25 percent—nearly two thirds of the 40 percent inflation (y/y) seen by the end of 2022. However, that still would leave about 15 percentage points of inflation to explain. This could be explained by a strong expectations effect—i.e. price setters anticipate further depreciation, and are setting prices already (even in non-tradeable goods). It is not possible to directly test this channel, however, as survey data on inflation expectations are not available.

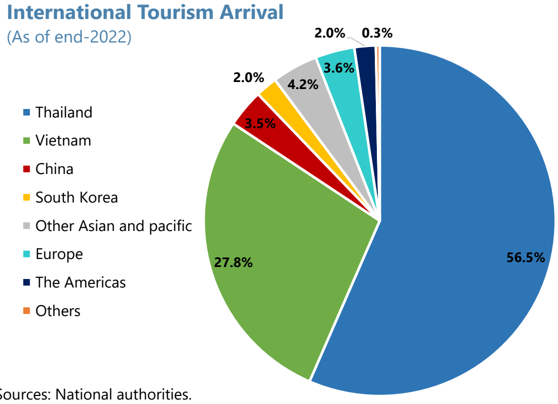
Annex VIII. Recovery in the Tourism Sector[1]

1. Tourism had been an important sector. In 2019, international tourist arrivals had increased by 14.4 percent, reaching 4.79 million; revenue from international tourists[2] was estimated to be US$ 934 million (close to 5 percent of GDP). Around 54,000 people[3] (about 1.4 percent of the total workforce), of whom over 60 percent were women, were employed by tourism and hospitality sectors.

International and Domestic Tourists
(In millions)

Sources: National authorities.

International Tourism Arrival
(As of end-2022)



Sources: National authorities.

2. The pandemic dramatically affected the sectors. In late March 2020, Lao P.D.R. closed borders and suspended the issuance of visas for international tourists. Restrictions were imposed on intra-provincial movements of people. Travel restrictions coupled with border closures caused a sudden and dramatic drop in number of international tourist arrivals—over 80 percent from levels in 2019. This has had a severe impact on service and hospitality sectors and employment.

3. Restrictions have now been eased. The government of the Lao P.D.R. reopened international borders in May 2022. All local and traditional border checkpoints have been also reopened in September to facilitate trade and travelling of people in border areas.

4. A gradual recovery is underway.

- To revitalize the tourism and hospitality sectors, and to compensate the loss in revenue from international tourists, the government has been promoting domestic tourism since 2021 with the Lao-Visit-Lao Campaign in parallel with the opening of railway services. However, with

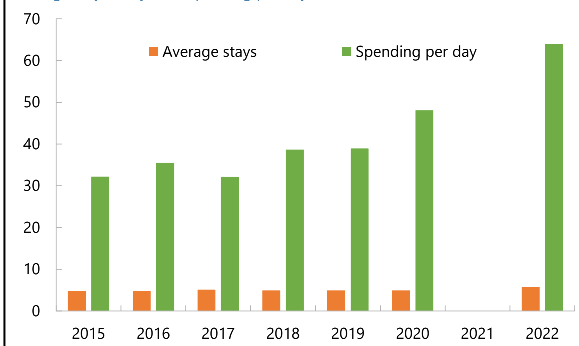
[1] Prepared by Anousa Kounnavong

[2] According to Ministry of Information, Culture and Tourism, average stay of international tourists was 5 days with average spending of 39 USD per day in 2019.

[3] MoICT 2018.

the current economic situation and rising prices, it is difficult to target local tourists as a key driver of service industry recovery.

Average Stay and Spending by International Tourists
(Average stay in days and spending per day in US dollars)



Sources: National authorities.

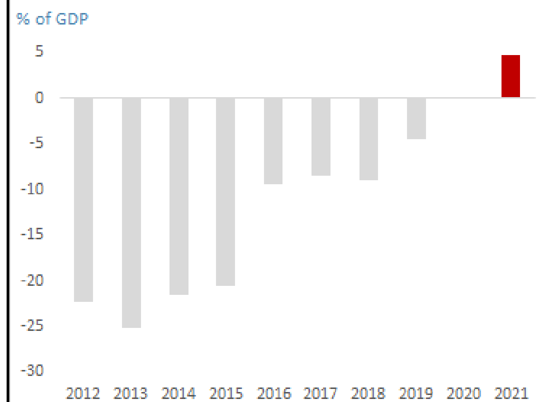
- With promotional campaigns for both international and local tourists and full operation of the Lao-China high-speed trains, international tourism has been recovering, gradually. International arrivals in 2022 were 1.3 million—about 27 percent of pre-pandemic levels. Of total international arrivals, almost 60 percent were from Thailand and over 90 percent from four Asian countries: Thailand, Vietnam, China and South Korea. Tourists from Europe, American, South Korea, China and Japan have not yet returned in substantial numbers. However, international tourists tend to stay longer and have increased average spending from US$ 39 per day in 2019 to US$ 64 per day in 2022.

Annex IX. Understanding Balance of Payments Data[1]

1. Exports boomed in 2021. Export receipts rose sharply in 2021, growing by 26 percent (y/y) in 2021 compared to an average of 6.3 percent in 2019-2020, contributing to a rare trade balance surplus. Some factors driving export growth include exports of gold and paper goods, which contributed 17 percentage points of the growth in 2021 (Figure 3 and Annex I).

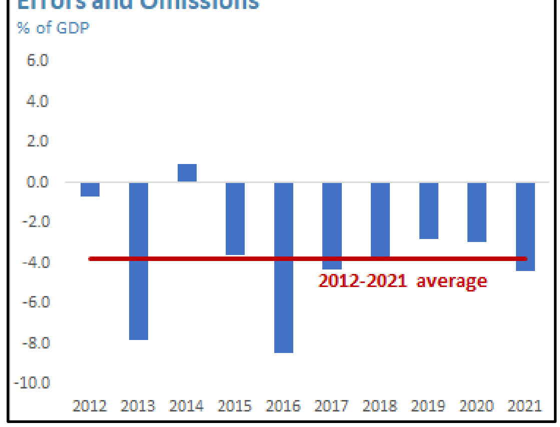
2. Meanwhile, capital flows came to a sudden stop. The 2021 capital inflow reversal was driven by a sharp contraction in net other investment inflows. The drop can be explained by (i) lower net disbursements to the public sector, likely reflecting debt sustainability concerns; and (ii) capital flight reflecting larger savings abroad by residents.

3. As a result, FX pressures continued to mount. Despite the exceptional export performance, Lao P.D.R. experienced FX shortages, currency depreciation, and an increase in the premium between parallel and official exchange rates. This reflects the fact that the exceptional export growth, and the improvement in the trade balance and current account, were accompanied by a deterioration in the financial accounts of the Balance of Payments. Furthermore, the authorities have raised concerns that FX receipts from exports are mostly not repatriated—only one third being repatriated in 2021.[2]



Trade Balance

Financial Flows Reversal, 2021 vs 2020

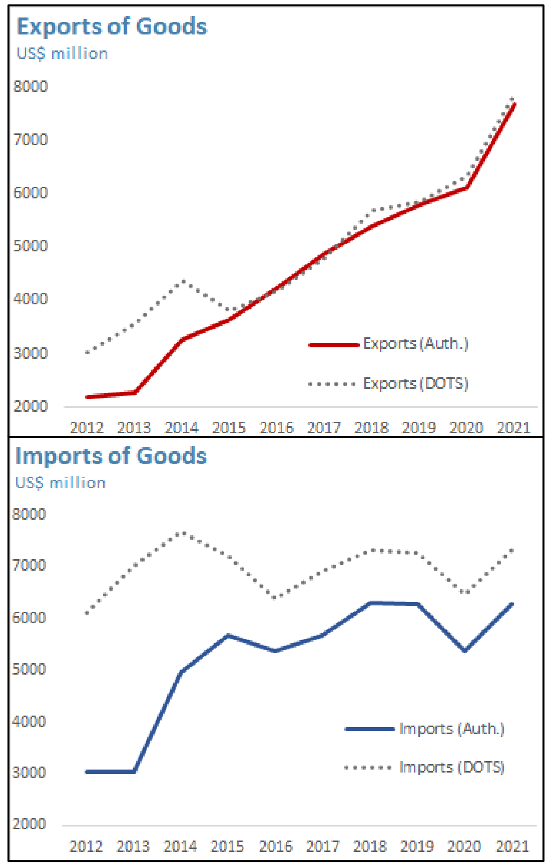


Errors and Omissions

[1] Prepared by Juliana Araujo.

[2] According to information provided by the authorities, about two thirds were repatriated from mineral exports, but only about 19 percent from agriculture and 14 percent from electricity.

4. A more comprehensive external sector analysis is challenged by persistent Balance of Payment measurement errors. While progress in balance of payment statistics has been achieved, errors and omissions averaged around 3.8 percent of GDP during 2012-2021. Notwithstanding historical discrepancies between official and mirror trade data, the strong export performance in 2021 is confirmed by different data sources. Discrepancies between official and mirror trade data on imports persist. Large and one-sided errors and omissions could reflect under-reporting of imports, capital flight over the years, among other measurement errors. The IMF continues to provide technical assistance to improve external sector statistics.



Annex X. Sensitivity Analysis of the Baseline Projections

1. In an upside scenario, with the authorities' growth and primary fiscal surplus targets and some exchange rate appreciation, debt would remain very high.[1,2] Nominal debt is above 50 percent of GDP and its PV is above the DSA NPV threshold of 35 percent for the next ten years, and the three stress test thresholds are exceeded for at least five more years.

Baseline and Upside Scenarios (Annual Percent Change)

		2022	2023	2024	2025	2026	2027	2032
Real GDP	Upside	4.5	4.9	5.3	5.4	4.8	4.8	4.8
	Baseline	*2.3*	*4.0*	*4.0*	*4.1*	*4.2*	*4.3*	*4.8*
GDP Deflator	Upside	17.6	16.1	3.5	3.0	3.0	3.0	3.0
	Baseline	*17.6*	*16.1*	*3.5*	*3.0*	*3.0*	*3.0*	*3.0*
Nominal GDP	Upside	22.9	21.8	9.0	8.6	7.9	7.9	7.9
	Baseline	*20.2*	*20.7*	*7.6*	*7.2*	*7.3*	*7.5*	*7.9*
ER (avg)	Upside	45.6	20.5	-1.5	-1.5	-0.2	1.1	1.1
	Baseline	*45.6*	*31.1*	*8.8*	*1.7*	*0.9*	*1.1*	*1.1*
ER (eop)	Upside	54.4	-1.5	-1.5	-1.5	1.0	1.1	1.1
	Baseline	*54.4*	*16.0*	*2.6*	*0.8*	*1.0*	*1.1*	*1.1*
Primary balance (percent of GDP)	Upside	0.3	1.3	1.4	1.9	1.9	1.9	1.9
	Baseline	*0.1*	*0.3*	*0.3*	*0.2*	*0.2*	*0.1*	*-0.2*
PPG debt (percent of GDP)	Upside	125.5	103.8	95.9	88.4	83.5	78.3	55.3
	Baseline	*128.5*	*123.1*	*120.1*	*116.0*	*112.4*	*108.3*	89.9

2. By contrast, debt ratios would easily increase further with some small changes to baseline assumptions.

- *Exchange rate assumptions:* A resumption of external pressures would see more pressure on the exchange rate and debt burden. A scenario in which the average exchange rate depreciates by 10 percentage points more than in the baseline in 2023 and smaller additional depreciation for the following three years, with all other paths the same as in the baseline, illustrates the sensitivity of the debt ratio to the exchange rate. The results show that the debt ratio would remain stalled at very high levels for a decade.

[1] The scenario assumes significantly stronger growth in 2022-23 and overshooting the long run trend in 2025-26 before stabilizing at 4.75 percent thereafter. The primary balance is higher by 2 percentage points of GDP each year all the way to 2042. The debt ratio consequently falls much more quickly than in the baseline.

[2] Note that the authorities assume much lower inflation than in the baseline, which would reduce the benefits to public debt shown here.

Baseline and ER Downside Scenarios (Annual Percent Change)

		2022	2023	2024	2025	2026	2027	2032
Real GDP	Downsid	2.3	4.0	4.0	4.1	4.2	4.3	4.8
	Baseline	*2.3*	*4.0*	*4.0*	*4.1*	*4.2*	*4.3*	*4.8*
GDP Deflator	Downsid	17.6	16.1	3.5	3.0	3.0	3.0	3.0
	Baseline	*17.6*	*16.1*	*3.5*	*3.0*	*3.0*	*3.0*	*3.0*
Nominal GDP	Downsid	20.2	20.7	7.6	7.2	7.3	7.5	7.9
	Baseline	*20.2*	*20.7*	*7.6*	*7.2*	*7.3*	*7.5*	*7.9*
ER (avg)	Downsid	45.6	41.1	17.1	4.4	2.2	1.2	1.1
	Baseline	*45.6*	*31.1*	*8.8*	*1.7*	*0.9*	*1.1*	*1.1*
ER (eop)	Downsid	54.4	32.6	5.5	3.3	1.2	1.2	1.1
	Baseline	*54.4*	*16.0*	*2.6*	*0.8*	*1.0*	*1.1*	*1.1*
Primary balance (percent of GDP)	Downsid	0.1	0.3	0.3	0.2	0.2	0.1	-0.2
	Baseline	*0.1*	*0.3*	*0.3*	*0.2*	*0.2*	*0.1*	*-0.2*
PPG debt (percent of GDP)	Downsid	128.5	137.1	136.7	134.5	130.4	125.7	103.9
	Baseline	*128.5*	*123.1*	*120.1*	*116.0*	*112.4*	*108.3*	*89.9*

- *GDP deflator assumptions:* The baseline assumes that the GDP deflator is lower than CPI inflation in 2022, when terms of trade are negative. Unofficial estimates by the Lao Statistics Bureau are for GDP deflator inflation to be lower still. A deflator inflation rate 5 and 2 percentage points lower than the baseline in 2023 and 2024, respectively, would also see a slower reduction in debt.

Baseline and GDP Deflator Downside Scenarios (Annual Percent Change)

		2022	2023	2024	2025	2026	2027	2032
Real GDP	Downsid	2.3	4.0	4.0	4.1	4.2	4.3	4.8
	Baseline	*2.3*	*4.0*	*4.0*	*4.1*	*4.2*	*4.3*	*4.8*
GDP Deflator	Downsid	12.6	14.1	3.5	3.0	3.0	3.0	3.0
	Baseline	*17.6*	*16.1*	*3.5*	*3.0*	*3.0*	*3.0*	*3.0*
Nominal GDP	Downsid	15.1	18.6	7.6	7.2	7.3	7.5	7.9
	Baseline	*20.2*	*20.7*	*7.6*	*7.2*	*7.3*	*7.5*	*7.9*
ER (avg)	Downsid	45.6	31.1	8.8	1.7	0.9	1.1	1.1
	Baseline	*45.6*	*31.1*	*8.8*	*1.7*	*0.9*	*1.1*	*1.1*
ER (eop)	Downsid	54.4	16.0	2.6	0.8	1.0	1.1	1.1
	Baseline	*54.4*	*16.0*	*2.6*	*0.8*	*1.0*	*1.1*	*1.1*
Primary balance (percent of GDP)	Downsid	0.1	0.3	0.3	0.2	0.2	0.1	-0.2
	Baseline	*0.1*	*0.3*	*0.3*	*0.2*	*0.2*	*0.1*	*-0.2*
PPG debt (percent of GDP)	Downsid	134.2	130.8	127.6	123.4	119.5	115.2	95.6
	Baseline	*128.5*	*123.1*	*120.1*	*116.0*	*112.4*	*108.3*	*89.9*

Annex XI. Risks from Public Debt[1]

1. The COVID-19 shock has exacerbated debt accumulation across countries. Total debt increased in low-income developing countries to 88 percent of GDP in 2021. As of April 2022, about 60 percent of low-income countries were in, or at risk of, distress.[2]

2. Rapid debt accumulation is risky. Banking, debt, or currency crises have often followed rapid debt build-up.[3] Between 1970 and 2018, there were 256 episodes of rapid government debt accumulation and 263 episodes of private debt accumulation in a sample of 100 EMDEs.[4] In those episodes, currency crises, characterized by a sharp and rapid depreciation (by 30 percent against USD, and over 10 percent from the previous year), were the most common. Banking crises featured significant signs of financial distresses and significant policy intervention in banking sectors. These crises could occur simultaneously. More than three-quarters of debt accumulation episodes associated with crises had currency crises. Growth has typically been lower with a longer debt surge, or if crises occur.[5]

3. The optimal level of debt depends on country characteristics, financial market conditions, and government and private-sector behavior. The literature offers a wide range of conclusions on the optimal level of public debt, ultimately depending on policymakers' objectives and cost-benefit analysis of holding debts. The benefits of debt largely depend on efficiency of a public sector, a cyclical position of the economy, and the financial market development. Debt could fund investment in growth-enhancing projects or social spending in EMDEs. Temporary debt accumulation can provide stimulus to help stabilize short-term economic downturns. Government debt can also play a role in financial deepening if investors view it as a relatively safe asset. Some of the costs of higher debt include interest payments, increasing likelihood of crises, constrained fiscal space, and crowding-out of credits to private sectors. For LICs, past studies suggest that external debt exceeding 20-25 percent of GDP has adversely affected long-term growth.[6] Given lower debt-carrying capacity of LICs than that of AEs, the sustainable gross PPG debt threshold in LICs should likely be much lower than 80 percent of GDP to avoid risks from sharp fiscal deterioration.[7]

[1] Prepared by Klakow Akepanidtaworn.

[2] Gaspar, Vitor, and Ceyla Pazarbasioglu (2022), "Dangerous Global Debt Burden Requires Decisive Cooperation", IMF Blog, https://www.imf.org/en/Blogs/Articles/2022/04/11/blog041122-dangerous-global-debt-burden-requires-decisive-cooperation

[3] Kose, M. Ayhan, et al. (2021), "Global Waves of Debt: Causes and Consequences – Chapter 5", The World Bank Group.

[4] Rapid government debt accumulation is identified as a period during which the government or private debt-to-GDP ratio rises from trough to peak by more than one (country-specific) 10-year rolling standard deviation. This identification follows the methodology used for identifying business cycles.

[5] Ando, Sakai et al. (2022), "The Case for Public Debt Deleveraging", IMF Working Paper.

[6] Clements, Benedict, Rina Bhattacharya, and Toan Quoc Nguyen (2003), "External Debt, Public Investment, and Growth in Low-Income Countries." IMF Working Paper 03/249.

[7] Greenlaw, David, et al. (2013), "Crunch Time: Fiscal Crises and the Role of Monetary Policy", No 19297, NBER Working Papers.

INTERNATIONAL MONETARY FUND

LAO PEOPLE'S DEMOCRATIC REPUBLIC

April 6, 2023

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By	Asia and Pacific Department (In consultation with other departments)

CONTENTS

FUND RELATIONS

(As of February 28, 2023)

Membership Status: Joined on July 5, 1961; Article VIII.

General Resources Account:

	SDR Million	% Quota
Quota	105.80	100.00
IMF's Holdings of Currency (Holdings Rate)	92.58	87.50
Reserve Tranche Position	13.23	12.50

SDR Department:

	SDR Million	% Allocation
Net Cumulative Allocation	152.08	100.00
Holdings	58.10	38.20

Outstanding Purchases and Loans: None

Latest Financial Commitments:

Type	Date of Arrangement	Expiration Date	Amount Approved	Amount Drawn
ECF[1]	04/25/2001	04/24/2005	31.70	18.12
ECF[1]	06/04/1993	05/07/1997	35.19	35.19
SAF	09/18/1989	09/17/1992	20.51	20.51

Projected Payments to Fund[2]

(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2023	2024	2025	2026	2027
Principal					
Charges/Interest	2.41	3.23	3.23	3.23	3.23
Total	2.41	3.23	3.23	3.23	3.23

[1] Extended Credit Facility (ECF), formerly PRGF.

[2] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Exchange Rate Arrangement

The de jure arrangement is a managed float, and the de facto exchange rate arrangement is classified as "other managed". Since September 2016, the kip has followed a depreciating trend against the U.S. dollar. Therefore, the de facto exchange rate arrangement was reclassified to a crawl-like arrangement from a stabilized arrangement, effective September 2, 2016. The authorities' objective had been to limit currency fluctuations of LAK against USD to within ±5 percent per annum. The Bank of the Lao P.D.R. (BoL) sets a daily official reference rate for LAK to USD which is calculated based on the weighted average of the previous day's overall rate, the estimation of the domestic demand for USD and the forecasting of USD rate in the international market. Commercial banks and foreign exchange bureaus are required to maintain their buying and selling rates within ±1.5 percent of the daily reference rate. For the Euro and Baht, the buying and selling rate may not exceed a margin of 1 percent, respectively. For other currencies, a margin of 2 percent applies.

Lao P.D.R. has accepted the obligations under Article VIII, Sections 2(a), 3 and 4 and maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers on current international transactions, except for restrictions imposed solely for security reasons and notified to the Fund under the Decision No. 144-(52/51). Staff are currently assessing the jurisdictional implications of recent changes to the exchange system as part of a planned comprehensive jurisdictional assessment of Lao PDR's exchange system.

Article IV Consultation

The last Article IV consultation discussions took place December 5-21, 2021 and were concluded by the Executive Board on March 2, 2022. The staff report was not published in 2022.

Technical Assistance

Over the past five years, Lao P.D.R. has received technical assistance in the areas of: banking supervision; customs administration; tax revenue administration; tax policy; public financial management; macroeconomic management; price statistics; external sector statistics; government finance statistics; and the national accounts. A Bangkok-based IMF office, Capacity Development Office in Thailand (CDOT) has facilitated technical assistance to Lao P.D.R. (as well as Cambodia, Myanmar, and Vietnam) and has provided technical assistance in macroeconomic analysis and forecasting, monetary operations, government finance statistics, external sector statistics, and public financial management.

Resident Representative

Francois Painchaud assumed the Resident Representative post for Vietnam and Lao P.D.R., based in Hanoi, on June 3, 2019.

INFORMATION ON THE ACTIVITIES OF OTHER INTERNATIONAL FINANCIAL INSTITUTIONS

Information on the activities of other international financial institutions in Lao P.D.R. can be found at:

- World Bank: https://www.worldbank.org/en/country/lao
- Asian Development Bank: https://www.adb.org/countries/lao-pdr/main

STATISTICAL ISSUES

(As of March 7, 2023)

I. Assessment of Data Adequacy for Surveillance
General: Data provision has serious shortcomings that significantly hamper surveillance, especially regarding national accounts, government finance, financial sector, and external sector statistics. Although some progress has been made in terms of data publication, the country statistical system remains highly decentralized with limited interagency coordination and weak capacity, leading to significant delays in data production and availability. Further TA by development partners and accelerated efforts by the authorities is required to improve statistics. The IMF is conducting technical assistance (TA) and training programs to address the specific needs with a focus on mitigating near-term risks, covering the areas of government finance statistics and external sector statistics. IMF TA on national accounts and prices has been provided in the past.
National Accounts: National accounts (NA) comprise annual estimates of GDP by activity at current and constant prices. Rebased national accounts (with a base year at 2012) were released in early 2017 with the help of a World Bank expert, broadly following the System of National Accounts (SNA) 1993 (including part of the 2008 SNA). Lao P.D.R. participated in an IMF Statistics Department (STA) project to implement the SNA and an International Comparison Project (ICP), funded by the government of Japan through the Japan Administered Account for Selected Activities (JSA). It has also received IMF TA in 2017 and 2018 to improve annual national accounts and develop quarterly national accounts (QNA). Despite existing weakness and limitation in data sources, the authorities can now produce and publish GDP by expenditure and GNI, and also quarterly GDP. Further TA, especially in the context of rebasing GDP (from the current base year of 2012), would be beneficial to provide more up-to-date information for policy analysis and advice, and to improve coordination between data providers and the accuracy of estimates. The IMF stands ready to support the further improvement of Lao P.D.R.'s National Accounts statistics. The WB will also provide support to the Lao Statistics Bureau to undertake a statistical system modernization.
Price Statistics: The monthly consumer price index (CPI) for Lao P.D.R. was updated during 2016. Coverage was extended from 12 to all 17 provinces and to cover the 22 main cities of these provinces. The number of basket items was increased from 245 to 485, and expenditure weights were updated using the results of the 2012–13 Lao Expenditure and Consumption Survey. However, the full list of the updated weights has not yet been disclosed. To ensure that the index remains representative of current expenditure patterns, the Lao Statistics Bureau (LSB) should prioritize the update of the expenditure weights using the results of the Lao Expenditure and Consumption Survey (LECS) VI 2018/19. The producer price index (PPI) has not been released, due to low survey response rates.
Government Finance Statistics (GFS) and public sector debt statistics (PSDS): Budget execution and GFS compilation is improving. Since 2019, annual and quarterly data are published on the Ministry of Finance (MoF) website and reported to the IMF, with a time lag. Data consistency is gradually improving, though ongoing inconsistencies need to be remedied, in part by addressing source

data issues. Data on on-lending, arrears, and related expenditure flows need particular attention. PSDS compilation is improving. Since 2021, an annual debt bulletin has been published on the MoF website, with a time lag. No quarterly PSDS data are currently being disseminated on the MoF website and to the IMF / World Bank quarterly PSDS database. Overall, GFS coverage needs to be expanded to include social security funds and non-market state-owned enterprises (that are economically defined as part of government) and data to be consolidated. Debt data need to be expanded from securities and loans to include comprehensive other accounts payable. Introducing accrual concepts to GFS and PSDS compilation is recommended. Further, the recording of public-private partnerships needs to be investigated and altogether more detail is recommended. To address these objectives, the IMF continues (with a fourth Japan-funded project) to assist the MoF in upgrading compilation and dissemination according to the GFS Manual 2014 and the PSDS compilation guide.
Monetary and Financial Statistics: The classification of monetary data by institutional sector and by financial instruments as well as valuation principles need to be strengthened. In addition, the timeliness of reporting needs further improvement. The compilation of monetary data based on the IMF Standardized Report Forms (SRFs) is yet to be implemented. STA stands ready to provide TA support to the BoL to implement SRFs. Lao P.D.R. reports data on some key series of the Financial Access Survey (FAS), including gender-disaggregated data and the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the United Nations to monitor Target 8.10 of the Sustainable Development Goals (SDGs).
Financial Sector Surveillance: Progress has been made with the dissemination of seven of the 12 core Financial Soundness Indicators (FSI) (except for those related to liquidity and market risk) by the Bank of the Lao P.D.R. (BoL) on its website, but the underlying financial statements (e.g., balance sheet, income statement, and supervisory series) and the associated metadata are missing. Lao P.D.R. is yet to compile and submit to the IMF STA financial soundness indicators consistent with the methodology of the IMF FSI Compilation Guide. STA stands ready to provide TA support to the BoL to compile FSIs aligned to the 2019 FSI Guide methodology.
External Sector Statistics: The IMF has been providing TA through the External Sector Statistics (ESS) Advisor appointed at the IMF Capacity Development Office in Thailand (CDOT), whose activities are funded by the government of Japan under the Project on the Improvement of ESS in the Asia–Pacific region. Under the project, the BoL successfully implemented the first nationwide enterprise survey for the International Investment Position (IIP) in 2018; and has been repeating the survey every year. In the past, TA missions have largely focused on assisting the BoL—the ESS compiling agency—in establishing a compilation framework for the IIP and external debt statistics (EDS) and improving estimation models for some key components of the primary and secondary income accounts. Work on EDS is in progress, pending committed support by the Ministry of Finance in providing timely data at higher frequency, and verifying data on state-owned enterprises. Draft partial IIP and EDS statements have been generated for the authorities' internal use and are pending BoL management approval. The main focus of the recent TA missions has shifted to improving the coverage of trade in goods (which would in turn address the currently

understated trade deficits), services, and FDI data by enhancing banking collection system (ITRS), developing administrative data collections, and strengthening collaboration between BoL and LSB in ESS data collection and compilation. Draft IIP data have recently been shared with the IMF team.
II. Data Standards and Quality
Lao P.D.R. has implemented the IMF Enhanced General Data Dissemination System (e-GDDS) since November of 2018 and publishes the data on its National Summary Data Page (NSDP). However, more work needs to be done by the LSB and key stakeholders, including the MoF, the BoL, the Ministry of Planning and Industry, the Ministry of Industry and Commerce, and the Ministry of Energy and Mines, to build upon what has been achieved so far in view of extending the coverage and improving the timeliness of the published data.

Lao P.D.R.: Table of Common Indicators Required for Surveillance

(As of March 03, 2023)

	Date of Latest Observation	Date Received	Frequency of Data[1]	Frequency of Reporting[1]	Frequency of Publication[1]
Exchange Rates	03/02/2023	03/02/2023	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[2]	09/2022	12/2022	M	I	I
Reserve/Base Money	09/2022	12/2022	M	I	I
Broad Money	09/2022	12/2022	M	I	I
Central Bank Balance Sheet	09/2022	12/2022	M	I	I
Consolidated Balance Sheet of the Banking System	09/2022	12/2022	M	I	I
Interest Rates[3]	11/2022	12/2022	M	I	I
Consumer Price Index	01/2023	02/2023	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[4]—General Government[5]	12/2022	01/2023	I	I	I
Revenue, Expenditure, Balance and Composition of Financing[4]—Central Government	12/2022	01/2023	I	I	I
Stocks of Central Government and Central Government-Guaranteed Debt[6]	2022	01/2023	A	I	I
External Current Account Balance	Q3/2022	01/2023	Q	I	I
Exports and Imports of Goods and Services	Q3/2022	01/2023	Q	I	I
GDP/GNP	2022	01/2022	A	I	A
Gross External Debt	2022	01/2023	A	I	I
International Investment Position[7]	2019	03/2023	A	I	I

1 Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

2 Any reserve assets that are pledged of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency, but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency, but settled by other means.

3 Both market-based and officially determined, including discount rates, money market rates, and rates on treasury bills, notes and bonds.

4 Foreign and domestic bank, nonbank financing.

5 The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

6 Includes currency and maturity composition.

7 Includes external gross financial asset and liability positions vis-à-vis nonresidents.

LAO PEOPLE'S DEMOCRATIC REPUBLIC

April 11, 2023

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

Approved By
Sanjaya Panth and Geremia Palomba (both IMF), Manuela Francisco and Hassan Zaman (both IDA)

Prepared by the staff of the International Monetary Fund and the International Development Association (IDA)[1]

Risk of external debt distress	In debt distress
Overall risk of debt distress	In debt distress
Granularity in the risk rating	Unsustainable
Application of judgement	Yes. Given on-going negotiations about debt service deferral and significant and sustained breaches of debt thresholds

The Lao P.D.R. is assessed to be in external and overall debt distress under the Low-Income Countries Debt Sustainability Framework (LIC-DSF). Compared to the 2019 Debt Sustainability Analysis[2], the country's risk rating and debt sustainability have deteriorated due to an adverse macroeconomic environment (through a strong exchange rate depreciation), an expansion of debt coverage to include guaranteed debt, expenditure arrears, and the issuance of domestic debt to recapitalize state-owned banks.[3] PPG and external debt are projected to decline in the baseline scenario, reflecting small primary surpluses and economic growth above interest rates, but the present value of PPG debt-to-GDP ratio remains very high and above the indicative threshold for two decades. Most of the PPG external and public debt indicators for both solvency and liquidity have persistent breaches of their indicative thresholds. The on-going negotiations about debt

[1] This DSA has been prepared jointly by the IMF and World Bank, following the 2018 Guidance Note on the Bank-Fund Debt Sustainability Framework for Low-Income Countries.

[2] Country report No.19/267, August 2019.

[3] The Lao P.D.R. Composite Indicator of 2.15 indicates a weak debt-carrying capacity, based on the October 2022 IMF's World Economic Outlook (WEO) and the 2021 World Bank's Country Policy and Institutional Assessment (CPIA).

service deferral indicate debt distress and the significant and sustained breaches of debt thresholds in the DSA also indicate a high probability of a future distress event.This result, along with the evidence of major economic vulnerabilities (including significant financing needs, low foreign exchange liquidity and reserves, limited external market access since 2020, limited potential for financing from domestic capital markets, increasing rollover risks, potential for additional exchange rate depreciation pressures, possible accumulation of additional domestic arrears, and substantial contingent liabilities), warrants, through the application of judgement, a rating of "in debt distress" for both external and public debt and an assessment of unsustainable public debt. Other DSA results show that external debt is most vulnerable to shocks to exports and a depreciation of the currency, while public debt is most sensitive to the contingent liabilities shock. Adjustment options are limited, as the primary surpluses required to reduce debt indicators below risk thresholds within a few years are not politically feasible or socially desirable.

PUBLIC DEBT COVERAGE

1. The debt coverage in this Debt Sustainability Analysis (DSA) comprises debt owed by the central government and government guarantees, including to state-owned enterprises (SOEs) (Text Table 1). Publicly guaranteed SOE external debt included in the DSA baseline is on-lent or guaranteed by the central government. There is no outstanding debt to the IMF. External debt is defined based on the currency criterion in this analysis. The debt stock includes a swap line with the People's Bank of China (PBoC) in 2020, given that the swap appears to be for balance of payments support to help shore up gross reserves. The stock also includes past deferred interest payments in 2021 and 2022, and expenditure arrears. There have been ongoing efforts by the authorities to enhance debt transparency: the government published an annual debt statistics bulletin for the first time in 2021 that includes publicly guaranteed external debt and domestic debt contracted by the central government, and the following bulletin included more detailed information.[4] Although the data in the debt bulletin provides information by creditor, information on debt owed by local governments and non-guaranteed SOE debt is lacking. Additionally, no information is available on the debt bulletin regarding borrowing of the central bank on behalf of the government. Therefore, the DSA coverage does not include these subsectors, and the contingent liability

Text Table 1. Coverage of Public Debt

	Subsectors of the public sector	Sub-sectors covered
1	Central government	X
2	State and local government	
3	Other elements in the general government	
4	o/w: Social security fund	
5	o/w: Extra budgetary funds (EBFs)	
6	Guarantees (to other entities in the public and private sector, including to SOEs)	X
7	Central bank (borrowed on behalf of the government)	
8	Non-guaranteed SOE debt	

[4] In addition to the information reported in the 2020 bulletin (published in 2021), the 2021 debt bulletin (issued in 2022) included the composition of on-lending and guaranteed debt by SOE, as well as expenditure arrears by type. The International Development Association (IDA), through its Sustainable Development Finance Policy (SDFP) Performance and Policy Actions (PPAs), has supported reforms to enhance debt transparency (publication of an annual public debt bulletin), debt management (compliance with a non-concessional borrowing ceiling), and fiscal sustainability (approval of a decree on SOEs).

stress test is used with tailored settings under the DSF to investigate potential effects of the uncovered public debts.

2. **A customized contingent liability stress test is used to analyze the impact of additional public debt coming from contingent liabilities from PPPs and SOEs, additional occurrence of government arrears in the future, and recapitalization needs from the banking sector** (Text Table 2).[5] Given risks of SOEs default, the contingent liability stress test assumes an additional shock related to SOEs by 8.3 percent of GDP in the second year of the projection. The parameter includes; (i) US$ 890 million (6.3 percent of GDP) coming from potential need to cover guaranteed state enterprise debt, and (ii) the default parameter value (2 percent of GDP) to capture non-guaranteed SOEs, which is not included in the debt coverage.[6] The shock related to PPPs is set to the default value of 35 percent of the PPP capital stock (equivalent to 26.5 percent of GDP) to capture contingent liabilities from the private sector share of PPPs.[7] A shock covering 0.5 percent of GDP has been added to analyze the effect of the discovery of potential domestic arrears. The test assumes a financial market shock of 11.5 percent of GDP, which includes LAK 4 trillion (1.5 percent of GDP) of potential commercial bank recapitalization and twice the default value (10 percent) given the financial sector remains weak.

Text Table 2. Calibration of Shock Scenarios

1	The country's coverage of public debt	The central government, government-guaranteed debt		
		Default	Used for the analysis	Reasons for deviations from the default settings
2	Other elements of the general government not captured in 1.	0 percent of GDP	0.5	accounts for potential discovery of arrears
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	8.3	captures non-guaranteed domestic SOEs debt and restructuring of SOEs.
4	PPP	35 percent of PPP stock	26.47	captures the contingent liabilities of the private sector share of PPPs
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	11.5	captures bank recapitalization needs and risks from a sensitivity of the financial market.
	Total (2+3+4+5) (in percent of GDP)		46.8	

1/ The default shock of 2% of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed to be negligible, a country team may reduce this to 0%.

DEBT DEVELOPMENTS

3. **The authorities have established a Public Debt Management Committee led by the Deputy Prime Minister**. All borrowing (by central and provincial governments, SOEs, Public-Private Partnerships (PPPs)) must be approved by the National Assembly and the Ministry of Finance negotiates all loans. To improve the legal and regulatory framework, the government has implemented a decree which mandates SOEs to report debt data to the Ministry of Finance and to consult the ministry before a significant borrowing.

[5] The DSA assumes that the additional financing needs due to the stress test shock will be covered mainly by domestic financing, given the limited access to external borrowing in the next few years.

[6] For guaranteed SOE debt, staff assumes an additional public debt increase equivalent to one-sixth of its outstanding debt as of end-2021.

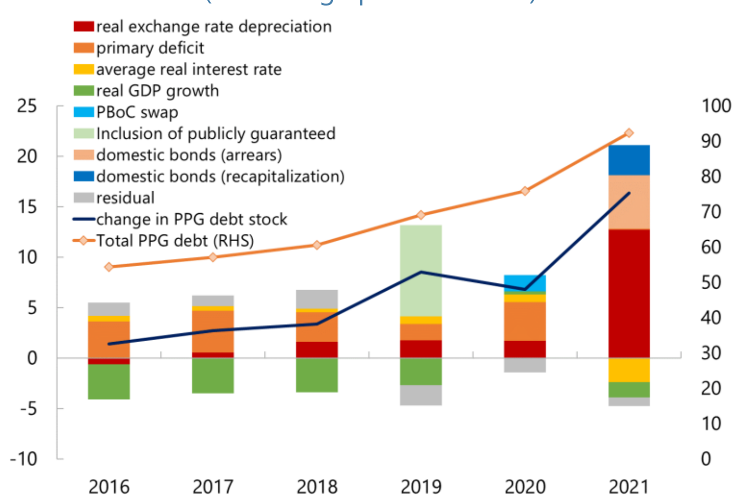
[7] Data on PPP capital stock are from the World Bank's Private Participation in Infrastructure Database and is available at https://ppi.worldbank.org/.

4. The Lao P.D.R.'s total public and publicly guaranteed (PPG) debt is estimated to be 92.4 percent of GDP as of end-2021.

- Most of the PPG debt is external, representing 86.1 percent of the outstanding public debt or 79.5 percent of GDP (Text Table 3). Publicly guaranteed debt is included in the external PPG debt stock for 2019 and beyond, and the effect of the inclusion in 2019 accounts for a large portion of debt increase which is not explained by automatic debt dynamics (Text Figure 1).[8] In 2021, guaranteed debt represents 15.8 percent of total PPG external debt stock. The DSA also treats as external PPG debt a swap line with the People's Bank of China (PBoC) of US$ 300 million in 2020, with a full repayment expected in 2023. Lao P.D.R. relies mainly on bilateral borrowing, in which China is the largest creditor. As a result, China has the largest share—nearly half—of external PPG debt (Text Figure 2). Multilateral creditors–mainly the International Development Association (IDA) and the Asian Development Bank (ADB)—account for 12.6 percent of external PPG debt. The remaining of external PPG debt is from sovereign bonds and commercial banks, which account for 7.9 percent and 7.5 percent of the external PPG debt stock, respectively. In terms of public external debt, 57.4 percent is on concessional or semi-concessional terms. The authorities' Debt Bulletin indicates that debt servicing to China was suspended: principal repayments in 2020 of about US$ 220 million, and of both principal and interest payments in 2021 and 2022 of about US$ 450 million and US$ 610 million, respectively.[9]

Text Figure 1. Change in PPG debt contributions

(Percentage points of GDP)

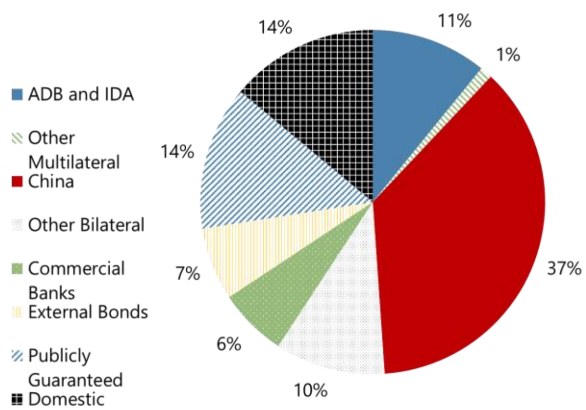


Sources: National authorities; and IMF staff calculations and projections.

[8] Publicly guaranteed debt in 2019 accounted for 9.2 percent of GDP.

[9] The Lao P.D.R. did not participate in the Debt Service Suspension Initiative (DSSI), with the authorities preferring direct discussions with key bilateral creditors.

Text Figure 2. Stock of Public Debt as of end-2021
(In percent of total PPG debt)



Sources: Authority data and IMF staff calculations.

- The Lao P.D.R.'s domestic debt is estimated at LAK 23,234 billion or US$ 2,081 million at end-2021, which represents 13.9 percent of total PPG debt or 12.9 percent of GDP. The stock of domestic debt at end-2021 includes domestic bond issuance amounting to LAK 9.6 trillion (5.3 percent of GDP) to clear expenditure arrears in 2021 and LAK 5.4 trillion (3 percent of GDP) to recapitalize banks.[10] The stock of domestic debt does not include domestic debt held by SOEs (which is not explicitly guaranteed by the government) due to technical difficulties to consolidate the data by the authorities.

Text Table 3. Stock of Public Debt as of end-2021
(in percent of total external PPG and domestic debt)

At end-2021	as percent of total PPG debt	as percent of total external PPG debt	as percent of GDP	in mln USD
Total PPG debt	**100.0%**	-	**92.36%**	**14,950.8**
External debt	**86.1%**	**100.0%**	**79.5%**	**12,869.9**
ADB and IDA	10.9%	12.6%	10.02%	1,622.8
Other Multilateral	1.2%	1.3%	1.07%	172.7
China	36.9%	42.9%	34.07%	5,515.6
Other Bilateral	10.3%	12.0%	9.54%	1,544.6
Commercial Banks	6.4%	7.5%	5.96%	964.1
External Bonds	6.8%	7.9%	6.32%	1,023.1
Publicly Guaranteed	13.6%	15.8%	12.52%	2,027.1
Domestic debt	**13.9%**	-	**12.85%**	**2,080.8**

Sources: Authority data and IMF staff calculations

Note: $300 million from the PBoP swap and $130 million of deferred interest payment in 2021 is included in China, in addition to the authority numbers.

[10] The remaining government arrears as of end-2021, which can be calculated as a gap between the reported arrears and the domestic bond issuance to clear arrears, is LAK 926 billion (0.5 percent of GDP).

5. **The government has addressed debt arrears by issuing domestic bonds, but there still exists a risk of domestic expenditure arrears going forward**. The government reported LAK 10.5 trillion of public investment and recurrent expenditure arrears as of 2021, most of which was cleared by issuing domestic bonds corresponding to LAK 9,577 billion (5.3 percent of GDP) in 2021. Staff's estimates of the debt stock as of end-2022 include an additional LAK 23.5 trillion (11 percent of GDP) in arrears on old investment projects, which was not cleared by issuing domestic bonds as of end-2022. Given significant fiscal pressures and limited progress in terms of enhancing budget formulation, implementation, spending controls and monitoring, further domestic expenditure arrears are a risk going forward.

6. **External debt repayment deferrals have taken place in 2020, 2021 and 2022:** debt servicing to China was deferred during the past three years (US$ 220 million in 2020, US$ 450 million in 2021, and US$ 610 million in 2022), and US$150 million of deferred principal is supposed to be repaid in 2023. The deferred principal payments in 2020 and 2021 are included in 2021 debt stock in the debt bulletin. Staff includes the suspended interest payments (US$ 130 million in 2021 and US$ 190 million in 2022) in the debt stock for this DSA.

7. **Despite eliminating the primary fiscal deficit, public debt increased in 2021, mainly because of exchange rate depreciation**: Public sector debt is estimated at 92 percent of GDP by end 2021. The PPG debt stock increased by 16.4 percentage points of GDP from 2020 to 2021, largely driven by currency depreciation, the conversion of government arrears into domestic bonds, and domestic bond issuances to recapitalize banks. In addition, non-guaranteed SOE debts increased, in large part because of currency depreciation, adding to contingent liabilities.

8. **The DSA estimates total private external debt to be 48.6 percent of GDP as of end-2021**. Private external debt is estimated given the large numbers of PPP contracts.

RECENT MACROECONOMIC DEVELOPMENTS

9. **This DSA is being conducted in the context of the 2023 Article IV Consultation**. The previous Low-Income Country DSA (LIC-DSF) was considered by the Executive Board of the IMF in March 2022.

10. **Macroeconomic vulnerabilities were aggravated by the impact of the COVID-19 pandemic**.

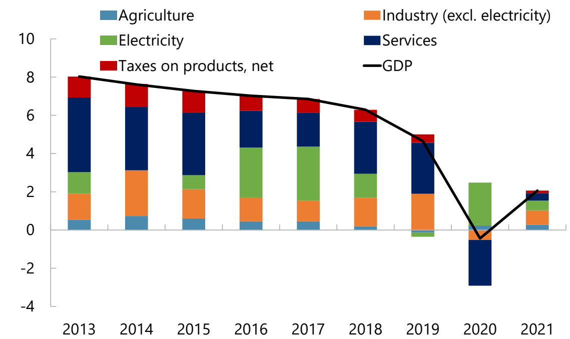
- In the 2000s and 2010s, Lao P.D.R. had been among the fastest growing countries in the world. Growth of about 7 percent was driven by public and private investment, mainly for hydropower, mining, and transportation projects. The poverty rate fell substantially over the same period.[11] However, economic growth was partly fueled by public debt accumulation and did not support significant formal job creation. In fact, growth was already slowing prior to the COVID-19 shock,

[11] World Bank estimates that headcount poverty fell to 18 percent by 2019. See 2022: *Lao People's Democratic Republic Poverty Assessment 2020: Catching Up and Falling Behind.* However, development needs remain high, as poverty rates are among the highest in the region and human capital levels are comparatively low.

as pressure from rising public debt had forced a slowdown in public investment. Other factors weighing on growth included the slowdown in credit growth and natural disasters.

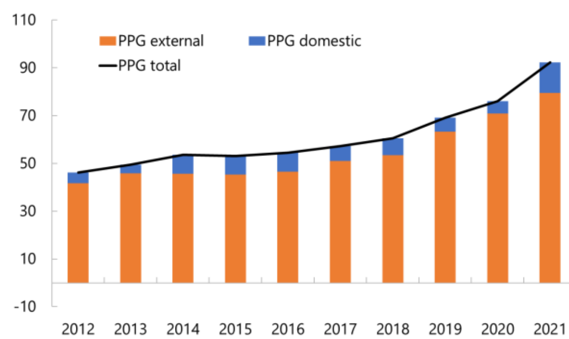
- GDP growth is estimated to have been nearly flat in 2020 and just over 2 percent in 2021. COVID-19 containment measures included restrictions on movement and border closures. The economy had very limited market access since 2020 as concerns over public debt sustainability, slowing growth, low foreign exchange reserves, and tight foreign exchange liquidity grew.[12] The central bank provided loans to the government in 2020 (repaid in 2021) and at the end of 2021 and increased its financing to banks. The parallel market exchange rate depreciated significantly in mid-2021 and the exchange rate premium widened (going over 20 percent in 2021Q3), before narrowing to about 5 percent by the end of 2021 as the BoL allowed more official exchange rate flexibility from September 2021.

Real GDP Growth with Sectoral Contributions
(Percent, y/y)



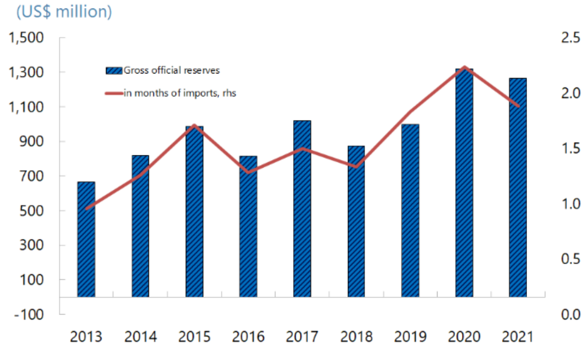
Sources: National authorities and IMF staff calculations and projections.

Public and Public-Guaranteed Debt (PPG) Dynamics
(In percent of GDP)



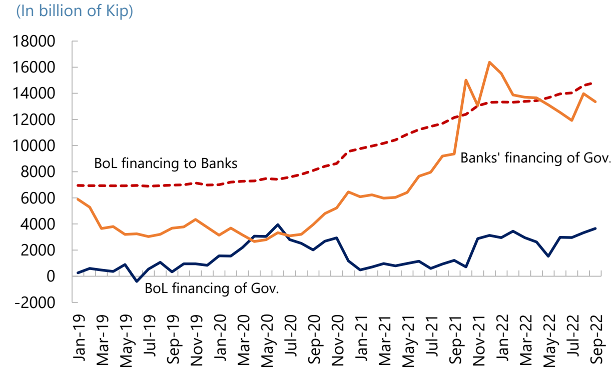
Sources: National authorities; and IMF staff calculations and projections.

Gross Official Reserves
(US$ million)



Sources: National authorities and IMF staff calculations and projections.

Lao PDR: Monetary Survey
(In billion of Kip)



Sources: National authorities and IMF staff calculations.

11. A gradual recovery was underway at the end of 2021, driven mainly by industry and agriculture. Services remained suppressed by COVID-19 containment measures. At the start of 2022, services picked

[12] Lao P.D.R.'s external market access has been largely confined to the Thai market.

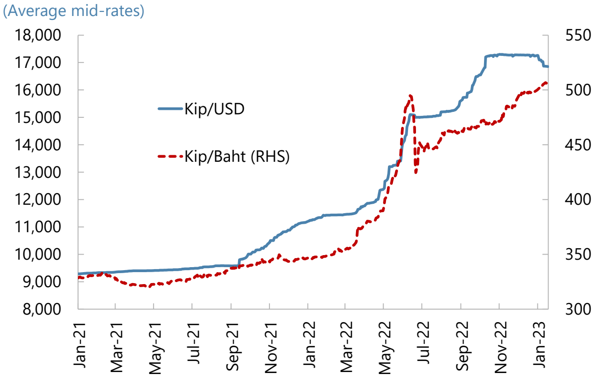
up, as mobility restrictions were eased and the opening of the Lao-China high-speed railway and the Thanaleng Dry Port boosted transport and logistics sectors, in turn boosting wholesale and retail trade in the first half of 2022. Tourism also started to recover gradually. Exports overall had improved substantially during this period, growing by 26 percent (y/y) in 2021 compared to an average of 6 percent over the previous two years, contributing to a trade balance surplus.

12. The increase in global commodity prices in the first half of 2022 has accentuated pressures on the exchange rate from pre-existing macroeconomic balances, increasing inflation rates and substantially eroding living standards.

- The terms of trade pressures arising from the sharp increases in commodity prices in early 2022 accentuated concerns about FX liquidity and the public finances. The Lao kip depreciated by over 50 percent against the US dollar and over 40 percent against the Thai baht in 2022; the parallel exchange rate premia (against the USD) surged during the middle of 2022, before nearly closing by the end of the year.

Official Exchange Rate

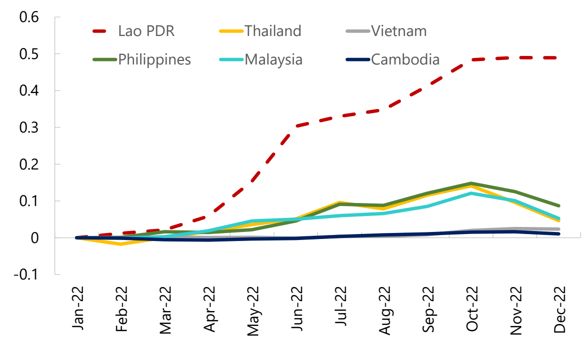
(Average mid-rates)



Sources: National authorities and IMF staff calculations.

Exchange Rates

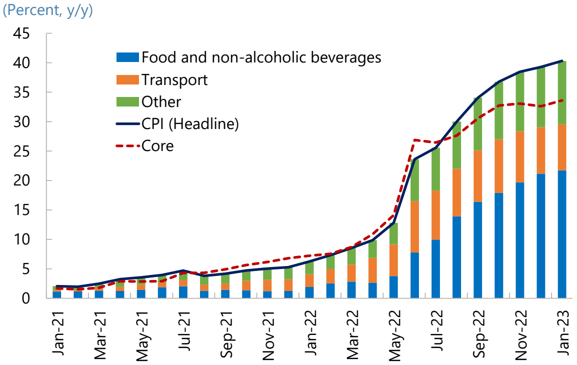
(January 2022=0)



Sources: CEIC

Inflation and Main Contributors

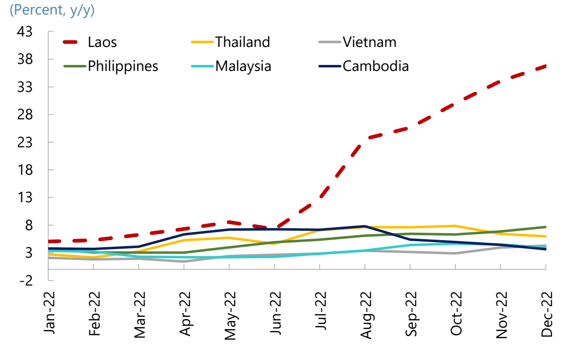
(Percent, y/y)



Sources: National authorities and IMF staff calculations.

Consumer Price Index

(Percent, y/y)



Sources: CEIC

- External shocks and exchange rate depreciation brought higher import prices, especially for fuel and fertilizers.[13] Inflation has surged, to 40 percent y/y as of January 2023; those items in the CPI basket with a larger share of imported goods have increased by considerably more.[14] Inflation in Lao P.D.R. is substantially higher than in neighboring countries; reflecting the depreciation but also non-tradeable price increases—as of November, all broad sectors have registered double-digit increases, which likely reflects a strong expectations channel over and above the effects of terms of trade and exchange rates; measures of core inflation have also increased.

- The inflation shocks severely stressed living standards. Fuel shortages were experienced in May 2022, reflecting a combination of the widening exchange rate premium and local fuel prices capped in kip based on the official exchange rate. The World Bank reports that 43 percent of households have experienced a decline in real incomes since the onset of the pandemic. Inflation has been highest on essential goods, resulting in cuts to food consumption, education, health care.[15] Poverty rates have increased.[16]

13. **The economy has also faced weaker-than-expected global demand and tighter global financial conditions**. Despite this, export growth has been strong, due to items such as paper goods products and perhaps reflecting the opening of the Lao-China railway and the Thanaleng Dry Port. But the interest rate differential against USD-denominated assets has worsened as global financial conditions have tightened and as inflation has surged by more in Lao P.D.R., likely exacerbating exchange rate pressures.

14. **The authorities' eliminated the primary fiscal deficit in 2021**. Fiscal consolidation has been substantial, driven equally by expenditure tightening (suspension of new public investment projects) and recovery in revenue collection, and by interest payment deferrals. (Note, however, the persistence and size of past expenditure arrears, which are not included in the fiscal accounts on a cash basis). The overall deficit improved by 4.3 percentage points of GDP in 2021, achieving a primary balance for the first time. Total revenue and grants reached 15 percent of GDP, closing the gap with pre-pandemic ratios.[17] Non-interest spending declined to 15.1 percent of GDP, down from 16.8 percent in 2020. Mid-year outturns for 2022 indicate that a primary surplus would have been attainable.

[13] Oil prices increased by around 40 percent, while fertilizers increased by 70 percent in 2022 (y/y).

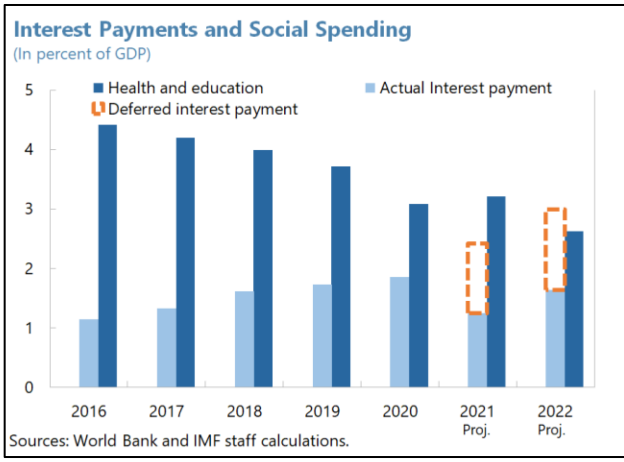
[14] Transport (16 percent of the CPI basket), increased by 50 percent YTD, food and non-alcoholic beverages (46 percent) by 47 percent YTD, and medical products by 48 percent.

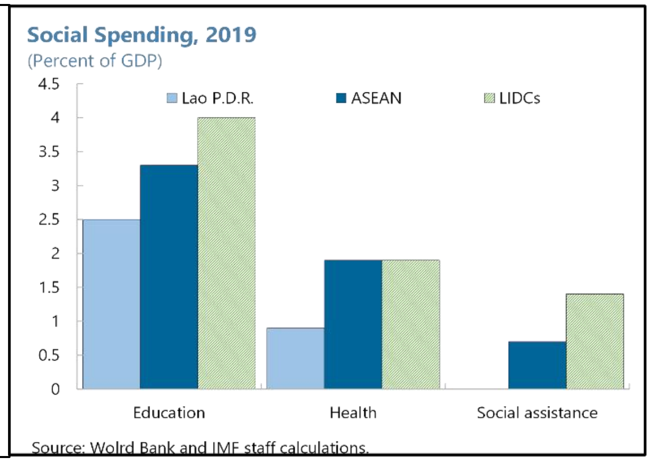
[15] World Bank (2022), *Monitoring Household Welfare in Lao PDR*, Report n.5, April-May

[16] Rising inflation could have pushed push an additional 2.9-3.7 percent of the Laotian population under the international poverty line (UNDP, 2022: *Addressing the Cost of Living Crisis in Developing Countries*). This is a significant increase from baseline: According to WB, the proportion of the Laotian population living in poverty was 18.3 percent in 2019 (World Bank, 2022: *Lao People's Democratic Republic Poverty Assessment 2020: Catching Up and Falling Behind*).

[17] At 25 percent YoY, nominal growth in fiscal revenues has far outstripped nominal GDP growth in 2021, exceeding the average historical elasticity (buoyancy). This performance can be explained by a combination of fiscal policy (active revenue mobilization efforts) and by the rebound from the historically low performance observed in 2020.

15. But spending cuts have come at the expense of important spending items and hence medium-term growth potential. The inability to protect those most affected by increases in the prices of essential goods has likely suppressed private consumption, while cuts to capital spending and health and education budgets hold back medium-term growth. Combined public spending on the social sectors (i.e., education, health, and social protection) is low compared with regional and income peers, and is well below international benchmarks (e.g., a recommendation of 4-6 percent of GDP for education). According to the MoF's Five-Year Plan, fiscal consolidation will rely heavily on spending austerity, and there is no plan to increase social benefits. As the cost of interest payments is increasing, significant primary surpluses are required to stabilize debt ratios in the medium term, which appears to be MoF's policy priority.





16. The Bank of the Lao P.D.R. (BoL) has acted to ease foreign exchange pressures. The BoL was lending to government in 2020 and was repaid in 2021. In 2021, it purchased government bonds from banks that were issued to cover expenditure arrears and to recapitalize banks.[18]

- The BoL has tightened domestic financial conditions: the BoL's extension of credit to banks and the government in 2022 has been fully offset by the issuance of BoL bonds.[19] The BoL has also increased its policy rate from 3.0 percent to 6.5 percent in 2022, and to 7.5 percent in February 2023, while also raising banks' reserve requirements.

[18] Domestic financing of the Ministry of Finance stood at LAK 16.7 trillion in 2021, including 1.9 trillion from the BoL. This figure includes 15 trillion of one-offs items (so-called "triangulation" and investment bonds, issued to cover arrears).

[19] In 2022, reserve money has grown strongly, mostly owing to the exchange rate depreciation changing the domestic currency value of foreign currency-denominated assets. By contrast, the BoL's domestic credit (NDA) growth has been much more subdued. From June 2021 to June 2022, the BoL's extension of credit to banks and the government has been completely offset by the issuance of BoL bonds to mop up liquidity. Banks' credit in Kip has picked up modestly, but remains subdued compared to historical average.

- It has tightened exchange controls,[20] while also allowing greater exchange rate flexibility.[21] A new FX law lays out surrendering requirements, but as yet secondary legislation to implement those provisions has not been implemented.

17. Despite nominal exchange rate depreciation, the external position in 2021 was still weak. The trade balance switched to a surplus in 2021-2022 with a sharp rise in exports, despite oil import pressures. Although the Covid-19 crisis had a significant impact on services exports (e.g., related to tourism), services imports also declined sharply, with the balance remaining somewhat stable. But despite the improvement in the current account position, the net international investment position—estimated to be -143 percent of GDP—has been deteriorating. Gross official reserves were down by US$ 170 million by end-August 2022 (from end-December 2021). Gross official reserves are projected to be US$ 1,101 million at end-2022, corresponding to 1.6 months of import coverage. For these reasons, the 2023 IMF Article IV Staff Report assesses the external position in 2021 to be substantially weaker than the level implied by fundamentals and desirable policies.

18. The financial sector remains weak. System-wide indicators conceal a wide range of capital levels and asset quality across banks. Capital levels at several of the largest banks are below requirements; these positions could yet be overstated because of loan forbearance.

MACROECONOMIC AND DEBT FORECASTS

19. The baseline outlook is for a period of stabilization, during growth rates are steady and inflation declines.

- The baseline assumes that there are no further external shocks, nor do risks manifest in the domestic economy. In particular, staff assumes that (i) for 2023, terms of trade stabilize after improving somewhat in the second half of 2022, allowing growth to improve, notwithstanding tight global financial conditions and external demand; (ii) improvement in services after the reopening of borders in 2022 and hence that tourism picks up substantially[22]; and (iii) fiscal policy and monetary policy continue to be tight, with no further lending from the BoL to government.

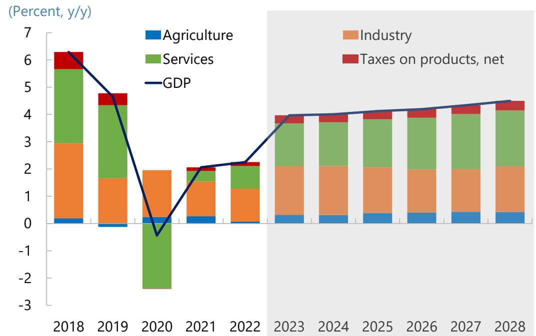
[20] Measures include daily limits on FX transactions, prioritizing access to FX, and closing FX bureaus.

[21] The BoL has a mandate to maintain price stability, manage financial stability, and supervise both financial institutions and the payment system. The monetary policy framework is a mixed regime of monetary targeting and an exchange rate anchor. In September 2021, the exchange rate band was widened to ±1.5 percent. In October 2022, the band was further widened to ±4.5 percent.

[22] Pre-pandemic tourism was around 4 million visitors per year. At the time of writing, visitor numbers were estimated to have been 1.3 million in 2022, owing mainly to Thai and Vietnamese tourists and despite the lack of Chinese tourists.

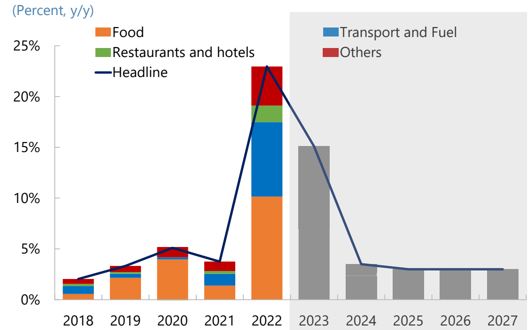
- Under these assumptions, growth recovers, at 4.0 percent in 2023, gradually increasing to staff's estimate of long-run potential of 4.75 percent. Note that, with no fiscal space, public capital spending remains subdued, precluding a return to pre-pandemic growth rates.

Real GDP Growth with Sectoral Contributions



Sources: National authorities and IMF staff calculations and projections.

Headline Average Inflation with Sectoral Contributions



Sources: National authorities and IMF staff calculations and projections.

- Average inflation is projected to fall, converging to a long-term rate of 3 percent by 2025. GDP deflator inflation is projected to be lower than CPI inflation in 2022, owing to negative terms of trade shocks in that year, and slightly higher than CPI inflation in 2023. Going forward, nominal GDP is expected to still grow at double digits in 2023 and stabilize in the 7-8 percent range thereafter.

Box 1. Potential Growth Assumptions

Although pre-crisis growth had been strong, growth accounting indicates that it was driven almost entirely by capital accumulation.[1] The strong investment was largely public, for major infrastructure and energy projects. The decomposition indicates that there was little benefit to the private economy, both in terms of productivity and employment growth. Indeed, net growth in formal private firms appears to have been negative, owing to lack of credit, labor mismatches, and competition from unregistered enterprises.

Going forward, employment is assumed to grow in line with UN working age population projections. TFP growth increases above historical rates due to efficiency gains, such as by improving the quality of public investment and facilitating private sector business environment in the long run [2]. Some increase in private investment is projected, but the state of the public finances, adverse financing conditions, and completion of major projects without firm plans for future projects reduce the scope for another surge in public investment. These assumptions imply a potential real growth rate of 4¾ percent.

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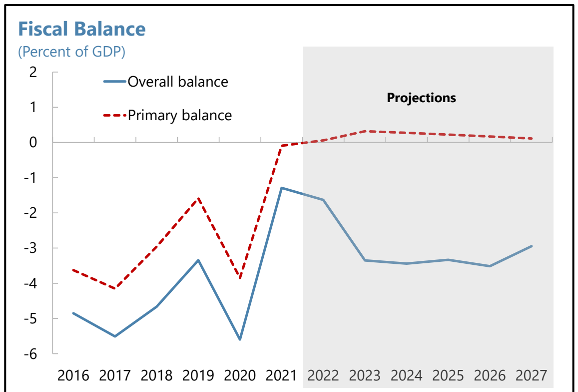
[1] A standard Cobb-Douglas production function with labor share of 60 percent was used. Data on output, capital stock, employment, and the labor share were obtained from the Penn World Tables 2021.

[2] The Government's National Agenda on Addressing Economic and Financial Difficulties aims to ease macroeconomic vulnerabilities and support a growth recovery. To support its implementation, the World Bank and the Asian Development Bank have recently prepared a Reform Roadmap that focuses on domestic resource mobilization, the quality of public spending, the governance of public and public-private investments, financial sector stability, and the business environment.

20. The improvement in fiscal balances is assumed to remain, with no further expenditure arrears.



Sources: National authorities and IMF staff calculations.

- Over the medium term, non-interest expenditure is expected to remain anchored at 2021 ratios to GDP (around 15 percent). A moratorium on new capital expenditure allows only existing projects to be completed. Ratios of wages, benefits and other spending to GDP are also expected to remain stable. Interest payments, however, are projected to increase significantly in the next few years, driving a rebound in overall expenditure (and the sizeable gap between primary and overall balances).

- The revenue gains seen in 2021 are expected to last, but the baseline assumes no further improvements. No additional measures on profit taxation are planned, hence their outturn is expected to be stable over the medium term; income tax and VAT outturns may suffer from compression in real incomes, and the reduction of the VAT rate from 10 to 7 percent in January 2022 will also undermine revenue mobilization. A portion of the increase in dividends observed in 2021 is assumed to be temporary and grants gradually decline, in line with historical trends. Overall, these losses are compensated by a small increase in other revenues (royalties, non-tax), leaving total inflows constant around 15 percent of GDP.

Text Table 4. Key Macroeconomic Assumptions

	2021	2022	2023	2024	2025	2026	2027	Long-term 1/
Real GDP (y/y growth)								
Current DSA	2.1	2.3	4.0	4.0	4.1	4.2	4.3	4.7
Previous DSA (2019 AVI)	6.7	6.8	6.8	6.8	6.7	6.5	6.6	5.9
GDP deflator (y/y growth)								
Current DSA	5.6	17.6	16.1	3.5	3.0	3.0	3.0	3.0
Previous DSA (2019 AVI)	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Primary fiscal balance (percent of GDP)								
Current DSA	-0.1	0.1	0.3	0.3	0.2	0.2	0.1	-0.3
Previous DSA (2019 AVI)	-2.4	-2.3	-2.2	-2.2	-2.2	-1.9	-1.8	-1.5
Revenue and grants (percent of GDP)								
Current DSA	15.0	14.9	15.1	15.1	15.1	15.1	15.0	14.7
Previous DSA (2019 AVI)	16.0	16.1	16.3	16.3	16.4	16.5	16.6	17.2
Primary expenditure (percent of GDP)								
Current DSA	15.1	14.8	14.8	14.8	14.9	14.9	14.9	15.0
Previous DSA (2019 AVI)	18.4	18.4	18.5	18.6	18.6	18.4	18.4	18.7
Fiscal balance (percent of GDP)								
Current DSA	-1.3	-1.6	-3.4	-3.5	-3.4	-3.6	-3.0	-2.6
Previous DSA (2019 AVI)	-3.9	-3.8	-3.7	-3.8	-3.7	-3.4	-3.3	-2.5
Current account balance (percent of GDP)								
Current DSA	-0.6	-6.0	-2.6	-6.2	-7.8	-8.4	-7.6	-6.1
Previous DSA (2019 AVI)	-11.1	-10.8	-10.9	-10.9	-10.8	-10.4	-9.7	-7.4
Exports of goods and services (percent of GDP)								
Current DSA	42.2	53.2	64.4	68.0	68.4	68.4	68.4	70.0
Previous DSA (2019 AVI)	36.5	37.0	37.1	35.8	35.3	34.8	34.4	31.9
Imports of goods and services (percent of GDP)								
Current DSA	38.2	52.8	60.0	66.1	69.0	70.3	70.9	75.2
Previous DSA (2019 AVI)	45.7	45.6	45.0	44.2	43.5	42.8	42.1	38.3

Sources: FSM authorities and IMF staff estimates and calculations.
1/ Average 2028-2042 for current DSA and 2028-2038 for previous one.

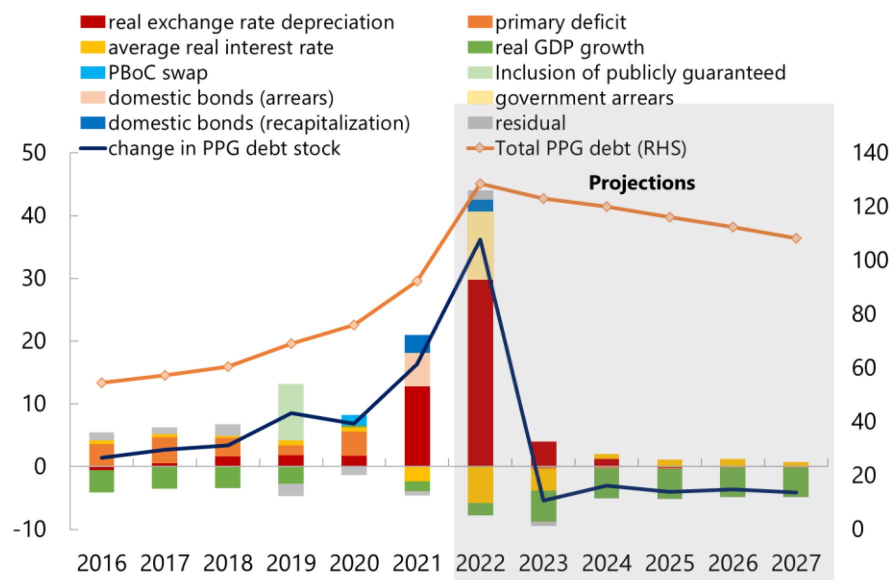
21. The PPG debt stock peaks in 2022 and declines thereafter, but remains high (Text figure 3 and Table 2).

- The debt ratio is estimated to have increased further, to 129 percent of GDP by end 2022. The main reason is exchange rate depreciation, contributing 30 percentage points to the estimated 36 percentage point increase over the year. A significant additional item is new government arrears to private contractors of around 11 percentage points of GDP, with bank recapitalization adding 2 percentage points, and deferred interest payments in 2022 adding 1 percentage point. In the absence of clear information except for the scheduled principal repayment of US$150 million in 2023, the remaining principal and interest servicing not made in 2020-2022 is assumed to be deferred until 2027, but is fully paid in the long run.[23]

- From 2022, the assumption that the government maintains a small primary surplus and positive GDP growth imply that debt gradually declines. Negative real interest rates contribute to the decline in 2023, as they did in 2022. However, debt is still above 100 percent until 2030 and around 60 percent in 2042.

Text Figure 3. PPG Debt Changes And Contributions

(In percent of GDP)



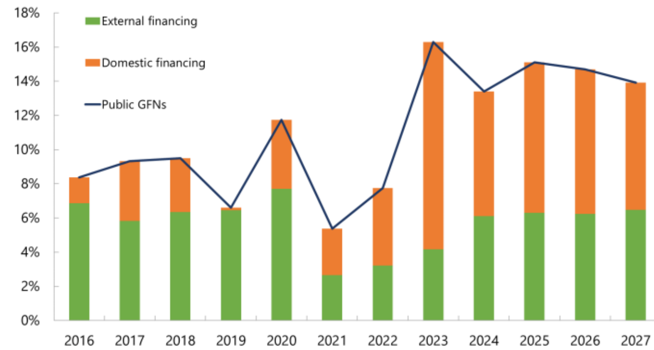
Sources: National authorities; and IMF staff calculations and projections.

22. Financing needs increase substantially from 2023; limited access to external financing implies reliance on domestic financing.

[23] The DSA assumes that for each external creditor, the total amortization is nearly equal to the initial debt stock, which comes from the authorities' debt bulletin. This means that the initial stock of debt from each external creditors will eventually be repaid in the future.

- Gross financing needs increase to nearly 16 percent of GDP in 2023, and remain at that level for several years. The increase arises mainly from external debt servicing that comes due in 2023 (including the swap line from the PBoC), which accounts for nearly 13 percentage points. Of this the majority is due to China. Smaller shares of external debt servicing are due to other bilateral creditors and to bondholders and commercial banks, with smaller share still to the ADB and World Bank.

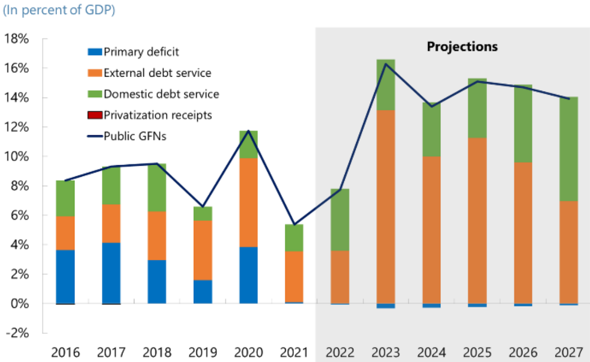
Financing Sources
(In percent of GDP)



Sources: National authorities; and IMF staff calculations and projections.

- External market access is assumed to only gradually be regained over the course of several years. Disbursements from commercial bank loans and bond issuance in international markets are assumed to be US$ 150 million in 2022 and 2023, about US$ 200 million from 2024 to 2026, and go up to US$ 500 million for 2027 and beyond. Hence the share of domestic financing would have to increase to nearly 12 percent of GDP in 2023. The share of domestic debt in total PPG public debt is expected to increase from 14 percent in 2021 to about 37 percent in 2030. Domestic banks are assumed in the baseline scenario as the main source of short- and medium- term domestic financing. Financing terms for external and domestic borrowings are described in Text Tables 5 and 6, respectively: the interest rate assumptions of domestic bonds are set in line with the recent historical issuance of investment/triangular bonds, which account for a large portion of MoF borrowing and debt stock (75 percent of the total debt stock) as of end-2021.[24]

Public Gross Financing Needs
(In percent of GDP)



Sources: National authorities; and IMF staff calculations and projections.

Decomposition of GFNs in 2023

		mln in Kip	mln in USD	percent of GDP
GFNs in 2023		42,733,278.8	2,295.1	16.3%
Primary deficit		-838,129.1	-45.0	-0.3%
Debt service for domestic existing debt		6,332,375.8	340.1	2.4%
Debt service for domestic new debt		2,717,302.0	145.9	1.0%
Debt service for external existing debt		34,185,509.2	1,836.1	13.0%
of which:	ADB	1,222,412.4	65.7	0.5%
	WB	807,256.0	43.4	0.3%
	Other multilateral	294,998.3	15.8	0.1%
	China (including PBoC swap)	20,642,494.0	1,108.7	7.9%
	Principal	11,310,760.4	607.5	4.3%
	Interest (excluding swap interest)	3,466,736.2	186.2	1.3%
	Swap interest	279,285.6	15.0	0.1%
	PBoC swap repayment	5,585,711.8	300.0	2.1%
	Other bilateral	2,552,613.2	137.1	1.0%
	Bonds/Commercial bank	8,665,735.3	465.4	3.3%
Debt service for external new debt		336,221.0	18.1	0.1%

Sources: Country authorities; and staff estimates and projections.

[24] Recent historical experience does not indicate changes in policy rates passing through to interest rates of government securities. Therefore, the DSA assumes no relationship between policy rates and bond interest rates.

Text Table 5. Loan Terms for Future External Disbursements

	Interest rate	Grace period	Maturity	Grant Element
Multilateral				
IDA (Blend)	2.0%	5	30	36%
AsDB	1.3%	8	32	45%
Others	2.0%	8	35	38%
Bilateral				
Paris Club	0.8%	9	30	51%
Non Paris Club (excluding China)	2.6%	6	23	24%
China	2.3%	6	20	26%
Commercial	6.9%	1	2	0%

Note. Disbursements from multilateral creditors other than the World Bank (IDA) and the Asian Development Bank ("Multilateral, Others") comprises less than 5 percent of disbursement amounts from multilateral creditors. Terms of these loans ("Others") have been kept identical to the previous 2019 DSA for lack of more information.

Text Table 6. Loan Terms for Future Domestic Loans

	interest rate				grace period	maturity	composition			
	2022-27	2028-32	2033-37	2038-42			2022-27	2028-32	2033-37	2038-42
Short-term debt										
T-bills (denominated in local currency)	4.3%	4.1%	4.1%	4.1%	0	1	2%	1%	1%	1%
MLT debt										
Denominated in local currency (LC)										
Bonds (1 to 3 years)-LC	4.6%	4.4%	4.4%	4.4%	1	3	8%	6%	3%	1%
Bonds (4 to 7 years)-LC	4.6%	4.4%	4.4%	4.4%	3	7	37%	27%	20%	15%
Bonds (4 to 7 years)-LC (with a higher interest rate)	4.9%	4.6%	4.6%	4.6%	3	7	53%	66%	76%	83%

Source: National authorities and IMF staff calculations.

Box 2. External Financing Assumptions

External financing assumptions tell a story of limited external access over the medium term, with a gradual pick-up as PPG debt ratios fall with higher growth.

Total external disbursement amounts average US$ 818 million from 2022 to 2027 and increase until 2042. External financing is made up of multilateral financing, bilateral financing, bonds, and commercial banks loans:

- Multilateral financing represents around 15 percent of the total external financing from 2022 to 2027, and is assumed to be around US$ 85 million on average from 2028 onward.
- Bond issuance is assumed to be US$ 150 million for 2022 and 2023 given the historical experience in Thai market. The bond issuance is assumed to continue at US$ 100 million every year from 2024.
- Commercial bank loans are assumed to be zero for 2022 and 2023, about US$ 100 million from 2024 to 2026, and US$ 400 million from 2027 onward.
- Other external financing is bilateral, representing 52 percent of the total external financing on average from 2022 to 2027 (on average: US$ 457 million), and 66 percent on average from 2028 to 2042, where it reaches US$ 1.7 billion.

All remaining financing needs are met through domestic borrowing.

23. The realism tools indicate that the baseline is consistent with Lao P.D.R.'s historical experiences and ensure the credibility of assumptions. The historical scenario does not divert largely from the baseline scenario, except for the present value of PPG external debt-to-GDP and -exports ratios, which increase explosively in the historical scenario after the mid-2020s. The explosive path of the historical scenario compared to the baseline comes from the large non-interest current account deficit in early 2010s, which is equivalent to 12.3 percent. Additionally, projected growth for 2022 in the baseline is not different significantly from the range of potential growth paths under various fiscal multipliers. Furthermore, the 3-year fiscal adjustment in the baseline is below the top quartile, which ensures the credibility of the baseline assumption.

24. The main risks arise from stresses to meet the government's financing needs. Assuming no further deferrals of debt servicing, that the authorities do not pursue monetary financing again, and in the absence of clear plans for other sources of financing (e.g. asset sales), domestic banks are assumed in the baseline scenario to lend to the government. Even without additional shocks, imposing loans to government implies significant crowding out of credit to the private sector: assuming broad money expands in line with nominal GDP growth, private sector credit growth would shrink to 3 percent y/y in 2023.

- There is a significant risk that the interest rate increases required to induce investors to finance government would be very large, increasing domestic financing costs. With weak bank balance sheets and negative real interest rates, domestic investors might demand shorter maturity bonds, increasing government rollover and refinancing risks. This might put pressure on the BoL to lend again to the government, without sterilization; in this case, reserve money would expand significantly, causing the exchange rate to depreciate by more than in the baseline, inflation to increase, and the kip value of liabilities (held by government and banks) to increase again. These pressures would be increased if the government were not able to sustain tax revenue gains and hence the primary surpluses assumed in the baseline.

- Deteriorating asset quality could trigger liquidity shortages and a solvency crisis in the banking system, causing a funding crisis for the government, both of which would cause the exchange rate and purchasing power to weaken further and domestic currency values of liabilities to increase.

- Even if the government were able to raise financing in local currency domestically, there remains the risk that the government would not be able to secure the foreign exchange to service external debt and to pay for imports without significant foreign exchange pressure.

25. The growth outlook is particularly uncertain, with risks tilted to the downside:

- It is possible that net trade improves further, given the potential for a faster pick-up in services (e.g., logistics and tourism) and remittances, which would bring valuable foreign exchange earnings.

- On the downside, in addition to the scenarios outlined in para 24, the external environment could be more adverse than expected in 2023. The low level of FX reserves and high debt burden imply that the economy has very little room to absorb external shocks; the result would likely be more pressure on the exchange rate, tighter FX liquidity, and higher inflation;

- Over the medium term, the economy risks long-term scarring: employment is yet to return to pre-pandemic levels, against the assumption in the baseline that employment rates pick up to fulfil the potential growth rate of 4.75 percent;[25] similarly, the assumption of a gradual increase in TFP might not be realized, given cuts to education and health spending. The country is highly vulnerable to natural disasters, particularly floods and droughts, which have significantly affected agriculture, forestry, water resources, food security, health, and economic growth.

COUNTRY CLASSIFICATION AND DETERMINATION OF STRESS TESTS

26. Debt-carrying capacity is assessed as weak. The country's Composite Indicator (CI) index of 2.15 indicates a weak debt-carrying capacity, based on October 2022 WEO and 2021 World Bank's Country Policy and Institutional Assessment (CPIA) (Text Table 7). Although the current CI is lower than the value in the previous 2019 DSA, which is 2.35, the indicative thresholds for external debt and benchmarks for public debt are unchanged: 30 percent for the present value (PV) of external debt-to-GDP ratio, 140 percent for the PV of external debt-to-exports ratio, 10 percent for the external debt service-to-exports ratio, 14 percent for the external debt service-to-revenue ratio, and 35 percent for the PV of public debt-to GDP ratio.

[25] World Bank (2022), *Lao PDR Economic Monitor: Restoring Macroeconomic Stability to Support Recovery*, April.

Text Table 7. Composite Indicator and Applicable Thresholds

Components	Current DSA: Coefficients (A)	Current DSA: 10-year average values (B)	Current DSA: CI Score components (A*B) = (C)	Current DSA: Contribution of components	2019 DSA: CI Score components (A*B) = (C)	2019 DSA: Contribution of components
CPIA	0.385	3.038	1.17	54%	1.24	53%
Real growth rate (in percent)	2.719	3.657	0.10	5%	0.19	8%
Import coverage of reserves (in percent)	4.052	13.831	0.56	26%	0.51	21%
Import coverage of reserves^2 (in percent)	-3.990	1.913	-0.08	-4%	-0.06	-3%
Remittances (in percent)	2.022	0.453	0.01	0%	0.00	0%
World economic growth (in percent)	13.520	2.898	0.39	18%	0.48	20%
CI Score			2.15	100%	2.35	100%
CI rating			Weak		Weak	

Applicable Thresholds

APPLICABLE EXTERNAL debt burden thresholds	
PV of debt in % of	
Exports	140
GDP	30
Debt service in % of	
Exports	10
Revenue	14

APPLICABLE TOTAL public debt benchmark	
PV of total public debt in percent of GDP	35

Source: LIC DSF

27. Given the exposure to natural disasters and market financing, two tailored stress tests were added to the standard set of stress test scenarios.

- Lao P.D.R.'s exposure to natural disaster risks has increased in the past years. The 2018 disasters (two tropical cyclones and one dam collapse) have generated damages and losses estimated at 2 percent of GDP and recovery needs of around 3 percent of GDP. To mitigate future risk, the government of Lao P.D.R. has joined the regional catastrophe risk insurance pool. To account for Lao P.D.R.'s exposure to disasters, a natural disaster tailored stress test is added: a one-off shock of 3 percentage points to the external debt-to-GDP ratio in 2023 (the second year of the debt projection period), in line with the recent evidence and in accordance to estimates laid out in the 2019 DSA.[26]

- Lao P.D.R. has been accessing the Thai capital market since 2013 (although it temporarily lost market access in 2020) justifying the inclusion of a market financing shock occurring also in 2023. The calibrations include a 400-bps increase in the cost of new external commercial

[26] Lao P.D.R. is not included in the group of countries for which the climate disaster stress test scenario is automatically applied. As such, the default parameters, which are tailored to this group of countries, need to be adjusted when the stress test is applied to Lao P.D.R.

borrowing, a shortening of maturities by one-thirds and one-off foreign exchange depreciation by 15 percent.

28. Shocks related to contingent liabilities are incorporated in the contingent liabilities stress test using the tailored parameters. The contingent liability stress test applies a one-off 46.8 percentage point-increase in the debt-to-GDP ratio in the second year of the projection**.**

DEBT SUSTAINABILITY

A. External Debt Sustainability Analysis

29. The baseline scenario shows that three out of four sustainability indicators breach their thresholds from 2023 to 2027(Table 1 and Figure 1). Breaches are reported for both solvency (the present value (PV) of the debt-to-GDP ratio) and liquidity ratios (the debt service-to-export and the debt service-to-revenue ratios). The magnitude of breaches is significant (Text Table 8): for the PV of the debt-to-GDP and debt service-to-revenue ratios, the debt sustainability indicators continue above their thresholds during the next decade. The PV of the debt-to-GDP ratio reaches around 63 percent in 2022, and is estimated at about 40 percent in 2032. The external PPG debt service-to-revenue ratio peaks at 97 percent in 2023, and declines to 39 percent in 2032. The PPG debt service-to-exports ratio trends above or around its sustainability threshold (10 percent) from 2023 to 2027. Only the PV of the debt-to-exports ratio stays below its threshold (140 percent) over the entire projection period, with the highest value of 119 percent in 2022.

30. The stress tests indicate the vulnerability of Lao P.D.R.'s external debt dynamics to exports and currency depreciation and, to a lesser extent, to natural disasters and contingent liabilities (Table 3). An export shock generates the most severe deterioration of debt indicator for PV of debt-to-exports ratio and debt service-to-exports ratio, while the most extreme shock for PV of debt-to-GDP ratio and debt-service-to-revenue ratio is one-time depreciation.[27] Focusing on the extreme shocks, three of four sustainability indicators, except for the PV of debt-to-exports ratio, exceed the corresponding thresholds over the next decade.

[27] Export receipts grew by 26 percent (y/y) in 2021 contributing to a rare trade balance surplus. Exceptional export growth did not improve the FX position in 2021 as only one third of export proceeds entered the domestic banking sector (according to information provided by the authorities).

Text Table 8. Magnitude of Breaches
(In percent of thresholds/benchmark)

	Average breach per period (in percent of threshold/Benchmark)		
	2022-2024	**2025-2027**	**2028-2032**
External PPG Debt			
PV of debt-to-GDP ratio	106.3%	65.4%	39.4%
PV of debt-to-exports ratio		no breach	
Debt service-to-exports ratio	75.6% 1/	35.6%	5.7% 2/
Debt service-to-revenue ratio	368.5%	378.0%	226.6%
Total PPG Debt			
PV of debt-to-GDP ratio	176.7%	151.1%	121.5%

1/ For 2022-2024, the calculation is the average of 2023 and 2024 because of no breach in 2022.
2/ For 2028-2032, the table displays the breach in 2029 because of no breaches for other years.
Sources: IMF staff calculations

B. Public Sector Debt Sustainability Analysis

31. The sustainability indicator for total PPG debt also breaches its threshold significantly over the next decades (Table 2 and Figure 2). The PV of the debt-to-GDP ratio exceeds its benchmark (35 percent) by a significant amount over the entire projection period. The debt service-to-revenue and grants ratio shows a rapid hike from 52 percent in 2022 to 110 percent in 2023 and goes down to 83 percent in 2032**.**

32. Public debt is most vulnerable to the contingent liabilities shock, which is driven by SOE and PPP risks and a financial market shock (Figure 2 and Table 4**)**. The PV of public debt-to-GDP ratio under the shock reaches 142 percent in 2023 and the debt service-to-revenue and grants would peak at 168 percent in 2029.

RISK RATING AND VULNERABILITIES

33. The Lao P.D.R. is assessed to be in external and overall debt distress. The assessment reflects the on-going negotiations about debt service deferral and the significant debt vulnerabilities emanating from the large and protracted threshold breaches of most solvency and liquidity indicators.

34. Overall debt is assessed to be unsustainable under the current baseline. Due to the high debt service ratios and critical macroeconomic conditions (including low foreign exchange reserves and liquidity, limited external market access since 2020, high dependence on domestic financing to close fiscal financing gap, and no fiscal space), overall debt is assessed to be unsustainable under the current baseline.

35. Downside risks would add further stress.

- The gross financing needs increase sharply in 2023 and exceed the 14 percent benchmark value.[28] On the assumption that external financing remains limited, the scale of domestic financing is substantial and presents a major stress to the projections. In the absence of confirmed alternative sources of funding, the baseline assumes that domestic banks lend to government. At the least, this would imply significant crowding out of credit availability to the private sector, stressing the recovery. The main risk is that the interest rate increases needed to induce the private sector to finance the government would be significantly larger than in the baseline, reducing growth, increasing government financing costs, and increasing rollover risks. Recourse to the BoL to finance the deficit would put further pressure on the exchange rate, increasing the domestic currency value of external liabilities to government and banks again.

- The economy continues to be vulnerable to external shocks. Globally, inflation may prove to be more persistent than anticipated, leading to tighter financial conditions.

- A manifestation of contingent liability risks would greatly stress the public finances. Vulnerabilities shown by the DSA include: shocks to exports, depreciation of the currency, large exposure to PPPs, and recapitalization needs of the banking sector, and the impact of natural disasters. The low level of reserves, a shallow domestic debt market, and limited access to capital markets add to these vulnerabilities.

In all these cases, liquidity pressures would increase, whether because financial inflows slow or because of domestic financing pressures, leading to solvency pressures in the banking system and causing funding stresses for the government and/or begetting monetization or financial repression that would cause the parallel exchange rate gap to widen again;[29]

36. Debt would remain at very high levels even with higher growth and revenue collection. The underlying problem is the starting point of debt:

- Alternative scenarios indicate that debt would remain high for the next 10 years, even assuming growth reaches the authorities' targets, which are much higher than the baseline, and with primary surpluses persisting for the duration of the simulation.

- The primary surpluses required to reduce debt below risk thresholds in the DSA within a few years (without harming long-term development prospects and without debt restructuring) are not socially feasible. Staff estimates that to reduce PPG debt to around 60 percent of GDP—a level that would still be somewhat risky for a heavily dollarized low-income economy—by 2027, the government would have to run a primary surplus of about 10 percent of GDP on average

[28] There is no Emerging Market Bond Index (EMBI) or equivalent spread for Lao P.D.R., which impedes an assessment of the second benchmark related to market sentiment.

[29] For example, if banks were to take significantly more "triangulation" bonds (in effect, IOUs from the government) onto their balance sheets, their solvency would be stressed. Liquidity would improve by allowing those bonds to be used as collateral at the BoL, but at the cost of expanding the money base.

each year for five years. Nonetheless, a commitment to a sustained revenue-led fiscal consolidation would improve market perceptions, reducing pressures to finance domestically.

37. The government recognizes the need to bring down public debt in its 9th Five-Year Plan and the National Agenda for addressing economic and financial difficulties. The government has responded to these challenges with measures to improve the public finances and to ease foreign exchange pressures. The government has announced this year that it has sought external debt reprofiling. The government has reached a small primary surplus, following substantial fiscal consolidation driven equally by expenditure tightening (both recurrent and suspension of new public investment projects) and recovery in revenue collection, and by interest payment deferrals. The Bank of the Lao P.D.R. (BoL) has allowed the exchange rate to depreciate, in line with staff advice, and has also attempted to reduce exchange pressure by soaking up excess kip liquidity and tightening rules on exchange markets.

38. A comprehensive set of adjustment policies is needed that recognizes the full extent of the macroeconomic imbalances, based on realistic expectations of revenue capacity and the time for reforms to show their full benefits.

- *Fiscal policy:* A preferred growth-friendly fiscal consolidation would be based mainly on revenue mobilization, eliminating tax exemptions and VAT rate reductions, improving tax administration, and broadening the tax base. Spending should be directed to social and development needs, with heightened attention to financial management.

- *Monetary policy:* The BoL should continue with bond issuances and interest rate increases, to ease pressures on the exchange rate and reduce pressures on bank solvency and to facilitate foreign exchange inflows.

- *Structural reforms* are needed to complement efforts to restore the public finances to health and improve external balances and put the economy on a structural transformation path for sustained and inclusive growth. With fiscal restraint required for a sustained period, growth will have to come from the private sector. Historically, firms have been held back by bureaucracy, difficult access to credit, labor market mismatches, and competition from unregistered enterprises. Firms need improved governance—in particular, simpler regulation, consistently implemented, and anti-corruption measures.

AUTHORITIES' VIEWS

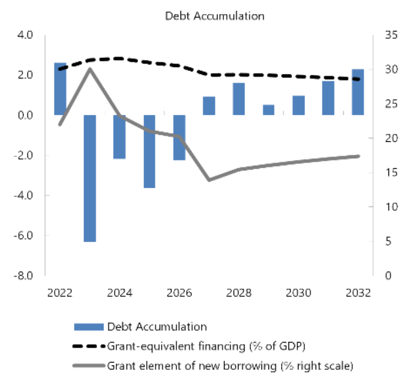
39. The authorities affirmed their intention to service debt repayments in full in 2023. Financing would be mostly domestic, with more tax revenue raised, sales of mining and hydroelectric concessions and fees, and borrowing from commercial banks and domestic issuance of bonds. A small share would be issued externally. The Lao government has discussed with China holding debt servicing during 2020, 2021 and 2022 until negotiations about postponements has been completed. There is not yet a schedule on when deferred amounts would be repaid. The government is in negotiations with bilateral creditors about future repayments, but no details were available at the time of the Article IV consultation. The authorities noted that, under Lao law, government arrears to the private sector were not counted until a bond was issued.

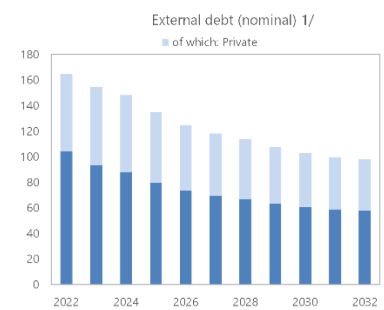
Table 1. External Debt Sustainability Framework, Baseline Scenario, 2021–2042

(In percent of GDP, unless otherwise)

	Actual	Projections								Average 8/	
	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
External debt (nominal) 1/	**128.1**	**164.8**	**154.5**	**148.2**	**135.0**	**124.5**	**118.3**	**97.8**	**85.2**	**101.1**	**124.3**
of which: public and publicly guaranteed (PPG)	**79.5**	**104.5**	**93.5**	**87.6**	**79.6**	**73.4**	**69.7**	**57.7**	**50.2**	**54.3**	**74.2**
Change in external debt	8.7	36.6	-10.3	-6.3	-13.2	-10.5	-6.2	-2.0	-1.9		
Identified net debt-creating flows	**-5.3**	**-1.2**	**-9.9**	**-6.9**	**-4.7**	**-3.6**	**-4.1**	**-5.5**	**-2.0**	**1.2**	**-5.8**
Non-interest current account deficit	**-1.2**	**3.6**	**-3.8**	**0.2**	**2.7**	**4.1**	**4.4**	**3.4**	**5.0**	**12.3**	**2.0**
Deficit in balance of goods and services	-4.0	-0.4	-4.4	-1.9	0.6	1.9	2.5	4.5	3.1	**13.1**	**1.0**
Exports	42.2	53.2	64.4	68.0	68.4	68.4	68.4	69.2	55.7		
Imports	38.2	52.8	60.0	66.1	69.0	70.3	70.9	73.8	58.7		
Net current transfers (negative = inflow)	-1.2	-1.6	-2.2	-2.2	-2.2	-2.0	-2.0	-1.2	-0.7	**-1.8**	**-1.8**
of which: official	-1.4	-1.3	-1.4	-1.4	-1.4	-1.3	-1.3	-0.6	-0.3		
Other current account flows (negative = net inflow)	4.0	5.7	2.7	4.3	4.2	4.2	3.9	0.0	2.6	**1.0**	**2.8**
Net FDI (negative = inflow)	**-5.8**	**-3.7**	**-5.4**	**-6.8**	**-6.8**	**-6.8**	**-6.6**	**-6.0**	**-4.3**	**-6.9**	**-6.1**
Endogenous debt dynamics 2/	**1.6**	**-1.2**	**-0.6**	**-0.3**	**-0.7**	**-1.0**	**-1.9**	**-2.8**	**-2.7**		
Contribution from nominal interest rate	1.8	2.3	6.5	6.0	5.1	4.4	3.2	1.6	1.2		
Contribution from real GDP growth	-2.5	-3.5	-7.1	-6.3	-5.8	-5.3	-5.1	-4.4	-3.9		
Contribution from price and exchange rate changes	2.3	...	...	...	...	...	...	...	...		
Residual 3/	**14.1**	**37.8**	**-0.4**	**0.6**	**-8.5**	**-6.9**	**-2.1**	**3.5**	**0.1**	**3.6**	**3.1**
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators											
PV of PPG external debt-to-GDP ratio	**49.7**	**63.3**	**61.9**	**60.4**	**53.8**	**48.5**	**46.5**	**39.7**	**38.0**		
PV of PPG external debt-to-exports ratio	**117.7**	**119.0**	**96.1**	**88.8**	**78.7**	**70.9**	**68.0**	**57.4**	**68.2**		
PPG debt service-to-exports ratio	**8.3**	**6.7**	**20.4**	**14.7**	**16.5**	**14.0**	**10.2**	**7.9**	**7.8**		
PPG debt service-to-revenue ratio	**26.8**	**26.9**	**96.9**	**73.0**	**81.4**	**69.3**	**50.1**	**38.8**	**30.2**		
Gross external financing need (Million of U.S. dollars)	513.8	1721.6	2629.6	2564.8	3140.4	3121.1	2685.1	2068.9	2217.8		
Key macroeconomic assumptions											
Real GDP growth (in percent)	2.1	2.3	4.0	4.0	4.1	4.2	4.3	4.8	4.8	**5.7**	**4.2**
GDP deflator in US dollar terms (change in percent)	-1.9	-19.2	-11.4	-4.9	1.3	2.0	1.9	1.9	1.9	**1.8**	**-1.9**
Effective interest rate (percent) 4/	1.5	1.5	3.6	3.8	3.7	3.4	2.7	1.7	1.4	**2.3**	**2.7**
Growth of exports of G&S (US dollar terms, in percent)	21.0	4.2	11.5	4.4	6.0	6.4	6.2	7.3	0.0	**8.3**	**6.7**
Growth of imports of G&S (US dollar terms, in percent)	8.3	14.2	4.6	9.0	10.2	8.4	7.1	8.7	0.0	**4.8**	**8.3**
Grant element of new public sector borrowing (in percent)	...	22.0	30.0	23.2	21.0	20.2	13.9	17.4	19.2	**...**	**19.3**
Government revenues (excluding grants, in percent of GDP)	13.0	13.3	13.6	13.7	13.8	13.9	13.9	14.1	14.3	**14.6**	**13.8**
Aid flows (in Million of US dollars) 5/	377.1	433.6	578.3	403.0	296.4	232.7	219.3	240.2	310.5		
Grant-equivalent financing (in percent of GDP) 6/	...	2.3	2.8	2.8	2.6	2.5	2.0	1.8	1.5	**...**	**2.2**
Grant-equivalent financing (in percent of external financing) 6/	...	47.9	48.5	37.5	34.5	33.1	26.4	24.0	26.2	**...**	**32.2**
Nominal GDP (Million of US dollars)	18,533	15,304	14,091	13,940	14,701	15,631	16,623	22,918	44,123		
Nominal dollar GDP growth	0.1	-17.4	-7.9	-1.1	5.5	6.3	6.3	6.8	6.8	**7.7**	**2.3**
Memorandum items:											
PV of external debt 7/	98.3	123.6	122.9	121.0	109.3	99.6	95.1	79.9	72.9		
In percent of exports	232.9	232.2	190.7	177.9	159.8	145.6	139.0	115.4	131.1		
Total external debt service-to-exports ratio	23.1	21.2	43.3	36.8	37.2	33.1	26.9	16.8	7.8		
PV of PPG external debt (in Million of US dollars)	9205.6	9690.3	8725.6	8417.7	7912.7	7583.1	7729.6	9110.1	16759.4		
(PVt-PVt-1)/GDPt-1 (in percent)		2.6	-6.3	-2.2	-3.6	-2.2	0.9	2.3	1.9		
Non-interest current account deficit that stabilizes debt ratio	-9.9	-33.0	6.4	6.5	15.9	14.6	10.6	5.4	7.0		

Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	Yes





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Current-year interest payments divided by previous period debt stock.

5/ Defined as grants, concessional loans, and debt relief.

6/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

7/ Assumes that PV of private sector debt is equivalent to its face value.

8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

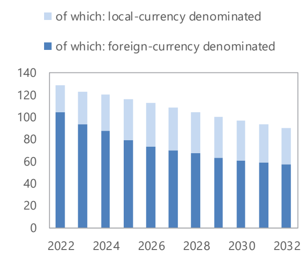
Table 2. Public Sector Debt Sustainability Framework, Baseline Scenario, 2021–2042

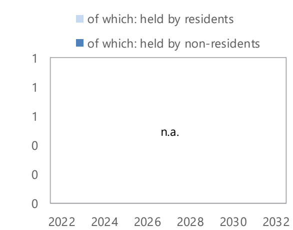
(In percent of GDP, unless otherwise indicated)

	Actual	Projections								Average 6/	
	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
Public sector debt 1/	92.4	128.5	123.1	120.1	116.0	112.4	108.3	89.9	63.6	61.2	108.5
of which: external debt	79.5	104.5	93.5	87.6	79.6	73.4	69.7	57.7	50.2	54.3	74.2
Change in public sector debt	16.4	36.2	-5.4	-3.0	-4.0	-3.6	-4.1	-3.4	-2.0		
Identified debt-creating flows	8.9	-7.8	-8.8	-4.2	-3.9	-3.6	-4.1	-3.5	-2.3	1.5	-4.6
Primary deficit	0.1	-0.1	-0.3	-0.3	-0.2	-0.2	-0.1	0.2	0.5	2.8	-0.1
Revenue and grants	15.0	14.9	15.1	15.1	15.1	15.1	15.0	14.7	14.8	17.7	14.9
of which: grants	2.0	1.6	1.5	1.4	1.3	1.2	1.1	0.6	0.5		
Primary (noninterest) expenditure	15.1	14.8	14.8	14.8	14.9	14.9	14.9	14.9	15.3	20.4	14.9
Automatic debt dynamics	8.8	-7.7	-8.4	-4.0	-3.6	-3.4	-4.0	-3.7	-2.8		
Contribution from interest rate/growth differential	-3.9	-7.7	-8.4	-4.0	-3.6	-3.4	-4.0	-3.7	-2.8		
of which: contribution from average real interest rate	-2.4	-5.7	-3.5	0.8	1.1	1.3	0.7	0.5	0.2		
of which: contribution from real GDP growth	-1.5	-2.0	-4.9	-4.7	-4.8	-4.7	-4.7	-4.2	-3.0		
Contribution from real exchange rate depreciation	12.7	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	7.5	44.0	3.3	1.2	-0.2	0.0	0.0	0.1	0.3	3.4	4.4
Sustainability indicators											
PV of public debt-to-GDP ratio 2/	69.7	100.9	96.1	93.6	90.5	87.8	85.4	72.2	51.5		
PV of public debt-to-revenue and grants ratio	463.7	677.1	636.9	619.4	598.5	582.6	568.7	491.7	348.6		
Debt service-to-revenue and grants ratio 3/	35.1	52.4	110.1	90.5	101.3	98.7	93.5	83.4	49.9		
Gross financing need 4/	5.4	7.7	16.3	13.4	15.1	14.7	13.9	12.5	7.9		
Key macroeconomic and fiscal assumptions											
Real GDP growth (in percent)	2.1	2.3	4.0	4.0	4.1	4.2	4.3	4.8	4.8	5.7	4.2
Average nominal interest rate on external debt (in percent)	1.0	1.3	2.7	2.8	2.6	2.5	1.7	2.1	2.4	2.2	2.1
Average real interest rate on domestic debt (in percent)	-0.8	-12.4	-9.6	1.4	1.9	2.4	2.2	1.5	1.5	3.2	-0.4
Real exchange rate depreciation (in percent, + indicates depreciation)	19.0	...	...	...	...	...	...	...	...	1.7	...
Inflation rate (GDP deflator, in percent)	5.6	17.6	16.1	3.5	3.0	3.0	3.0	3.0	3.0	3.8	5.6
Growth of real primary spending (deflated by GDP deflator, in percent)	-8.3	0.3	3.4	4.5	4.6	4.2	4.3	4.8	5.0	3.8	4.0
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-16.3	-36.2	5.1	2.7	3.8	3.4	4.0	3.7	2.5	-8.7	0.2
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Definition of external/domestic debt	**Currency-based**
Is there a material difference between the two criteria?	**Yes**

Public sector debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government, government-guaranteed debt . Definition of external debt is Currency-based.

2/ The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

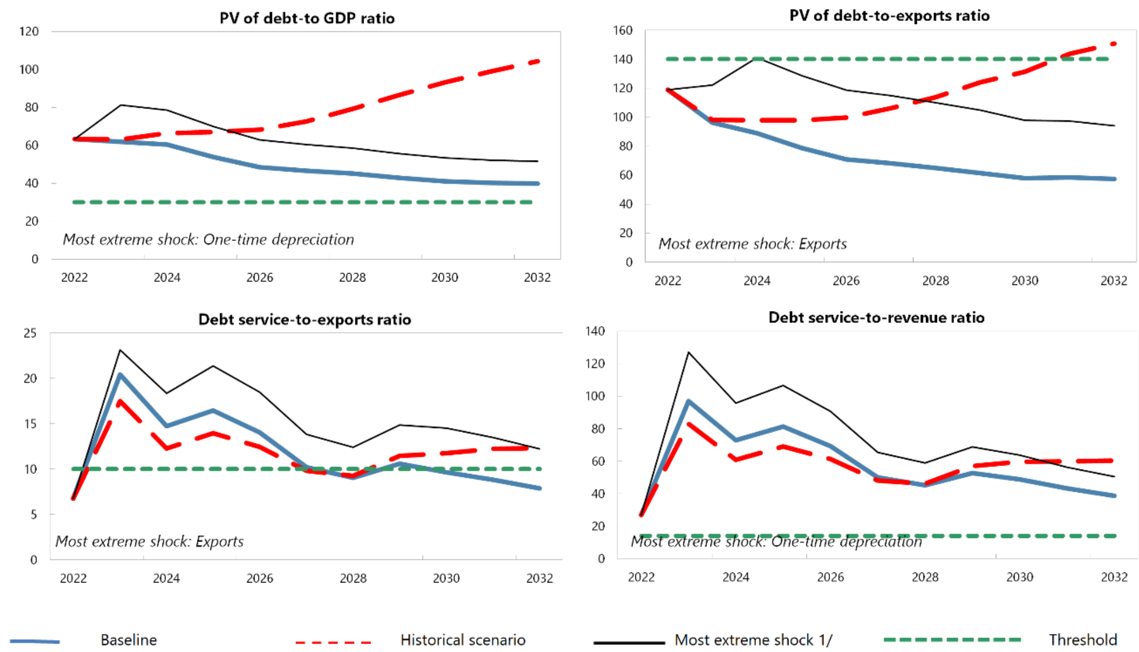
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

4/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period and other debt creating/reducing flows.

5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio ((-): a primary surplus), which would stabilizes the debt ratio only in the year in question.

6/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

Figure 1. Indicators Of Public And Publicly Guaranteed External Debt Under Alternative Scenarios, 2022–2032



Customization of Default Settings		
	Size	Interactions
Tailored Stress		
Combined CL	Yes	
Natural disaster	Yes	No
Commodity price	n.a.	n.a.
Market financing	No	No

Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

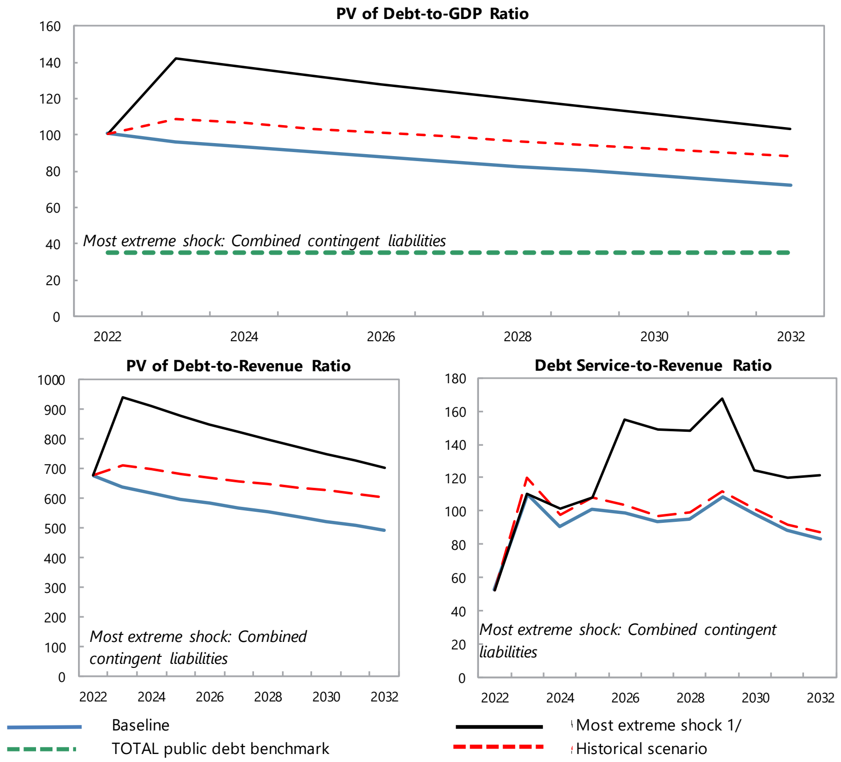
Borrowing assumptions on additional financing needs resulting from the stress tests*		
	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	3.8%	5.0%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	18	20
Avg. grace period	4	5

* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 2. Indicators Of Public Debt Under Alternative Scenarios, 2022–2032



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	42%	20%
Domestic medium and long-term	57%	79%
Domestic short-term	1%	1%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	3.8%	3.8%
Avg. maturity (incl. grace period)	18	18
Avg. grace period	4	4
Domestic MLT debt		
Avg. real interest rate on new borrowing	-0.9%	-0.9%
Avg. maturity (incl. grace period)	6	6
Avg. grace period	2	2
Domestic short-term debt		
Avg. real interest rate	-1.4%	-1.4%

* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Table 3. Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2022–2032

(In percent)

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
PV of debt-to GDP ratio											
Baseline	**63**	**62**	**60**	**54**	**49**	**46**	**45**	**43**	**41**	**40**	**40**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	**63**	**63**	**66**	**67**	**68**	**73**	**79**	**86**	**93**	**99**	**104**
B. Bound Tests											
B1. Real GDP growth	**63**	**65**	**66**	**59**	**53**	**51**	**50**	**47**	**45**	**44**	**44**
B2. Primary balance	**63**	**63**	**63**	**56**	**51**	**49**	**48**	**45**	**44**	**43**	**42**
B3. Exports	**63**	**70**	**81**	**74**	**68**	**66**	**65**	**62**	**59**	**56**	**55**
B4. Other flows 3/	**63**	**64**	**65**	**58**	**53**	**51**	**49**	**47**	**45**	**44**	**43**
B5. Depreciation	**63**	**81**	**79**	**70**	**63**	**60**	**59**	**56**	**53**	**52**	**52**
B6. Combination of B1-B5	**63**	**67**	**69**	**63**	**57**	**55**	**54**	**51**	**49**	**47**	**46**
C. Tailored Tests											
C1. Combined contingent liabilities	**63**	**70**	**69**	**63**	**58**	**57**	**57**	**55**	**54**	**53**	**53**
C2. Natural disaster	**63**	**63**	**62**	**55**	**50**	**48**	**47**	**45**	**43**	**42**	**42**
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	**63**	**70**	**69**	**60**	**54**	**51**	**50**	**47**	**45**	**44**	**44**
Threshold	30	30	30	30	30	30	30	30	30	30	30
PV of debt-to-exports ratio											
Baseline	119	96	89	79	71	68	65	61	58	58	57
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	119	98	98	98	100	106	114	124	131	**144**	**151**
B. Bound Tests											
B1. Real GDP growth	119	96	89	79	71	68	65	61	58	58	57
B2. Primary balance	119	97	92	82	74	71	68	65	61	62	61
B3. Exports	119	122	**141**	128	119	115	110	105	98	97	94
B4. Other flows 3/	119	99	95	85	77	74	71	67	63	63	62
B5. Depreciation	119	96	88	78	70	67	64	61	57	58	57
B6. Combination of B1-B5	119	114	100	98	90	86	83	78	73	73	72
C. Tailored Tests											
C1. Combined contingent liabilities	119	109	102	91	85	84	82	80	76	77	76
C2. Natural disaster	119	100	93	82	74	72	68	65	61	62	61
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	119	96	89	77	69	66	63	60	56	57	56
Threshold	140	140	140	140	140	140	140	140	140	140	140
Debt service-to-exports ratio											
Baseline	7	**20**	**15**	**16**	**14**	**10**	9	**11**	10	9	8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	7	**17**	**12**	**14**	**12**	10	9	**11**	**12**	**12**	**12**
B. Bound Tests											
B1. Real GDP growth	7	**20**	**15**	**16**	**14**	**10**	9	**11**	10	9	8
B2. Primary balance	7	**20**	**15**	**17**	**14**	**10**	9	**11**	10	9	8
B3. Exports	7	**23**	**18**	**21**	**18**	**14**	**12**	**15**	**15**	**13**	**12**
B4. Other flows 3/	7	**20**	**15**	**17**	**14**	**10**	9	**11**	**10**	9	8
B5. Depreciation	7	**20**	**15**	**16**	**14**	**10**	9	**11**	10	9	8
B6. Combination of B1-B5	7	**22**	**17**	**19**	**16**	**12**	**10**	**13**	**12**	**11**	10
C. Tailored Tests											
C1. Combined contingent liabilities	7	**20**	**15**	**17**	**15**	**11**	10	**11**	**10**	10	9
C2. Natural disaster	7	**21**	**15**	**17**	**15**	**11**	9	**11**	**10**	9	8
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	7	**20**	**16**	**19**	**15**	8	9	**10**	10	9	8
Threshold	10	10	10	10	10	10	10	10	10	10	10
Debt service-to-revenue ratio											
Baseline	**27**	**97**	**73**	**81**	**69**	**50**	**45**	**53**	**49**	**43**	**39**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	**27**	**83**	**61**	**69**	**61**	**48**	**46**	**57**	**60**	**60**	**60**
B. Bound Tests											
B1. Real GDP growth	**27**	**102**	**80**	**89**	**76**	**55**	**50**	**58**	**54**	**47**	**42**
B2. Primary balance	**27**	**97**	**73**	**82**	**70**	**51**	**46**	**54**	**50**	**45**	**40**
B3. Exports	**27**	**97**	**77**	**89**	**77**	**57**	**52**	**62**	**62**	**56**	**51**
B4. Other flows 3/	**27**	**97**	**74**	**83**	**71**	**52**	**47**	**55**	**52**	**46**	**41**
B5. Depreciation	**27**	**127**	**96**	**106**	**91**	**65**	**59**	**69**	**64**	**56**	**50**
B6. Combination of B1-B5	**27**	**96**	**77**	**86**	**73**	**54**	**49**	**58**	**55**	**49**	**44**
C. Tailored Tests											
C1. Combined contingent liabilities	**27**	**97**	**76**	**84**	**72**	**53**	**48**	**56**	**52**	**47**	**42**
C2. Natural disaster	**27**	**97**	**73**	**82**	**69**	**50**	**45**	**53**	**49**	**44**	**39**
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	**27**	**97**	**81**	**92**	**72**	**40**	**45**	**52**	**48**	**43**	**38**
Threshold	14	14	14	14	14	14	14	14	14	14	14

Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the threshold.
2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
3/ Includes official and private transfers and FDI.

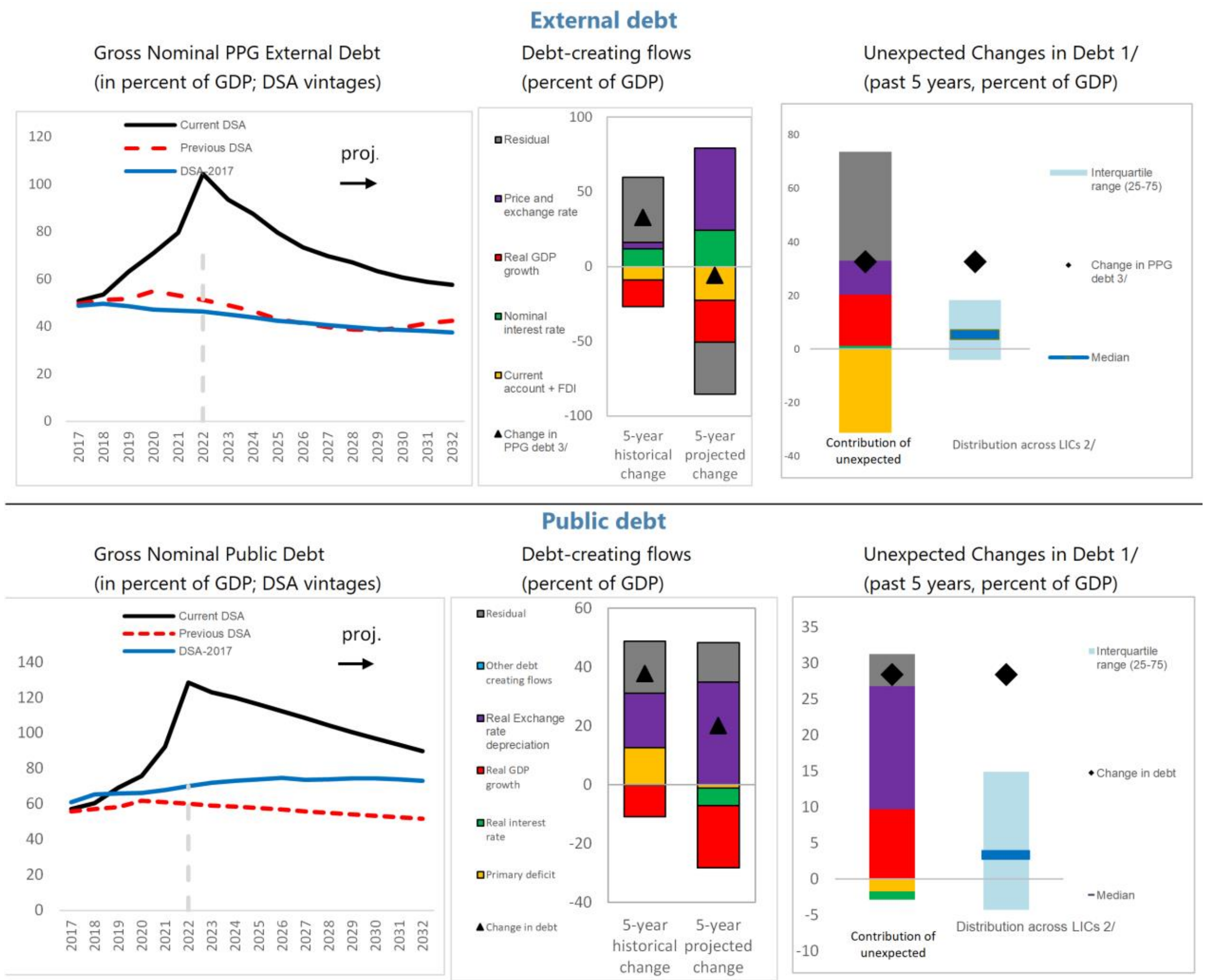
Table 4. Sensitivity Analysis for Key Indicators of Public Debt, 2022–2032

(In percent)

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
PV of Debt-to-GDP Ratio											
Baseline	**101**	**96**	**94**	**91**	**88**	**85**	**83**	**80**	**78**	**75**	**72**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	**101**	**108**	**107**	**104**	**101**	**99**	**97**	**95**	**93**	**91**	**88**
B. Bound Tests											
B1. Real GDP growth	**101**	**101**	**104**	**102**	**100**	**98**	**96**	**94**	**92**	**90**	**88**
B2. Primary balance	**101**	**100**	**103**	**99**	**96**	**94**	**91**	**88**	**85**	**82**	**79**
B3. Exports	**101**	**104**	**113**	**110**	**107**	**104**	**101**	**98**	**94**	**91**	**87**
B4. Other flows 3/	**101**	**98**	**98**	**95**	**92**	**90**	**87**	**84**	**81**	**78**	**76**
B5. Depreciation	**101**	**105**	**101**	**97**	**93**	**89**	**86**	**82**	**78**	**75**	**71**
B6. Combination of B1-B5	**101**	**97**	**100**	**97**	**94**	**92**	**89**	**86**	**83**	**81**	**78**
C. Tailored Tests											
C1. Combined contingent liabilities	**101**	**142**	**138**	**133**	**128**	**124**	**120**	**115**	**111**	**107**	**103**
C2. Natural disaster	**101**	**101**	**98**	**95**	**92**	**90**	**87**	**85**	**82**	**80**	**77**
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	**101**	**96**	**94**	**89**	**86**	**84**	**82**	**79**	**76**	**74**	**71**
TOTAL public debt benchmark	35	35	35	35	35	35	35	35	35	35	35
PV of Debt-to-Revenue Ratio											
Baseline	677	637	619	598	583	569	554	538	523	508	492
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	677	712	700	681	669	659	648	637	626	615	604
B. Bound Tests											
B1. Real GDP growth	677	665	681	666	657	649	640	630	620	610	599
B2. Primary balance	677	666	681	658	640	624	607	590	572	555	537
B3. Exports	677	690	749	727	710	695	678	659	636	614	591
B4. Other flows 3/	677	652	650	628	612	598	583	566	549	532	515
B5. Depreciation	677	700	674	644	620	598	576	553	531	509	488
B6. Combination of B1-B5	677	645	661	640	624	610	595	579	563	547	530
C. Tailored Tests											
C1. Combined contingent liabilities	677	940	911	878	850	825	800	775	750	726	702
C2. Natural disaster	677	666	649	628	613	599	584	569	554	539	523
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	677	637	620	592	574	560	545	531	515	501	485
Debt Service-to-Revenue Ratio											
Baseline	52	110	91	101	99	94	95	109	98	88	83
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	52	120	98	108	104	97	99	112	102	92	87
B. Bound Tests											
B1. Real GDP growth	52	114	98	110	108	104	107	124	113	104	99
B2. Primary balance	52	110	92	104	106	105	107	121	108	96	92
B3. Exports	52	110	93	107	105	100	101	117	110	100	94
B4. Other flows 3/	52	110	91	103	100	95	97	111	101	91	86
B5. Depreciation	52	113	99	111	107	100	102	117	107	97	91
B6. Combination of B1-B5	52	108	92	104	101	99	101	114	103	91	87
C. Tailored Tests											
C1. Combined contingent liabilities	52	110	102	108	155	149	148	168	125	120	122
C2. Natural disaster	52	112	92	103	104	99	101	115	102	93	88
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	52	110	98	111	101	84	95	108	98	88	83

Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the benchmark.
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.
3/ Includes official and private transfers and FDI.

Figure 3. Drivers of Debt Dynamics—Baseline Scenario



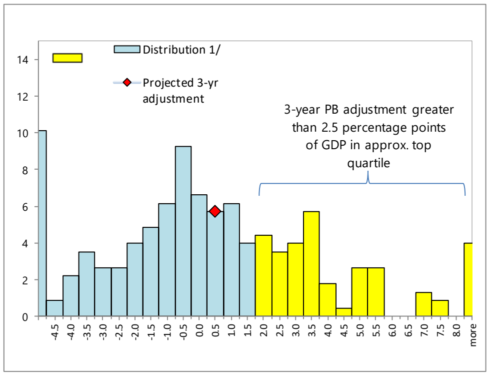
1/ Difference between anticipated and actual contributions on debt ratios.

2/ Distribution across LICs for which LIC DSAs were produced.

3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

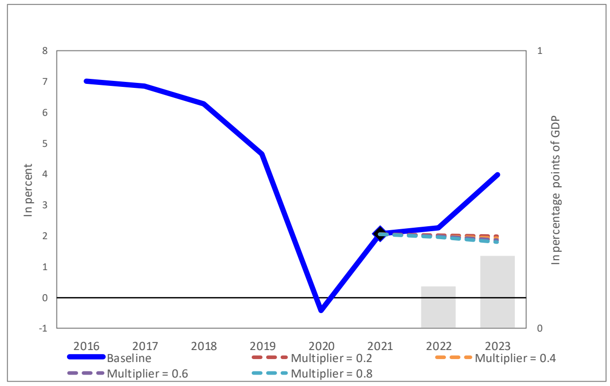
Figure 4. Realism Tools [1/]

3-Year Adjustment in Primary Balance
(Percentage points of GDP)



1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



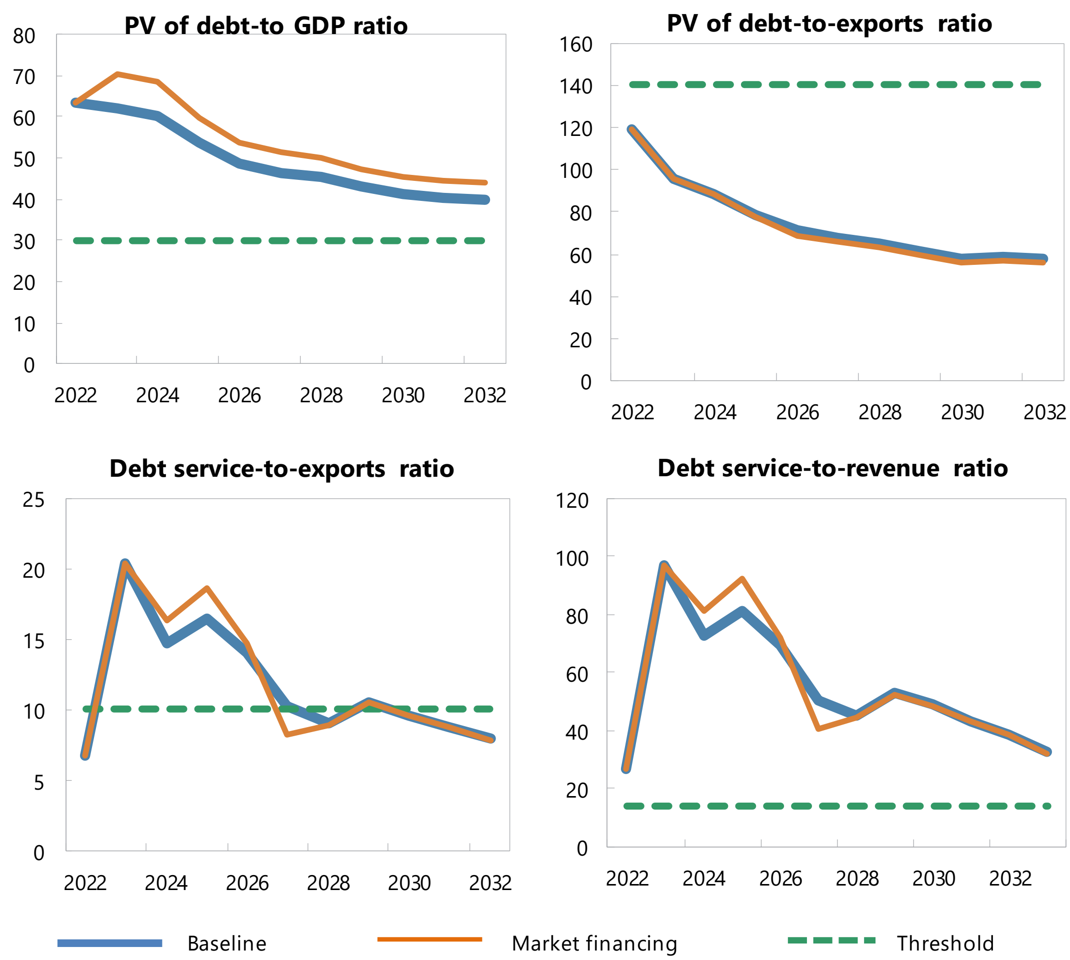
1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

[1/] The data needed to conduct the investment growth tool is not available for the DSA exercise.

Figure 5. Market Financing Risk Indicators

	GFN 1/	EMBI 2/
Benchmarks	14	570
Values	16	n.a.
Breach of benchmark	Yes	n.a.
Potential heightened liquidity needs	Moderate	

1/ Maximum gross financing needs (GFN) over 3-year baseline projection horizon.
2/ EMBI spreads correspond to the latest available data.



Sources: Country authorities; and staff estimates and projections.

Statement by Rosemary Lim, Executive Director for Lao PDR, Raja Anwar, Alternate Executive Director, and Inthiphone Xaiyavong, Advisor to the Executive Director
May 3, 2023

On behalf of our Lao PDR authorities, we thank staff for the candid dialogue and thorough policy assessment. Recovery in the Lao economy since the end of 2021 has continued well into 2022, despite new pressures as a result of the difficult external environment. Depreciation of the Lao kip against major currencies such as the US dollar and Thai baht, amid already rising food and energy prices resulted in high inflation, raised the cost of living for Lao people and increased the domestic currency values of public debt.

Against this backdrop, the authorities remain committed to improving public finances and easing foreign exchange pressures in line with the National Agenda to address economic and financial difficulties, at the same time promoting private sector-led growth by creating a more favorable business climate and accelerating governance and public administration reforms in line with the National Socio-Economic Development Plan for 2021-2025 (9th NSEDP).

Economic developments and outlook

Real GDP growth in Lao PDR increased to 4.4 percent in 2022, and is expected to grow to 4.5 percent in 2023, driven by the return of tourists, goods trade following railway and trade agreements, and future development of resource sectors, including new hydroelectric power plants. In particular, the opening of the Lao-China high-speed railway and the Thanaleng Dry Port boosted the transport and logistics sectors, resulting in an increase in wholesale and retail trade. For the first eight months of 2022, the Lao section of the Laos- China railway carried more than 1 million tons of cross-border goods, including manufacturing, agriculture and mining products. This is expected to trend up as the re- opening of China and on-going implementation of the Regional Comprehensive Economic Partnership (RCEP) should further boost external demand for Lao products.

Implementation of infrastructure projects under the 9th NSEDP will provide support for growth into the medium term. New road and rail transport system links facilitate the movement of people and goods across borders. These include connecting the domestic transport and logistics system with the Laos-China railway, ASEAN railway network (Singapore-Kunming Rail Link), and regional and international networks (Trans-Asian Railway). The Government has also set an ambitious target of 15.8 percent annual growth for electricity generation, which could be achieved by expanding electricity transmission and distribution system both within and across borders, streamlining investment regulations, and enhancing human resource capacity to provide sustainable and reliable electricity supply.

The promotion of private investment would further enhance economic diversification and inclusive growth. The authorities have enhanced investment facilitation by strengthening the implementation of one-stop investment service center and two Prime Minister's Orders aimed at streamlining investment procedures and regulations. They have also developed 12 Special Economic Zones (SEZ) and provided the necessary infrastructure to attract more foreign direct investment, while strengthening linkages between foreign- owned firms in SEZs and local firms to raise local firms' productivity and competitiveness. Moreover, the authorities are undertaking measures to achieve a well-functioning labor market through the development of Labor Market Information Systems and implementation of Active Labor Market Programs.

These positive developments notwithstanding, the authorities are cognizant of the need for firm policy action to address national economic and financial challenges. Official statistics show the depreciation in the Lao kip - calculated based on the percentage change of the average exchange rate in 2022 compared to that in 2021 – to be about 31.5 percent against the US dollar and 23.2 percent against Thai baht in 2022. The sharp currency depreciation together with higher prices of imported goods contributed to inflation rising to 23.0 percent in 2022, eroding living standards. The authorities reduced the excise tax on imported fuel to mitigate the burden of high fuel prices. The excise rate for diesel was reduced from 21 percent to 0 percent. The excise rate for regular gasoline was also reduced from 31 percent to 5 percent.

In addition, the authorities implemented a complementary combination of fiscal consolidation, tight monetary policy, and foreign exchange measures to address pressures on public finances and foreign exchange. These measures have contributed to a more stable exchange rate of Lao kip against the US dollar. The authorities agreed with staff on the need to continue to tighten monetary conditions in 2023 to contain inflation but were more optimistic than staff about the decline in inflation. They also expect that debt sustainability could be restored more quickly than projected by staff as economic growth and fiscal balances improve in the medium term.

Fiscal policy

The authorities remain committed to a tight fiscal stance by implementing fiscal consolidation through domestic revenue mobilization, the reduction of public expenditure, and debt payment deferral. Under the five-year budget plan, the authorities aim to minimize the fiscal deficit to 1 percent on average and not to exceed 3 percent.

On the revenue side, they have implemented the Prime Minister's Order on Enhancing Revenue Collection and Eliminating Revenue Leakage to expand the tax base and strengthen tax collection at border checkpoints. They have also rolled out various tax reform measures to improve revenue collection. Key measures include introduction of the Tax Revenue Information System (TaxRIS) and the integration of the Automated System for Customs Data (ASYCUDA) into TaxRIS, and connection with the database systems of line ministries and other relevant sectors including energy and mining, natural resources and environment, labor and social welfare and internal sector, to compile comprehensive tax base and revenue collection data.

Furthermore, the value-added tax rate will be increased from 7 percent to 10 percent after trial and reassessment. Legislation on land and construction tax, on environmental tax and amendments related to the collection of resource fees, concession fees and mineral export taxes will also be developed.

The authorities have initiated the Finlink system, which is a modern and centralized system to collect taxes and customs, fees and other public service charges. The Finlink is designed and approved to be the main link with the national retail payment operator, namely LAPNet, to reduce the cumbersome individual linkage with each payment service provider such as bank or fintech company. Once the system is officially launched, revenue collection is expected to increase and be more transparent.

The authorities have also streamlined public expenditure through implementation of the Prime Minister's Order on Streamlining Public Expenditure and the Decree on Enhancing the Efficiency of Public Expenditure and Assets. These legal instruments aim to enhance transparency in competitive tendering and accountability of public procurements; reduce unnecessary expenditure for public assets; design public investment consistent with planned public revenues; halt public investment projects that lack proper project appraisals or have low impact; and determine the ceiling of annual borrowings to finance public investment projects.

The combination of revenue and expenditure measures amid reopening of economic activities have contributed to public revenues growing faster than expenditure, and to the fiscal deficit falling sharply from -5.2 percent of GDP in 2020 to -1.2 percent in 2021 and -0.5

percent in 2022. The authorities are committed to sustain the fiscal deficit at low levels over an extended period to restore debt sustainability.

The authorities are in the process of revising the medium-term budget projections to increase the primary surplus. Additional sources of public revenues would come from closing leakages on import duties, new excises, the improvement of personal income tax collection, and expected revenue growth from the Thanaleng Dry Port. These will be complemented with the plan to strengthen the capacity of tax authorities on the oversight of e-tax systems and private sector capacity to provide accurate tax declarations.

Moreover, the authorities are negotiating the deferral of interest and principal servicing with bilateral creditors. Debt reprofiling and larger primary surpluses would reduce financing needs, the remaining of which would be sourced from sales of mining and hydroelectric concessions and fees, borrowing from commercial banks and domestic and external issuance of bills.

Monetary and exchange rate policies

The authorities have kept to a tight monetary stance by issuing bills, raising policy interest rate, and increasing reserve requirements for both kip and foreign currency- denominated deposits. In a country with multiple currency phenomenon – where foreign currencies are used in parallel with the Lao kip – and less developed financial market, the authorities have used multiple tools to contain inflation. The issuance of kip-denominated bills and an increase in the policy rate could reduce the money supply in kip, not the US dollar and Thai baht. The policy rate was raised from 3.1 percent in May 2022 to 6.5 percent in October and to 7.5 percent in February 2023. Meanwhile, the authorities increased reserve requirements for kip from 5.0 to 5.5 percent and for foreign currencies from 5.0 to 8.0 percent in 2023. The authorities stand ready to further tighten monetary conditions, but stress that this should be done gradually, in a way that supports economic recovery while keeping a close eye on containing inflation.

Moreover, the authorities have prioritized access to foreign exchange for fuel importing firms and closed foreign exchange bureaus. Prior to closures of foreign exchange bureaus, commercial banks sold foreign exchange to foreign exchange bureaus using the higher parallel market exchange rate, while restricting sale of foreign exchange to importing firms that by regulation must be transacted based on a daily reference exchange rate determined by the Bank of Lao PDR (BOL). This resulted in a large gap between the commercial bank rate and the parallel market rate. Following the BOL decision to close foreign exchange bureaus in January 2023, commercial banks should directly supply foreign exchange to importing firms who need it, using the commercial banks' exchange rate. This should enhance the mechanism of foreign exchange management and increase foreign exchange liquidity at commercial banks.

In June 2022, BOL issued its bills with the total value of 5 trillion kip for general public, and in February 2023 and March 2023, rolled over 2 trillion kip for general public and 1 trillion kip for open market operations. BOL also requested for technical assistance from IMF CDOT to help develop forecasting and policy analysis capabilities to facilitate BOL decision making and more effective monetary policy implementation.

Financial sector policies

The banking system remains profitable and well-capitalized. As of the third quarter of 2022, return on equity and return on assets reached 15.8 and 1.4 percent, respectively. Meanwhile, the regulatory capital to risk-weighted assets and the capital to asset ratios recorded at 18.5 and 14.6 percent respectively, way above the regulatory minimum of 8 percent. Non-performing loans remained low at 2.1 percent of total gross loans. BOL has plans to gradually phase out exemption implemented as part of COVID-19 measures in 2023.

The liquidity of the banking sector is sufficient, taking into account the short-term liquidity ratio published in the Financial Soundness Indicators since 2021, in which the liquid assets to short-term liabilities ratio is at 86.4 percent in Q3 2022 increasing from 80.7 percent in Q4 2021. Moreover, the cash reserve ratio of the banking system at about 4.3 percent, of which 3.8 percent is for foreign currency, is well above the regulated level (2 percent) in Q3 2022 and similar to 2019 prior to the COVID-19 pandemic, showing that the cash balance of the banking sector is sufficiently liquid for their day-to-day operations. Although there are some short-term issues with foreign exchange liquidity, it is manageable and the current foreign exchange liquidity pressures would be eased by recent measures. Two state-owned commercial banks have been restructured to improve their performance. The authorities remain vigilant to risks and vulnerabilities to ensure the stability of financial system.

On the capital adequacy ratio of Banque Pour Le Commerce Exterieur Lao Public (BCEL), the slump of its CAR in Q3 2022 is primarily due to flaws in data migration from the implementation of International Accounting Standards. This was corrected in Q4 2022. Additionally, BOL has imposed a prompt corrective action on the bank to submit a remedial plan to BOL, which is currently submitted.

In addition, BOL is in the process of finalizing a number of major prudential regulations to be issued this year, including the amendment of the Law on Commercial Banks, the Decision on Capital Adequacy Requirements, Decision on Net Open Positions, Decision on Liquidity Risk Management, and Notice on Phasing out of Loan Forbearance. The draft amendment of the Law on Commercial Banks requires banks to inject additional capital, restrict foreign exchange operations, and strengthen the dissolution and bankruptcy processes. BOL has issued a notice to commercial banks to submit comments on the draft Capital Adequacy Requirements, which will be in line with Basel III as well as the Decision on Liquidity Risk Management that includes the introduction of Liquidity Coverage Ratio.

Structural reforms

The authorities agree that structural reforms are key to support the economic growth agenda and promote resilience and inclusive growth. They recognize the importance of leveraging the private sector as an engine for growth through reducing the regulatory burden on small businesses; enhancing the consistent and transparent implementation of tax and regulation across all businesses; increasing registration and labour formality; and improving educational attainment and skills training. The government is implementing policy measures under the 9th NSEDP to address these issues, including enhancing trade facilitation to reduce regulatory burden and trade costs; creating a competitive environment for micro, small, and medium-sized enterprises (MSMEs); and developing human resources and workforce skills to improve labour productivity.

The authorities are in the early stage of amending the Anti-Money Laundering and Combating Financing of Terrorism (AML/CFT) law (expected to be completed by 2024) to further reduce risks of criminal economic activity and promote integrity and stability of financial markets. Efforts are underway to enhance implementation capacity and AML/CFT risk awareness of relevant authorities. Commercial banks have put in place rules and mechanisms to support AML monitoring, and to strengthen their staff's capacity and knowledge in this area The National Committee for AML/CFT supported by the AML Intelligence Office have disseminated AML/CFT information to key stakeholders through various channels, including in-person trainings and publications.

Conclusion

The Lao authorities are mindful of the significant challenges that lie ahead to achieve targeted growth and progress toward sustainable development. To address the country's economic challenges, the authorities are determined to put in place and strengthen the necessary steps and in particular are strongly committed to put public debt on a downward trajectory. These efforts should enhance fiscal sustainability and reduce inflation, while promoting private sector development and raising labor productivity to boost economic growth.

The authorities emphasized the importance to address structural weaknesses and create solid foundations to support development goals going forward. In the near term, policies will support growth through ongoing fiscal and monetary consolidation, sound exchange rate management to combat inflation, efficient market functioning and financial stability.

In this context, the authorities would like to express their heartfelt gratitude to the Fund for the consistent support through various technical assistance projects and insightful policy discussions over the years. All recommendations will be taken into consideration and implemented at the appropriate pace to achieve the intended policy outcomes. The authorities look forward to continued engagement as they move forward in their reform agenda.