INTERNATIONAL MONETARY FUND

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LAO PEOPLE'S DEMOCRATIC REPUBLIC

February 2017

2016 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR LAO PEOPLE'S DEMOCRATIC REPUBLIC

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 2016 Article IV consultation with Lao People's Democratic Republic, 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 January 30, 2017 consideration of the staff report that concluded the Article IV consultation with Lao People's Democratic Republic.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on January 30, 2017, following discussions that ended on September 30, 2016, with the officials of Lao People's Democratic Republic on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on January 6, 2017.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the International Development Association (IDA).
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for Lao People's Democratic Republic.

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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FOR IMMEDIATE RELEASE
February 15, 2017

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Washington, D. C. 20431 USA

IMF Executive Board Concludes 2016 Article IV Consultation with the Lao People's Democratic Republic

On January 30, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with the Lao People's Democratic Republic.

Real GDP growth is expected to moderate from 7.5 percent in 2015 to 7 percent in 2016. Domestic activity has slowed following a less favorable external environment, and credit growth has also moderated from a high level. Inflation is expected to remain low and stable at around 2 percent at end-2016, aided by a strengthening kip exchange rate. The current account deficit is expected to remain high at 17 percent of GDP in 2016 but has narrowed from 20 percent of GDP in 2014. Gross international reserves, at 2 months of prospective imports of goods and services (US$998.6 million, September 2016) remain low by partner country standards. While the overall banking system is well capitalized, state-owned bank balance sheets show signs of weakness, with rising nonperforming loans (NPLs) and weak capital and profitability. The fiscal deficit is expected to have widened to 6 percent in fiscal year 2016 owing to weak tax revenue growth and rising current spending. Public-and-publicly-guaranteed debt (excluding arrears) is projected at 68 percent of GDP in nominal terms (56 percent of GDP in present value terms) at end-2016, a level which elevates the risk of debt distress from medium to high.

As growth continues to moderate in the near-term, inflation is projected to remain in low single digits. The current account deficit is projected to widen to around 19 percent of GDP in 2017 due to the execution of large infrastructure projects with foreign direct investment, and reserves are expected to remain at around 2 months of imports. On current trends without the resumption of fiscal consolidation, the fiscal deficit is expected to remain at around 5 percent and the public debt could rise to around 70 percent of GDP. Risks are on the downside. A failure to consolidate the fiscal position and bring down public debt could undermine confidence in the government's macro policy framework, raise public debt further and worsen the external position. The economy is also exposed to external shocks, notably a further regional growth slowdown and a

[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.

deterioration in terms-of-trade and capital inflows. Financial risks could also present risk to macroeconomic stability, particularly the growing foreign currency debt financed by foreign borrowing, and the existence of balance sheet currency mismatches in the private non-bank sector.

Executive Board Assessment[2]

Executive Directors commended the authorities for their strong macroeconomic performance and progress on poverty reduction despite economic challenges. Directors noted, however, that there are significant vulnerabilities in the external, fiscal, and financial sectors, and that risks to the outlook could materialize from a regional growth slowdown, tightening in global monetary conditions, and capital flow volatility. Against this background, Directors emphasized the need for resuming fiscal consolidation, tighter monetary conditions with gradually increased exchange rate flexibility over the medium-term, strengthened financial sector supervision, and reforms to support economic diversification and private sector development.

Directors considered that growth-friendly fiscal consolidation anchored on reducing public debt to 55 percent of GDP over the course of the next 5 years would reduce the risk of debt distress and help strengthen the external position. They welcomed efforts to contain the public sector wage bill, improve tax administration, and reduce non-concessional financing. To ensure successful consolidation and space for well-targeted social and capital spending, Directors recommended increased measures to mobilize tax revenues, reduce exemptions, and rationalize current expenditures. Efforts to formulate a medium-term fiscal framework, enhance fiscal transparency, and reduce fiscal arrears were also encouraged.

Directors noted that the exchange rate remains overvalued and international reserves are low for precautionary purposes, particularly in the context of a large current account deficit, although they also noted that in the past the current account has largely been financed by foreign direct investment. They recommended the authorities continue allowing the exchange rate to move gradually within the official band, supported by tightening of kip liquidity, to help accumulate gross international reserves and reduce external vulnerabilities. Directors agreed that a cautious approach was warranted, given currency mismatches in the non-bank private sector, and the use of the exchange rate as an anchor for inflation. Further reform of the monetary and financial framework would help facilitate more flexibility in the future.

Directors noted the rise in nonperforming loans (NPLs) and undercapitalization of state-owned banks. To safeguard macro-financial stability, they recommended promptly addressing NPLs, phasing out regulatory forbearance, strengthening sound lending practices and supervision, and recapitalizing state-owned banks. Directors emphasized the importance of addressing supervisory weaknesses and developing a crisis management framework. They welcomed the

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[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.

AML/CFT law, and encouraged full implementation of the action plan as agreed with the Financial Action Task Force.

Directors welcomed progress on product and labor market openness and gains in poverty reduction. To support more inclusive and broad-based growth, they encouraged further reforms aimed at diversifying the economy, boosting private sector activity, and improving the business climate. In this context, trade integration and improvements in education and health infrastructure were encouraged. Enhancing financial deepening and financial access by small and medium-sized enterprises would also support macro stability and growth.

Directors welcomed the authorities' interest in improving the quality and publication of economic and financial data, with technical assistance from the Fund and other development partners as needed.

Lao P.D.R.: Selected Economic and Financial Indicators, 2011–18 1/

	2011	2012	2013	2014	2015	2016 Proj.	2017 Proj.	2018 Proj.
GDP and prices (percentage change)								
Real GDP growth	8.0	7.9	8.0	8.0	7.5	6.9	6.8	6.7
CPI (annual average)	7.6	4.3	6.4	4.1	1.3	2.2	2.3	2.7
CPI (end year)	7.7	4.7	6.6	2.4	0.9	2.1	2.3	2.6
Revenue and Grants	22.4	24.1	23.9	23.2	24.0	18.5	19.4	19.7
Of which: Resources	3.4	3.7	3.2	3.0	2.2	2.1	2.1	1.9
Of which: Mining	2.7	3.0	2.2	2.0	1.3	0.9	0.8	0.6
Of which: Hydro power	0.7	0.7	0.9	1.0	0.9	1.2	1.3	1.2
Of which: Grant	6.0	6.4	5.7	5.3	5.0	2.3	2.8	2.7
Expenditure	24.1	24.6	29.6	27.8	26.7	24.4	24.6	24.9
Expense	11.3	12.0	17.3	15.2	15.7	16.4	15.9	16.2
Net acquisition of nonfinancial assets 2/	12.9	12.6	12.3	12.6	11.0	8.0	8.7	8.7
Overall balance	-1.7	-0.5	-5.6	-4.5	-2.7	-5.9	-5.2	-5.2
Nonmining balance 3/	-4.5	-3.5	-7.8	-6.5	-4.0	-6.8	-6.1	-5.8
Public and public guaranteed debt (in percent of GDP)	56.0	56.8	62.5	64.9	65.8	67.8	69.0	70.3
Money and credit (annual percent change)								
Reserve money	16.2	27.2	7.7	30.3	6.6	9.8	11.0	…
Broad money	28.7	31.0	18.8	23.4	14.7	13.0	16.0	…
Bank credit to the economy 4/	45.8	26.6	34.5	14.2	16.8	17.2	15.0	…
Bank credit to the private sector	39.3	35.1	36.3	11.7	19.3	17.6	18.0	…
Balance of payments								
Exports (in millions of U.S. dollars)	3,120	3,323	3,883	4,687	4,387	4,804	5,124	5,596
In percent change	42.1	6.5	16.9	20.7	-6.4	9.5	6.7	9.2
Imports (in millions of U.S. dollars)	4,642	6,382	7,352	8,017	7,533	7,684	8,708	9,565
In percent change	28.1	37.5	15.2	9.1	-6.0	2.0	13.3	9.8
Current account balance (in millions of U.S. dollars)	-1,502	-2,808	-3,195	-2,450	-2,116	-2,351	-2,813	-3,181
In percent of GDP	-18.6	-29.9	-29.6	-20.7	-16.8	-17.1	-19.0	-19.7
Gross official reserves (in millions of U.S. dollars)	677	740	662	816	987	1,476	1,587	1,622
In months of prospective goods and services imports	1.2	1.1	0.9	1.2	1.5	1.9	1.9	1.8
External public debt and debt service								
External PPG debt								
In millions of U.S. dollars	3,666	4,262	5,489	6,061	6,495	7,422	8,240	8,987
In percent of GDP	45.5	45.3	50.9	51.1	51.7	54.1	55.6	55.7
External PPG debt service								
In percent of exports	2.7	4.2	5.1	5.6	5.2	7.1	7.7	9.1
Exchange rate								
Official exchange rate (kip per U.S. dollar; end-of-period)	8,019	7,982	8,030	8,096	8,119	…	…	…
Real effective exchange rate (2005=100)	135.0	136.3	144.9	153.5	166.6	…	…	…
Nominal GDP								
In billions of kip	64,727	75,251	84,572	95,406	102,543	112,188	122,518	134,219
In millions of U.S. dollars	8,062	9,400	10,788	11,851	12,561	13,722	14,831	16,135

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

1/ Public finances are on a fiscal year (October to September) while other data are on a calendar year.

2/ Includes off-budget investment expenditures.

3/ Net lending/borrowing excluding mining revenue.

4/ Includes Bank of Lao P.D.R. lending to state-owned enterprises and subnational levels of government.

INTERNATIONAL MONETARY FUND

LAO PEOPLE'S DEMOCRATIC REPUBLIC

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION

January 6, 2017

KEY ISSUES

Context. Growth remains strong, although it has slowed as the economy faces headwinds from major trading partners, low metals prices and a slowdown in agriculture. Inflation has risen slightly but remains contained. Domestic risks include a sustained reversal of fiscal consolidation, high public debt and weak public banks. On the external front, a tightly managed and overvalued exchange rate, low reserves and dollarization make Laos vulnerable to terms of trade shocks or capital flows reversals.

Main policy recommendations.

Policies should focus on increasing buffers, preparing for exchange rate flexibility in the medium-term, and addressing structural constraints to boost medium-term growth.

- Fiscal policy: Resuming fiscal consolidation will support sustainability, increase fiscal space, help contain the current account deficit and accumulate reserves.

- Monetary and financial policy: Building capital buffers in banks and improving regulation and supervision will increase resilience to shocks. Removing caps on interest rates will support efficient allocation of credit, market development and de-dollarization. Accumulating international reserves will help address external risks.

- Exchange rate and markets: Developing local money, foreign exchange and government debt markets to support the implementation of an active monetary policy framework, and developing the institutional framework for monetary policy, will allow for increasing exchange rate flexibility in the medium-term. Allowing limited flexibility in the short-term will support the accumulation of reserves, foreign exchange market development and risk management.

- Structural policies: Addressing constraints in the ease of doing business, upgrading human capital and financial inclusion will help support diversification, competitiveness, and more inclusive growth.

Approved By
Mr. Markus Rodlauer and Ms. Yan Sun

Discussions took place during September 19–30, 2016. The staff team comprised G. Bannister (Head), S. Rafiq and H. Nishizawa (all APD), J. Dunn (Resident Representative) and N. Ha (Resident Representative's office) and Ms. Sereevoravitgul (TAOLAM). Ms. Omany, Ms. Pharakhone and Ms. Savannarideth of the IMF Laos office worked with the staff team. Mr. Omar (Executive Director) and Mr. Nguyen (OED) joined the concluding meetings. Ms. Jamasali and Ms. Zhuang assisted in the preparation of this report.

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CONTEXT

1. Context. Lao P.D.R. is a small, landlocked economy that has experienced rapid growth based on capital intensive investments in the energy sector. Progress has been made in achieving the Millennium Development Goals, but poverty remains high, inequality has increased (Figure 1)**,** and Laos' growth model needs to become more inclusive, in particular by integrating the mainly agrarian population into more productive activities. The authorities have maintained macroeconomic stability by anchoring inflation to a stable exchange rate and bringing down the fiscal deficit in FY 13/14 and FY 14/15.[1] However, fiscal progress was reversed in FY 15/16 and the economy has accumulated vulnerabilities in the form of high public debt, a progressively overvalued real exchange rate and pockets of weakness in the banking sector. With few buffers to address shocks, the economy remains vulnerable to a rapid deterioration in the external environment, a sustained deterioration in the fiscal position, or a rapid reversal of foreign capital flows.

2. Past IMF Advice. Fiscal consolidation was introduced in FY 13/14 and FY 14/15, in line with IMF advice, but was reversed in FY 15/16. The exchange rate remains tightly managed with respect to the US dollar, inhibiting the accumulation of international reserves. Meanwhile, public debt has continued to rise. The authorities have been working to improve bank supervision, assess risks and address weakness in state banks. IMF policy advice has been supported by technical assistance on macroeconomic policy, revenue and customs administration, interbank market development, and banking supervision.

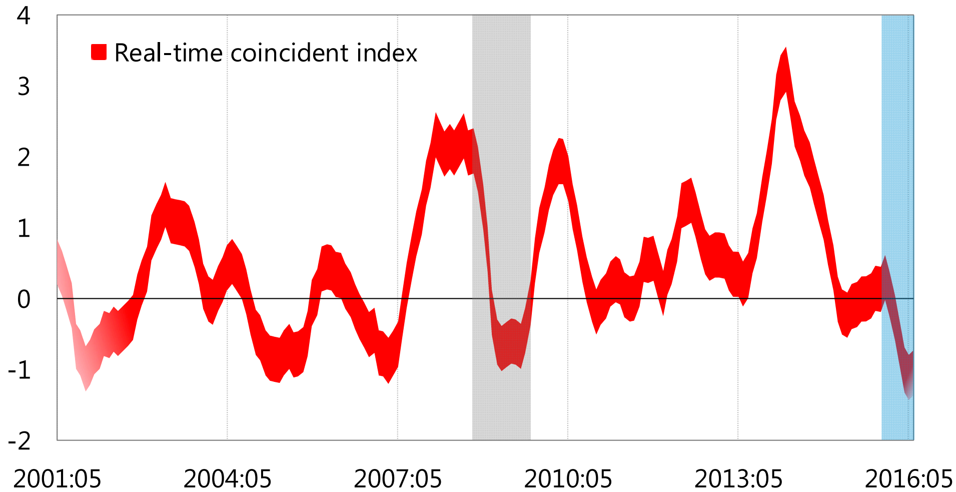
DEVELOPMENTS, OUTLOOK, AND RISKS

3. Growth and inflation. Real GDP growth decelerated from 8 percent in 2014 to 7½ percent in 2015, and is expected to decline further to around 7 percent in 2016. A real-time coincident indicator of economic activity (see chart) shows that activity has been slowing in 2016.[2] The economy faces headwinds from a slowdown in major trading partners, lower metals prices, and poor weather in agriculture (30 percent of the economy). Headline inflation decelerated to around 1 percent in 2015 following international oil prices, but has rebounded to around 2 percent in October 2016 on higher domestic food prices. Core inflation remains below 1 percent due to the pass-through of lower international fuel prices and a strengthening of the currency.

[1] The fiscal year in Laos runs from October 1 to September 30. Starting in 2017, the fiscal year will coincide with the calendar year.

[2] The coincident indicator is constructed using a state-space model and Kalman filter estimation (see Rafiq, S. 2016, IMF Working Paper No. 16/214), using three high frequency indicators of economic activity: real exports (to proxy for industrial production); real imports (to proxy for domestic private consumption); and tourism growth (to proxy for service sector activity). A value greater than zero indicates above trend growth; a value below zero indicates slowing economic activity.

Real-Time Coincident Indicator Shows Slowing Economic Activity



Source: IMF staff calculations.
The Laos coincident index is constructed using a state-space model and Kalman filter estimation (see Rafiq, S. 2016. IMF Working Paper 16/214). The coincident indicator is constructed using three high frequency indicators of economic activity: (i) real exports to proxy for industrial production; (ii) real imports to proxy for changes in domestic private consumption; (iii) tourism growth to proxy for changes in the service sector growth. A value greater than zero indicates above trend growth, and a negative value indicates slowing economic activity.

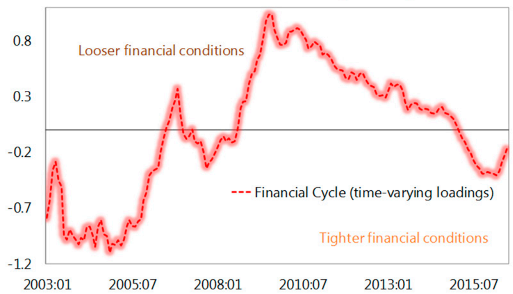
4. The external sector remains vulnerable. Staff's assessment is that there continue to be significant vulnerabilities to external shocks and the external position needs strengthening (Box 4). While the current account deficit fell by 4 percentage points of GDP to 16.8 percent of GDP in 2015, mainly due to a decline in imports related to new hydropower projects, the non-resource current account deficit (excluding mining and hydropower) fell by only 1 percent of GDP and remains high at 7½ percent of GDP. Gross international reserves are low at 1½ months of imports and 34 percent of foreign currency liabilities in the banking sector. The nominal exchange rate has been maintained within a very narrow band with respect to the US dollar.[3] While this has helped anchor inflation expectations, it has led to an appreciation in the real effective exchange rate (estimated at between 20 and 40 percent), as Laos' major trading partners have allowed their currencies to depreciate against the US dollar.

5. Credit growth has slowed to a more sustainable level, and broader financial conditions have tightened, but risks related to dollar lending remain (Boxes 2 and 3). A combination of fiscal consolidation, a deterioration of bank and nonbank private sector balance sheets, and slower economic activity led to a decline in credit growth in 2014–15. In response, the authorities introduced a cap on kip deposit and lending rates in mid-2015. Credit growth recovered to around 25 percent in mid-2016, although the acceleration was mostly in foreign currency lending, raising worries about re-dollarization. The increase in dollar lending is also associated with a sharp

[3] While the de jure arrangement is a managed float, since January 2015 the kip has been maintained within a 2 percent band against the U.S. dollar, and the de facto classification is a stabilized arrangement.

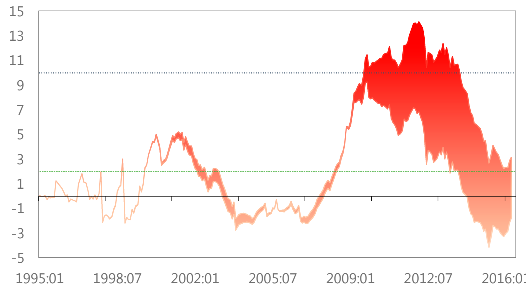
decline in commercial bank net foreign assets (NFA), suggesting that dollar credit in Laos is being increasingly funded by non-core foreign sources.[4]

Financial Conditions Index Shows a Tightening



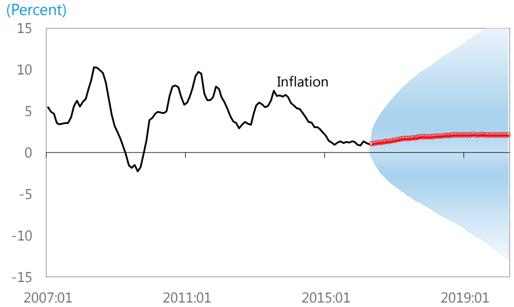
Source: IMF staff calculations.
The financial cycle index (FCI) for Laos is calculated using a dynamic time-varying factor model with time-varying loadings (see Rafiq. S. 2016. IMF Working Paper 16/214). The model contains cross-border borrowing, private sector credit and deposit growth, various credit gaps, as well as asset and bond prices. The FCI controls for fluctuations in real economic activity and, therefore, represents 'pure' financial conditions. Positive (negative) values imply looser (tighter) financial conditions.

The Credit Gap Has Moderated
(Percent of GDP)



Source: IMF staff estimates.
The credit-to-GDP fan chart is based on a one-sided Hodrik-Prescott filter estimated using a Kalman filter, with multiple smoothing parameters to account for uncertainty regarding financial deepening.

Inflation Projected to Remain Moderate
(Percent)



Source: IMF staff calculations.
The inflation forecast is calculated using a Bayesian VAR with a Minnesota prior containing economic activity, inflation, the exchange rate and commodity prices at a monthly frequency.

6. Outlook. GDP growth is expected to moderate to 6.8 percent in 2017–18, and to rise to around 7 percent in the medium-term, supported by a resumption of resource-related FDI (mainly hydropower). Inflation is expected to remain moderate at around 3 percent. The baseline scenario assumes a rise in the fiscal deficit to around 6 percent of GDP in FY 15/16. Over the medium-term the deficit is expected to improve gradually to 5 percent of GDP as overall revenues recover and expenditure is contained. The current account deficit will widen slightly reflecting higher imports to support hydroelectric and railway projects, financed by private capital inflows, but will narrow in 2021 as project-related imports fall and electricity exports come on line. Gross international reserves are expected to remain low at around 1½ months of imports. Credit growth is projected to remain at around 20 percent in 2016–17, broadly supportive of growth but below a rate that, in staff's assessment, would raise concerns about financial stability (Box 2). Under an adjustment scenario with a resumption of fiscal consolidation, greater exchange rate flexibility, bank recapitalization and structural reforms, short-term growth would be lower but the medium-term growth path would be more robust and near-term vulnerabilities would be reduced (Box 5).

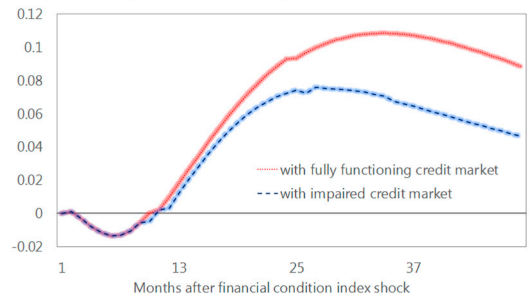
[4] There has also been a sharp rise in claims by BIS reporting institutions on banks in Laos. As of the third quarter of 2015, BIS exposure was approximately 10 percent of GDP, compared to 1 percent of GDP in 2012.

7. The main risks to this outlook include:

- ***Domestic fiscal risks***. A sustained reversal in the momentum of fiscal consolidation driven largely by weak revenue growth would lead to further increases in the public debt ratio and a deterioration of the external position. This would have a negative effect on confidence and growth, given that the Debt Sustainability Analysis (DSA) puts Laos' public and publicly guaranteed (PPG) external debt at high risk of debt distress (Debt Sustainability Analysis).

- ***Banking sector risks.*** Risks could also materialize in the undercapitalized state-owned banks (accounting for around 45 percent of the banking system by assets), through deposit flight, and an abrupt depreciation of the exchange rate, which could further undermine solvency, impairing economic growth.

Weak Banking System Is a Drag on Economic Growth



Source: IMF staff calculations.
The projection is based on the local projection method in Jorda (2005). The simulation is based on a model containing economic activity, a financial conditions index, and credit growth. The response is a projection of economic activity to a loosening in financial conditions.

- ***Dollarization and currency mismatches*** *(Box 3)*. The high level of dollarization and foreign borrowing has led to balance sheet mismatches in the non-bank private sectors estimated conservatively at about 4 percent of GDP. A kip depreciation of 30 percent (on the order of the estimated current overvaluation) would add another 4 percent of GDP to bank and nonbank private sector liabilities, further exacerbating balance sheet weakness, increasing NPLs and affecting growth in a negative feedback loop (Box 3). Public sector liabilities are also vulnerable to exchange rate movements as about 60 percent of the public debt is denominated in US dollars.

- ***Other domestic risks.*** Continued erosion of competitiveness from the kip's real appreciation, coupled with weak productivity and low private investment, would damage growth prospects, particularly for nascent non-commodity exports.

- ***External risks*** *(Box 1)*. With a thin reserves cushion, the exchange rate remains vulnerable to a reversal in private capital flows or a rapid deterioration in the terms-of-trade. In the worst case, an abrupt depreciation of the exchange rate could undermine banking system confidence and financial stability. A sharp slowdown in China would impact commodity and agriculture exports and tourist arrivals. A disorderly unwinding of financial conditions in China or globally would be felt through lower foreign direct investment and capital flow reversals.

Lao P.D.R.: Risk Assessment Matrix

	Event	Up/Down-side	Probability	Impact	Transmission	Policy Recommendations
Domestic Risks	Fiscal consolidation is reversed	↓	Medium	High	Public debt rises further, current account deficit deteriorates, loss of confidence, capital outflows, and forced fiscal retrenchment	Maintain fiscal consolidation efforts; raise non-mining tax revenues; rationalize current expenditures; limit non-concessional external borrowing.
	Capital positions for SOCBs deteriorate further due to rising NPLs	↓	High	High	Sharp slowdown in credit, tightening in domestic liquidity conditions, capital outflows, putting further pressure on the exchange rate.	Eliminate forbearance and ensure that all banks meet the mandatory minimum CAR to reduce possibility of external shocks being amplified by banking system failure. Introduce regulations to better account for NPLs.
External risks	Terms of trade shock	↓	Medium	High	Current account deficit deteriorates, abrupt exchange rate depreciation leads to capital flight and banking system instability, worsening the fiscal deficit, and raising public debt levels.	Maintain a fiscal consolidation path, allow limited exchange rate depreciation and build up international reserves and government deposits. Expedite efforts to raise non-mineral tax revenues.
	Significant China slowdown	↓	Low/ Medium	Medium	Lower exports coupled with weaker FDI and banking sector flows.	Expedite structural reforms to accelerate diversification. Ensure adequate emergency liquidity.
	Rebalancing in China demand	↓	High	Medium	Lower commodity and agriculture exports.	Expedite policies to promote export diversification. Improve the business climate and accelerate compliance with WTO commitments.
	Sharp asset price decline and decompression of global credit spreads	↓	Medium	Medium	FX deposit outflows, foreign reserves fall.	Build up foreign reserves to buffer against external shocks; allow for greater exchange rate flexibility; where appropriate release limited short-term liquidity to troubled banks; expedite work on a crisis management framework; increasing reserve requirements on foreign deposits during episodes of strong capital inflows would create a buffer that can be liberated when foreign deposits flow out in response to external shocks.
	Surge in the U.S. dollar strength	↓	High	Medium	Balance sheet impact from currency mismatches, weaker exports, tourism receipts, FDI, and bank lending from other partner countries	Maintain macroeconomic stability and develop interbank and foreign exchange markets to enhance monetary policy effectiveness and to reduce dollarization. Expedite structural reforms to boost non-price competitiveness

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.

8. **The authorities broadly concurred with the near-term outlook and risks.** They acknowledged the likelihood of lower growth but emphasized the importance of more inclusive and diversified growth going forward. They agreed that rising public debt posed a risk, and on the need for resuming efforts to increase fiscal revenue and consolidation. While they acknowledge weakness in public banks they pointed to the overall soundness of the system, efforts to improve supervision, and plans for restructuring. They also emphasized that external sector risks are mitigated by the large FDI inflows into the hydro and energy sectors and the fixed foreign currency price and quantity contracts for electricity exports, which are not affected by the exchange rate. While they acknowledged that the managed exchange rate had some costs, they considered that the risks to inflation and balance sheets of introducing greater flexibility warranted caution.

POLICY DISCUSSIONS

The key policy challenges are to safeguard macroeconomic stability and put in place the conditions for sustainable medium-term growth. To reduce risks and rebuild buffers, fiscal policy should resume the momentum for growth friendly consolidation, and weakness in the banking sector should be addressed. At the same time, reforms should focus on preparing for greater exchange rate flexibility and accumulating reserves. Gradually allowing the exchange rate to depreciate in line with market forces will support these objectives. Addressing structural constraints, integrating the population into productive activity and increasing financial inclusion will further support inclusive growth.

A. Fiscal Policy: Rebuilding Fiscal Buffers

9. **The momentum of fiscal consolidation has been reversed, and the composition of spending has deteriorated.** The overall deficit in FY 15/16 is expected to rise to 5.9 percent of GDP from 2.7 percent of GDP in FY 14/15, due to a large decline in tax and non-tax revenue. Tax revenue has been affected by the economic slowdown and the decline in commodity prices, while lower non-tax revenue reflects the absence of the sale of state assets, which supported revenue by about 1 percent of GDP on a one-off basis in 2015. Capital expenditure fell in line with lower externally financed investment (financed by grants), but current expenditure rose, mainly due to an increase in interest payments and transfers, leading to a deterioration in the composition of spending. Part of the deterioration thus reflects a deficit of a more structural nature which needs to be addressed.

Lao P.D.R.: Fiscal Outcome and Projections
(Percent of GDP)

	2013	2014	2015	2016 (Proj.)
Total Revenue	23.9	23.2	24.0	18.5
Tax	15.8	15.7	15.7	14.3
Non-tax	2.5	2.3	3.3	1.9
Grants	5.7	5.3	5.0	2.3
Total Expenditure	29.6	27.8	26.7	24.4
Current	17.3	15.2	15.7	16.4
Capital	12.3	12.6	11.0	8.0
Fiscal Balance	-5.6	-4.5	-2.7	-5.9

10. **Public debt has risen and has become less concessional.** The PPG debt ratio reached 65.8 percent of GDP at end-2015, from 62.5 percent at end-2013. The increase is mainly due to a rise

in the stock of domestic treasury bills and bonds, higher borrowing from Thailand and China for investment in power generation projects, and the issuance of sovereign bonds in the Thai market (DSA Box 1). The increase in debt has been accompanied by a decline in the degree of concessionality, with 12.8 percent of the debt on commercial terms at end-2015, compared to about 3 percent at end-2013. As a result, the DSA assesses Laos at high risk of external debt distress, a deterioration from the previous DSA, where it was on the borderline between moderate and high risk (DSA). Given the high proportion of public debt denominated in foreign currencies (especially the US dollar), the DSA also highlights the vulnerability of the public balance sheet to a large exchange rate depreciation.

11. It is urgent to restore fiscal space by resuming a growth friendly fiscal consolidation and reducing the debt ratio. This will safeguard macroeconomic stability, particularly under a tightly managed exchange rate, and would build financial buffers to address real and financial shocks. Fiscal policy could be anchored to reducing the public debt ratio to 55 percent of GDP by 2021, a level that would lower the debt distress rating from high to moderate. Including the cost of public bank recapitalization, this would require maintaining an average overall fiscal deficit of around 3½ percent of GDP and a non-mining fiscal deficit not greater than 4½ percent of GDP over the next five years (Box 5).[5] Achieving this goal would require strong and permanent revenue and expenditure measures so that the burden of adjustment does not fall on priority social and capital expenditures, and the fiscal adjustment is sustainable. In particular:

- ***<u>Tax policy and administration</u>*.** A key reform objective is to boost the tax-to-GDP ratio to build space for priority spending and investment. Non-commodity revenues could be raised by broadening the tax base, including by reducing exemptions, and strengthening tax administration. The authorities have taken some important measures recently, improving the valuation of imported vehicles to calculate import taxes, eliminating exemptions for oil imports in public projects, revising excise taxes, and better administering the VAT**.** Nevertheless, further work is necessary to reach revenue targets:

  - ***Revise exemptions***. The exemption regime in Lao P.D.R. is extensive and anecdotal evidence suggests there are important leakages. A first step in revising the regime is to conduct a tax expenditure study to understand where exemptions are concentrated. Centralizing the administration and issuance of exemptions, and ensuring regular reporting, will lead to a more transparent regime. In addition to the exemption regime, unifying the VAT rate between the Special Economic Zones (SEZs) and the rest of the economy would simplify VAT administration and improve tax efficiency.

  - ***Revenue Measures.*** Gradually increasing excise rates on automobiles and other luxury goods, and introducing a land tax or property tax on buildings, would support the revenue base.

[5] The cost of recapitalizing public banks is estimated at about 1.8 percent of GDP.

- ***Improve Tax Administration***. Short-term priorities for reform include: improving compliance of large and medium taxpayers; restructuring the tax department to better reflect priority functions; establishing a full Large Taxpayer Office (LTO); and bringing district tax offices formally under the control of the Director General of the Tax Department. It will also be important to carefully manage the implementation of the government's planned investments in information technology for the tax office. The authorities' plan to introduce point-of-sale (POS) recording of transactions for retail businesses and to require strengthened bookkeeping for presumptive taxpayers are welcome.

- ***Public financial management reforms***. Focus should also be on restraining non-capital spending by accelerating civil service reform to lower the public sector wage bill; curtailing non-essential expenditures and off-budget capital spending; and eliminating fiscal arrears. To enhance the tracking of the government's financial operations, reduce off-budget spending, and strengthen control over expenditure, the authorities should push ahead with a Treasury Single Account (TSA).

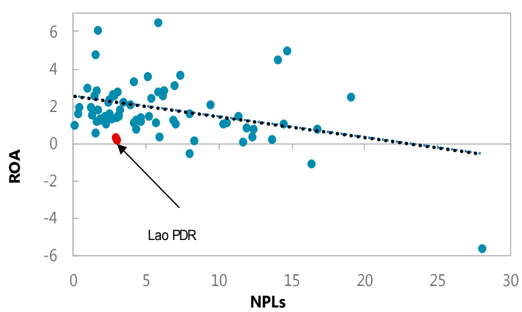
- ***Medium-term fiscal and debt management framework.*** Developing a medium-term fiscal framework, that includes a revenue strategy for modernizing tax and customs policy, the legal framework and administration, as well as a public expenditure review to identify opportunities to improve efficiency, would support a well-planned sustainable fiscal reform that could identify and protect essential social spending and support growth. A medium-term debt strategy could also help anticipate and manage financing challenges as Laos moves towards middle-income country status.

12. Authorities' views. The authorities agreed that the fiscal deficit should be put on a downward trend to reduce fiscal risk and contain growth in the public debt. They emphasized that future borrowing would remain mainly on concessional terms and oriented towards necessary investments. On exemptions, they plan to revise two laws (Investment Promotion and Special Economic Zones) and review the application of exemptions, particularly for vehicles and construction materials. On tax policy, they are planning to introduce a land tax in 2017 and revise some rates on existing taxes. On tax administration, they agreed that large taxpayers should be managed centrally and were planning to transfer this function from provincial offices to the central tax office. In addition, they expect that the POS recording of transactions would help improve tax compliance. Finally, they also cited the recruitment of more personnel for the tax office.

B. Ensuring a Sound Banking System

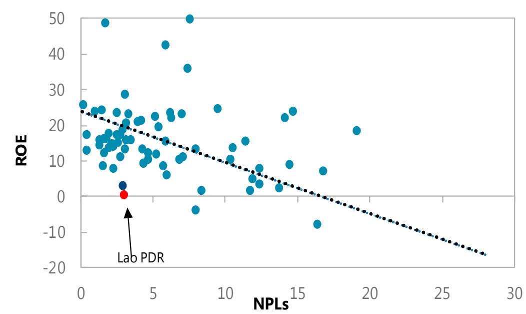
13. Lao P.D.R. has weaknesses in parts of its commercial banking system. Public banks that make up almost half the system are undercapitalized. NPLs in public banks have risen from 2 percent to 8 percent while the capital adequacy ratio (CAR) is estimated by staff to have fallen to around 3 percent. This partly reflects a lack of control over public investment spending in previous years at the state and local level, which resulted in arrears and cash-flow problems at some local firms.[6] Some domestic private banks are also well below the mandated capital levels, although these are not systemic. Weak accounting standards mean the level of NPLs could be significantly understated. According to international evidence, the ROA and ROE of the banking system (at 0.2 percent and 0.6 percent respectively) could be consistent with NPLs above 10 percent. The recently mandated caps on local currency deposit and lending rates have also likely contributed to reverse progress in de-dollarization and may affect the profitability of already weak segments of the banking system.

Emerging and Developing Countries: NPLs and ROA
(Percent)



Sources: National authorities; and IMF staff calculations.

Emerging and Developing Countries: NPLs and ROE
(Percent)



Sources: National authorities; and IMF staff calculations.

14. The authorities have made efforts to improve banking supervision and detect risks. The Bank of Lao (BOL) is working to amend its legal framework to strengthen risk-based supervision and move toward Basel-core principles, including improvement of prudential regulations. A plan to restructure public banks starting in 2017 is underway, as well as implementing CARs to comply with BASEL II (likely in 2018). The central bank is also working on upgrading the payments system, and other information requirements for the securities markets. As credit growth resumes (Box 2) it will be important for the BOL to monitor liquidity conditions and control a further buildup of risks. In particular:

- ***Address weakness in the banking sector.*** It is urgent to repair bank balance sheets to reduce the possibility of an external shock being amplified by the banking system. Eliminating forbearance and ensuring that all banks meet the mandatory minimum CAR of 8 percent is a first step. Introducing regulations to better account for NPLs would help clarify recapitalization

[6] The process of off budget public investment spending at the state and local level was ended in 2014, and a committee has been established to resolve arrears.

estimates and restructuring options. Recapitalizing public banks should be a first priority, with potential recapitalization costs estimated at US$ 250 million (1.8 percent of 2016 GDP).

- ***Continue to improve supervision.*** Supervisory capacity is stretched given rapid growth of the banking system and the large number of banks. In light of emerging risks, there is a need to maintain the moratorium on new bank licenses, and to quickly improve supervision, including risk-based supervision in the medium-term. Collecting corporate and household balance sheet information (with appropriate safeguards) and assessing the balance sheet risks in the banking system would improve the BOL's ability to monitor and manage the economy's exposure to exchange rate risks.

- ***Develop the crisis management framework.*** This should include a contingency plan for the banking sector in the event of financial distress, including strengthening the institutional setup for crisis management with resolution authority, a sound emergency liquidity assistance framework with appropriate safeguards, a bank resolution framework, and a communications strategy.

- ***Address foreign currency lending risks.*** The recent rapid rise in dollar lending, financed by foreign borrowing, may present additional macrofinancial risks. While there are limits on bank net open positions, and restrictions on foreign currency lending to non-foreign currency earning clients, the BOL should also consider macroprudential tools, including further raising foreign currency reserve requirements (which, at 10 percent, are already higher than kip reserve requirements), setting limits on loan-to-deposit ratios for foreign currency lending or additional unremunerated reserve requirements in foreign currency, to contain these risks.

- ***Reduce dollarization.*** Although dollarization has fallen, Laos remains a highly dollarized economy, with 45 percent of deposits and 48 percent of private credit in foreign currencies. A market based approach to reduce dollarization would begin by removing the caps on kip lending and deposit rates, strengthening the deposit insurance arrangements for local currency deposits, and introducing measures to promote the use of kip (e.g., lower cost and convenient services for kip use, larger spread between foreign currency and kip reserve requirements). International experience also shows that gradually introducing a small measure of exchange rate flexibility helps reduce dollarization.

15. Authorities' views. The authorities emphasized that, despite pockets of weakness, the banking system as a whole is stable and sound. In addition, public disclosure of audited statements of all banks will be enforced in 2017 to enhance transparency. In the area of accounting they are considering upgrading requirements in line with IFRS. On bank licensing the authorities have upgraded fit and proper criteria to safeguard against AML/CFT risks. The authorities are also aware of foreign currency lending risks, and are considering additional macroprudential measures. The authorities see interest rate caps as a way of broadening access to credit, but emphasized that these were temporary until a well-functioning financial market is developed.

C. Strengthening International Reserves and Exchange Rate Policy

16. **Reserve coverage metrics for Lao P.D.R. are significantly lower than the level desirable for countries with a tightly managed exchange rate and a highly dollarized financial sector, according to the IMF's standard metrics** (Box 4). In light of the low level of reserves, the authorities should use the flexibility in their current regime (which allows the kip/US dollar exchange rate to move within a band of plus or minus 5 percent per year) to gradually let the kip/US dollar exchange rate depreciate in line with market forces. This, combined with tighter fiscal policy would support a gradual buildup of reserves towards a goal of at least 4 months of import cover. Low inflation provides an opportunity to let the kip depreciate gradually and accumulate reserves with a limited impact on price stability. Greater exchange rate flexibility would also better help manage volatility of fiscal revenues associated with changes in commodity prices.

17. **Authorities' views.** The authorities consider the level of reserves to be adequate, although they agree that a higher level would further safeguard stability. The central bank calculates reserves at end-2015 at 6.4 months of imports due to a different estimate of trade flows and the exclusion of imports related to FDI projects.[7] Using the central bank's overall import figure, and not excluding FDI imports, puts reserve adequacy at around 2 months of imports, still well below recommended levels.

Lao P.D.R.: Reserve Adequacy Calculations
(End-2015; millions of US dollars)

	Bank of Lao	IMF 1/
Imports c.i.f.	5,233	7,533
Gross International Reserves (GIR)	987	987
GIR in months of imports	2.3	1.6
GIR in months of imports adjusted for FDI-related imports	6.4	…
Implied FDI-related imports	1,804	…

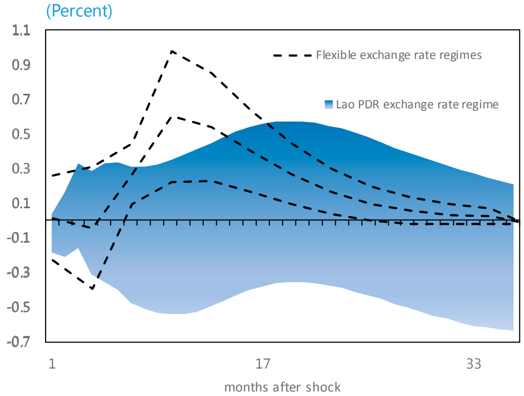
1/ Using IMF - Direction of Trade Statistics (DOTS)

18. **Lao P.D.R. should move quickly to put in place the preconditions for greater exchange rate flexibility.** The de-jure exchange rate regime is a managed float, and moving to more flexibility would help Laos adjust to external shocks and reduce vulnerabilities. However, a successful move requires an alternative nominal anchor for price stability, as well as preparing the bank and corporate sectors to deal with greater volatility (in particular limiting their open foreign exchange positions). As these preparations will take time, the transition will need to be gradual.

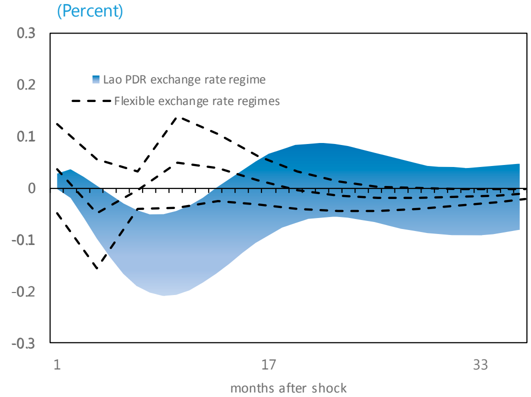
[7] The authorities' estimate of trade flows is lower than the duly adjusted partner country data. Discrepancies are concentrated in trade with major partners and can be explained by differences in valuation, under-recording due to exemptions, informal border trade, and contraband. For a systematic study of the discrepancies, see Hamanaka, S. (2011), "Quality of the Trade Statistics of the Lao P.D.R.," South East Asia Research, 19, 3, pp 595–633. Staff have updated this study to 2014/15 with similar results.

The Exchange Rate Has Not Acted as a Shock Absorber

Response of Exchange Rate to Terms-of-Trade Shock
(Percent)



Response of Economic Activity to Terms of Trade Shock
(Percent)



Source: IMF staff calculations.
The calculations use a standard VAR model containing economic activity, the exchange rate and the terms-of-trade. The Lao PDR responses to a terms-of-trade shock are compared with a panel of ASEAN countries with floating exchange rates (Indonesia, Philippines and Thailand). See Rafiq, S. 2011. "Sources of Economic Fluctuations in Oil-Exporting Economies: Implications for Choice of Exchange Rate Regimes," International Journal of Finance and Economics 16:70–91.

19. The following sequence of reforms is recommended:

i. Develop the functioning of local financial markets. This includes implementing reforms that would allow for the smooth functioning of the interbank money market, the interbank foreign exchange market, and the government debt market.[8]

ii. Actively manage liquidity and steer market interest rates. Once local financial markets are sufficiently developed, the monetary policy transmission mechanism should begin to function so that a short-term policy interest rate can be used by the BOL to transmit the desired monetary policy stance to the market. This will require removing caps on deposit rates and intermediation spreads, and using open market operations and exchange rate intervention to affect the market interest rate. Active liquidity management based on stable and low excess reserves will also support market development.

iii. Develop the institutional framework for monetary policy. Upgrading the monetary policy framework will require institutional, technical and operational reforms. The basic elements include: a) a clear mandate and operational independence for the central bank to pursue price stability; b) development of the technical capacity to design and implement a transparent, forward-looking monetary strategy; c) a clear and effective framework for

[8] Detailed recommendations have been made in this area by the IMF Technical Assistance mission on Interbank Market Development in July 2015, and include as a first step the development of the Bank of Lao's liquidity management framework.

monetary control; and d) a framework for forecasting and managing banking system liquidity.[9]

iv. Develop the foreign exchange market and introduce systems to manage exchange rate risk. Market participants need to develop internal risk management and information systems to measure foreign exchange risk, and an adequate prudential and supervisory framework should be in place to monitor direct and indirect exposure. Cautious development of derivatives in the foreign exchange market will support hedging instruments necessary for market development.

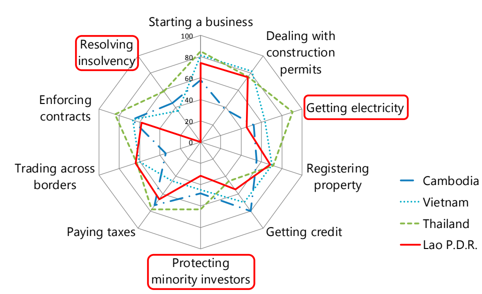
20. During this process, allowing some controlled and limited flexibility early on is important. Allowing for a two-way variation in the exchange rate at an early stage (e.g. by gradually allowing the exchange rate to float within the 5 percent plus or minus band) helps reduce one-way currency bets. Such variation also stimulates foreign exchange market development and provides incentives for risk management, while supporting the accumulation of international reserves

21. Authorities' views. The authorities recognized that there are risks associated with the managed exchange rate, but they saw these as manageable. They pointed to significant benefits from stability including macroeconomic stability and trust in the currency, and they saw significant risks to introducing flexibility in the short-term. Nevertheless, they viewed the tightly managed exchange rate as a temporary arrangement, and agreed that more flexibility is desirable in the medium term. In this connection, they agreed that it is important to put in place preconditions to reach this objective.

D. Promoting Competitiveness, Diversification and Inclusion

22. Lao P.D.R. faces structural constraints that limit future growth potential, and render the economy vulnerable to shocks. A narrow export base founded on natural resources (mining and hydropower), a weak business climate and eroding competitiveness have inhibited investment and diversification. The country's rank in comparative studies of the ease of doing business is well below its peers in ASEAN, and concerns remain regarding governance, access to finance, institutional efficiency, education and skills, and inadequate infrastructure. For Laos to take advantage of changing patterns in China's import demand towards consumer goods, and further

Doing Business Indicators Cross Country Comparison 1/
(Distance to frontier score 2/)



1/ These indicators should be interpreted with caution due to a limited number of respondents, a limited geographical coverage, and standardized assumptions on business constraints and information availability.
2/ On a scale of 0 to 100; 100 is the frontier and 0 is the furthest from the frontier.

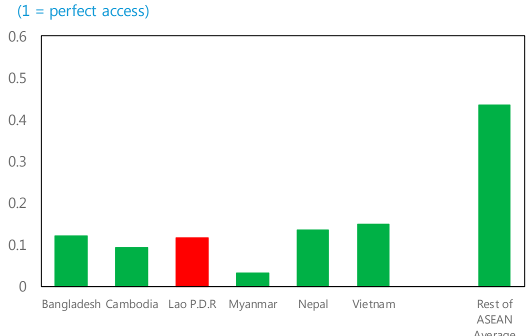
[9] These elements are described in detail in the IMF paper: "Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries" (IMF, 2015).

regional integration through the ASEAN Economic Community (AEC) will require addressing these structural constraints.[10]

23. Integrating a higher proportion of the population into productive economic activity would boost growth and reduce poverty. Over two-thirds of the population remains in agriculture, where productivity has consistently been the lowest in the region. A large skills gap impedes movement to manufacturing or services employment. School enrollment is high, but outcomes are low, and Lao P.D.R. has the highest rate of adult functional illiteracy in the region (33 percent urban and 66 percent rural). A lack of skilled labor has also contributed to low levels of investment in manufacturing, and the majority of labor in Special Economic Zones is foreign. Creating better economic opportunities will require investing in rural infrastructure, education and training. It is also necessary to improve basic health outcomes, including reducing malnutrition and maternal mortality, where Lao P.D.R. lags behind low-income country averages.

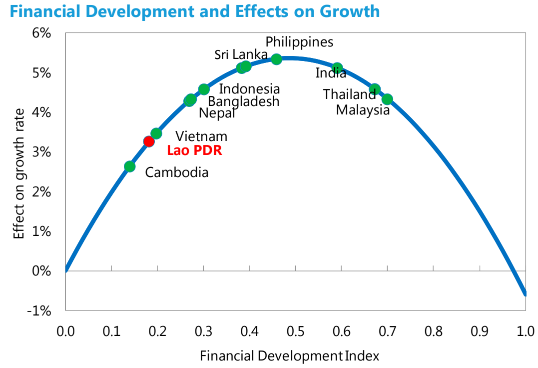
24. Policies that increase financial inclusion will help promote macro-financial stability and enhance growth. While Laos has experienced rapid financial deepening over the last decade, financial inclusion remains low. Access to financial institutions is limited to about one-third of the population, and Laos has the third-lowest level of financial access in ASEAN (only Cambodia and Myanmar rank lower). To enhance financial inclusion, policies should focus on: increasing the supply of financial services (access to ATMs, branches, and accounts); financial literacy programs (as used in Bangladesh and India); and the delivery of financial services and information through microfinancial institutions.[11]

Financial Institution Access Index
(1 = perfect access)



Source: Katsiaryna, S. (2016), 'Introducing a New Broad-based Index of Financial Development', IMF Working Paper #WP/16/5.

Financial Development and Effects on Growth



Source: IMF staff calculations.

25. Authorities' views. The authorities agreed that there were significant structural constraints to growth, reflected in the narrow base of production and exports, low fiscal revenue and a lack of inclusive growth. In addition to continuing to implement WTO commitments and enhancing further

[10] For a description of these trade opportunities for Laos, see IMF, Asia and Pacific Department (2016), "China's Changing Trade and the Implications for the CLMV Economies."

[11] Lao P.D.R. has a micro finance sector which serves mainly agricultural clients and is supervised by the Bank of Lao, but it makes up less than 1 percent of assets in the overall financial system.

integration with ASEAN, they agreed that further efforts were necessary to improve the business environment, including through infrastructure investment. A particular area of focus was the promotion of small and medium-sized enterprises. The new laws on Investment Promotion and on Special Economic Zones are also aimed at reducing red tape, and new regulations on Public Private Partnerships should help finance new infrastructure.

26. Statistics. Significant constraints are imposed on surveillance by weak data, particularly in external sector and financial statistics, although some progress has been made since the last Article IV consultation (Informational Annex). Shortcomings are largely due to a lack of capacity. Development partners (including the Fund) have devoted significant resources in Laos to capacity development in this area. In this connection it is encouraging to note the authorities' interest in joining the e-GDDS and bringing statistical quality, coverage and dissemination in line with their peers in ASEAN.

STAFF APPRAISAL

27. Economic setting. Growth is expected to slow to under 7 percent as the economy faces headwinds from a less favorable external environment and a slow-down in agriculture. Inflation has risen slightly but is expected to remain contained. Private sector credit growth will remain between 15 and 20 percent, concentrated in construction and services. In the medium-term growth is expected to rebound slightly to around 7 percent, supported by hydro-electric projects and transportation investments. The external position is assessed to be vulnerable to shocks and requires strengthening.

28. Risks. The outlook is subject to domestic and external risks. On the domestic side, a sustained reversal in fiscal consolidation would lead to a further increase in public debt, a loss in confidence and a deterioration of the external position. Weakness in the banking system, coupled with high dollarization, could also lead to deposit flight and pressure on the exchange rate. Continued erosion of competitiveness from the kip's real appreciation, coupled with weak productivity and low investment, could threaten growth. On the external side the thin reserves cushion and a tightly managed exchange rate make Laos vulnerable to a deterioration in the terms of trade or a reversal of capital flows. A slowdown in China would affect FDI, exports and growth.

29. Resuming fiscal consolidation. Anchoring fiscal policy on a goal of reducing the public debt ratio to 55 percent of GDP by 2021 will lower the debt distress rating in the DSA to moderate, and help build fiscal buffers. This will require sustained efforts to increase revenue and rationalize expenditure. The authorities' initiatives on tax administration, exemptions and new taxes are welcome. A revision of the exemption regime and the efficiency and composition of expenditures will further help achieve a growth-friendly consolidation. In this connection, the formulation of a comprehensive medium-term fiscal framework, including a medium-term revenue strategy, a medium-term debt strategy and a public investment review, would allow for a sustained approach that could be executed over a number of years.

30. Putting the debt ratio on a downward trajectory. The DSA assesses Laos' external PPG debt to be at high risk of debt distress, which is a deterioration from last year's Article IV consultation. The high proportion of public debt in foreign currency makes it particularly vulnerable to changes in the exchange rate. In the transition to a lower debt ratio it will be particularly important to continue to emphasize concessional financing, and adopt clear guidelines for the issuance of sovereign debt and guarantees and the use of such borrowing. In particular, the continued issuance of foreign currency sovereign bonds in the Thai market on non-concessional terms (DSA Box 1), and the use of part of the proceeds for current spending, seems to be in conflict with desirable debt management practices.

31. Addressing banking sector risks. The authorities have made commendable efforts to improve supervision and detect risks, and their plan to restructure public banks is welcome. Moving rapidly to address bank weakness, including through the prompt recapitalization of state-owned banks, and further improving supervision, will be important to reduce the risk of an external shock being amplified through the banking system. At the same time, addressing foreign currency lending risks through additional macroprudential measures will help reduce balance sheet risks. Developing the crisis management framework would also help the central bank prepare for possible contingencies. An early removal of interest rate caps will be important to developing local financial markets and reducing dollarization.

32. Moving towards greater exchange rate flexibility and accumulating reserves. Even as Laos puts in place policies to support the tightly managed exchange rate in the short-term, it is necessary to put in place conditions that will allow it to adopt more exchange rate flexibility in the medium-term. The sequencing of reforms should include: a) developing local financial markets; b) actively managing liquidity to affect market interest rates; c) developing the framework for monetary policy; and d) developing the foreign exchange market and tools to manage exchange rate risk. During this process allowing some limited exchange rate flexibility will support the accumulation of reserves and promote the development of foreign exchange risk management and the foreign exchange market. A higher buffer of international reserves is needed to address foreign currency risks, given the high current account deficit, the tightly managed exchange rate, dollarization and balance sheet mismatches in the non-bank private sector.

33. Addressing structural constraints will help secure more sustainable and inclusive growth. Improving the business environment and upgrading skills and human capital will support investment and productivity growth, and the diversification of exports, and help Laos take advantage of growing export opportunities in the region. Enhancing financial inclusion will also support macro-financial stability and growth.

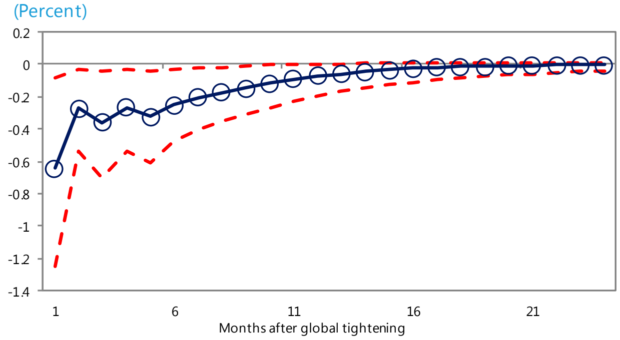
34. The collection and dissemination of economic and financial statistics continues to require improvement. Sustained effort will be required to secure progress, which will be important for informed policymaking and surveillance. Staff welcomes the authorities' commitment to improving statistics.

35. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

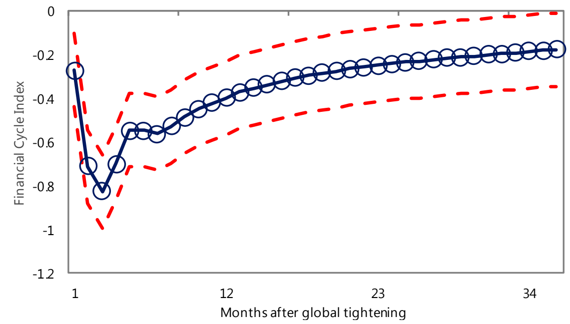
Box 1. Lao P.D.R.: External Sector Risks for Laos' Economy[1]

Because of high dollarization and a relatively open capital account, Lao P.D.R. is exposed to international financial volatility and the global monetary cycle. Developments in China are also a key risk.

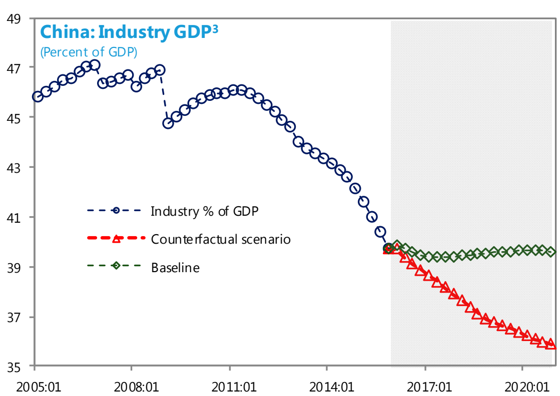
Rise in Global Market Stress (VIX) leads to US Dollar Deposit Outflow from Lao Banks, Increasing Liqudity Risks...[1]
(Percent)



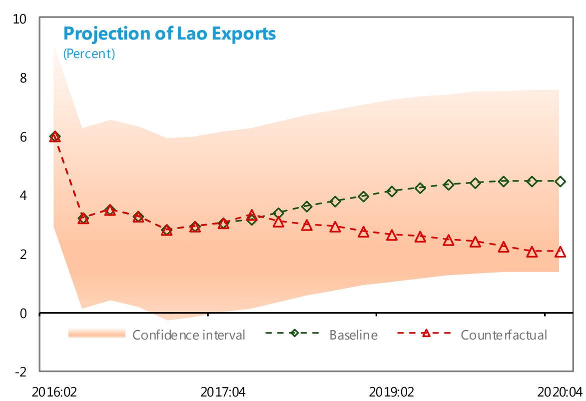
... And, Financial Conditions Tighten in Response to Global Financial Market Stress[2]



Continued China Rebalancing ...



... Will Impact Lao Exports to China



Source: IMF staff calculations.
[1] The response is derived based on a regression of US dollar currency deposits in Lao banks and VIX. The projection is based on local projection method in Jorda (2005).
[2] The response is derived from a regression of the financial conditions index (FCI) and VIX. The projection is based on local projection method in Jorda (2005).
[3] A conditional forecast simulation is performed using a VAR model with a Litterman prior containing China's industrial GDP growth (quarterly data), Lao's exports to China (monthly data) and the kip-RMB exchange rate (monthly).

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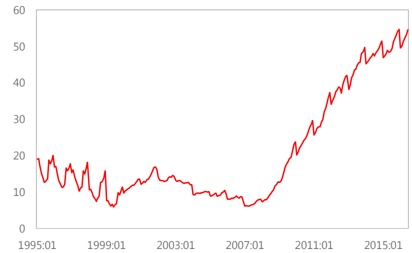
[1] Prepared by Sohrab Rafiq.

Box 2. Lao P.D.R.: Unlocking the Credit Cycle and Its Phases[1]

After a rapid episode of financial deepening, credit growth has slowed, due to both weaker demand and banking sector weakness. The credit cycle is currently in the repair/recovery phase and risk appetite seems to be recovering.

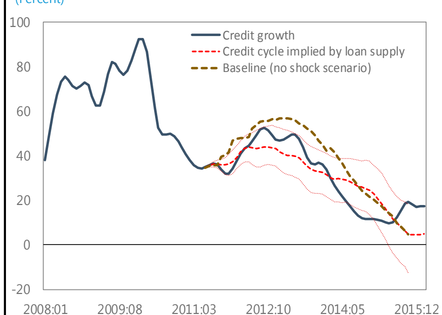
Laos has experienced rapid financial deepening as measured by credit-to-GDP. The credit-to-GDP ratio rose from around 9 percent of GDP in 2007 to around 50 percent by end-2014, one of the fastest financial deepening episodes witnessed. The credit gap was 10 percent of GDP in 2012; a leading indicator of an impending financial crisis according to the BIS (Drehman and others, 2013). From 2013 to 2014 the credit gap abruptly closed as credit growth slowed. Structural Bayesian analysis suggests that much of the slowdown in credit growth reflects a combination of loan supply and credit demand shocks. This implies that both weaker demand, reflecting slower economic growth, and credit market supply shifts, reflecting banking sector weakness and/or liquidity constraints, have driven the credit cycle in recent years.

Total Credit in Lao P.D.R.
(Percent of GDP)

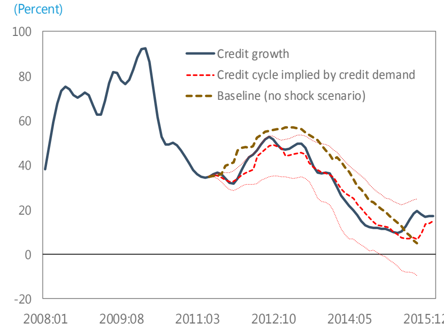


Sources: Bank of Lao; and IMF staff calculations.

Credit Cycle and Loan Supply Shocks[1]
(Percent)



Credit Cycle and Loan Demand Shocks[1]
(Percent)

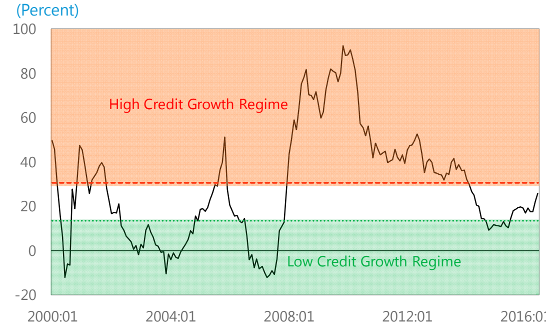


Source: IMF staff calculations

[1] The model is calculated using a Bayesian VAR with sign restrictions with theoretical priors from Bernanke and Blinder (1998) to identify credit market shocks. See Rafiq, S. 2015. "The Effect of U.S. Unconventional Monetary Policy on Asia Froniter Economies" IMF Working Paper No. 14/18 for estimation details. The baseline described the no-shock scenario.

Gauging the current phase of the credit cycle provides an understanding of financial risks. A Markov Chain model suggests that, relative to historical trends, the credit cycle in Laos is currently in the repair/recovery phase. In credit repair, banks try to improve their balance sheets. Indeed, in a bid for FX liquidity, the deposit spread between Lao and foreign banks for FX deposits has risen over the past two years. As risk appetite begins to rise, the Bank of Lao should closely monitor liquidity conditions, while working pre-emptively to improve banking sector supervision to better monitor and control the potential buildup of risks.

Credit Cycle Regimes in Lao P.D.R. [1]
(Percent)



Source: IMF staff calculations.

[1] A Markov Chain model is estimated to disentangle Laos' credit cycle into boom, bust and repair/recovery phases of the credit cycle. Since 2000 the typical Laos credit boom (bust) cycle has lasted 31 (11) months.

[1] Prepared by Sohrab Rafiq.

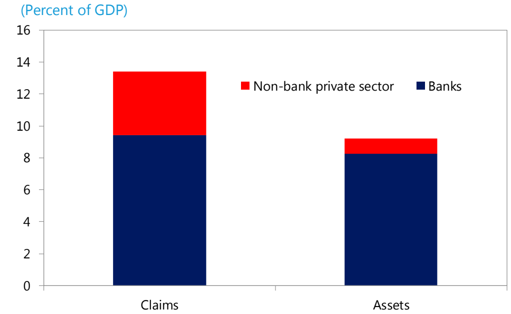
Box 3. Lao P.D.R.: Dollar Credit Cycle, Dollarization and Private Currency Mismatches: How Large Are Risks?[1]

Laos' economy is highly dollarized, and currency mismatches on balance sheets are a potential source of macro-financial risk. The data shows that private currency mismatches principally exist in the non-bank sector, which has significantly increased its foreign borrowing in recent years. To mitigate vulnerabilities, financial safety nets need to be pre-emptively strengthened, while surveillance of cross-border financial flows should be improved.

Laos is a highly dollarized economy, and the risk-taking channel increases the potential for valuation mismatches arising from exchange rate effects. These risks have grown since 2010 as US dollar cross-border bank and non-bank borrowing has grown significantly. Available data shows:

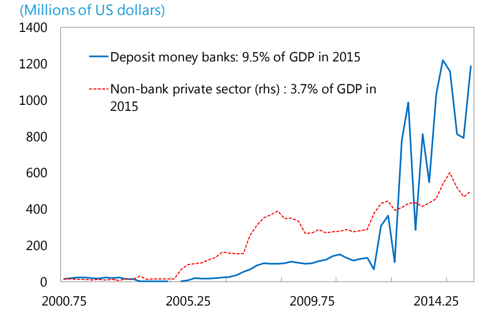
- Laos' total net FX exposure, according to BIS data, is around 4.2 percent of GDP: 1.2 percent of GDP for banks and 3 percent of GDP for the non-bank private sector. The non-bank private sector in Lao P.D.R. is a larger net debtor to the rest of the world than banks. The non-bank sector in Laos is, therefore, a potential conduit for the transmission of global financial conditions to the domestic economy.
- Balance sheet data from two public banks in Lao (BCEL and BFL) show FX assets to be, in total, around 1 percent of GDP larger than liabilities.

BIS Claims and Liabilities Banks and Non-Bank Sectors
(Percent of GDP)



Sources: Bank for International Settlements; and IMF staff calculations.

Claims BIS Reporting Banks on Lao P.D.R.
(Millions of US dollars)



Sources: Bank for International Settlements; and IMF staff calculations.

Estimates suggest that net FX liabilities of the economy will rise by 3.8 percent of GDP (2.7 percent of GDP for banks and 1.1 percent of GDP for the nonbank private sector) following a 30 percent kip/dollar depreciation. From current levels, this would aggregate total currency mismatches to around 8 percent of GDP. Due to valuation effects, gross foreign reserves held at the Bank of Lao would rise from 7 to around 8.6 percent of GDP. It is worth noting that these estimates are likely to be very conservative since BIS data does not include Chinese banks, which are an important source of project funding in Laos.

Potential Balance Sheet Impact from Exchange Rate Adjustment

	% of GDP	US dollar (millions)
30 percent depreciation	3.8	477

Lao P.D.R. is a net debtor to the rest of the world, and balance sheet risks call for preemptively widening and deepening financial safety nets. In addition:

- The Bank of Lao should gradually make more use of the exchange rate bands to allow for greater exchange rate flexibility, which would help sensitize economic agents to the risks of foreign borrowing.
- De-dollarization policies should be expedited, and focus on market-based measures to promote the kip (interbank market development), supported by credible macro prudential policies.
- Banks' net open positions should be closely monitored and surveillance of cross-border financial flows should be enhanced.

[1] Prepared by Sohrab Rafiq.

Box 4. Lao P.D.R.: External Sector Assessment[1]

The external position is highly vulnerable and needs strengthening. The kip is estimated to be overvalued by between 20 and 40 percent, a decline in competitiveness compared to previous assessments, and reserves continue to be inadequate for precautionary needs.

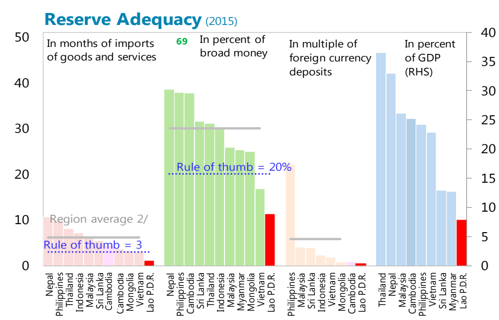
Staff estimated EBA-Lite based on the macroeconomic balance and equilibrium REER approaches, both suggesting that the kip is overvalued by 20–40 percent. The macroeconomic balance approach indicates a 20 percent overvaluation. The current account norm used is lower than the previous assessment as growth estimates and fuel import prices are lower for the foreseeable future. The equilibrium real exchange rate approach indicates a 38 percent overvaluation, and could be related to the recent nominal appreciation of the kip with respect to major partner country currencies (renminbi and baht).

Lao P.D.R. Exchange Rate Assessment

	Art. IV 2016		Art. IV 2015		Art. IV 2013
	MB	REER	MB	REER	MB
Underlying CA balance 1/	-9.3	-9.3	-16	...	-15.1
CA norm	-3.9	...	-8.5	...	-9.0
Required improvement in the CA	-5.4	...	-7.9	...	-6.2
Implied over (+) / under (-) valuation 2/	20.1	38.3	29.4	12.9	24.3

1/ Non-resource current account balance is used in the analysis. The 2015 Article IV was based on the CGER methodology and, therefore, may not be directly compatible with the 2016 EBA-lite estimates.
2/ Using the elasticity of -0.27 estimated in the EBA-Lite framework.
MB -- Macroeconomic balance approach

Trends in the balance of payments are consistent with the overvaluation of the kip. A significant proportion of Lao's balance of payments is inelastic to price and exchange rate movements, particularly imports related to FDI projects, electricity exports under fixed price and quantity contracts, and natural resource exports (metals) priced in dollars. Nevertheless, even as the overall current account deficit fell by 4 percentage points of GDP from 2014 to 2015, the non-resource current account deficit, (which remains high at 7½ percent of GDP), only fell by one percentage point, reflecting slow growth in tourism and non-resource related exports and higher growth of non-resource non-petroleum imports.



Source: IMF staff estimates.

Reserve coverage metrics are significantly lower than the level desirable for countries with a fixed exchange rate regime and highly dollarized financial sector, according to the Fund's reserve adequacy metric. As of December 2015, reserves were equivalent to about 1 month of prospective imports of goods and services, about 13 percent of broad money, 30 percent of foreign currency deposits and about 8 percent of GDP. These reserve coverage levels are significantly below the traditional metrics of at least three months of prospective imports or up to 50 percent of broad money, respectively. Although the authorities consider reserves as adequate under their methodology (which excludes a measure of FDI-related imports), the numbers used by IMF staff are consistent with the IMF's internationally comparable methodology.

Staff's overall assessment is that the external position is vulnerable to shocks and requires strengthening. Fiscal consolidation and a gradual depreciation of the exchange rate within the current regime would help reverse the trend appreciation and increase international reserves.

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[1] Prepared by Manuk Ghazanchyan and Sohrab Rafiq.

Box 5. Lao P.D.R.: Adjustment Scenario [1]

An adjustment scenario including recommended policies would result in lower growth in the near term, but more robust and sustainable growth in the medium-term. It would also result in a less risky path for the economy and make it more resilient to external shocks, including lower debt, a smaller current account deficit and the accumulation of reserves.

The adjustment scenario is based on the following assumptions:

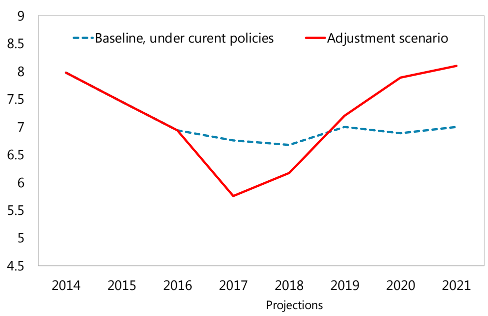
- **Resumption of fiscal consolidation.** Sustainable fiscal and expenditure measures would bring the fiscal deficit to 3½ percent of GDP on average, which would be sufficient to lower the debt to GDP ratio to 55 percent of GDP, including the additional 1.8 percent of GDP cost of recapitalizing public banks.
- **Gradual exchange rate adjustment.** The real exchange rate would adjust by 23 percent over 5 years, through both nominal depreciation and productivity growth, realigning the REER with long-term fundamentals.
- **Banking sector reforms.** Strengthening of state-owned banks management and recapitalization
- **Structural reforms to boost competitiveness and long-term productivity.**

Macro Framework Under Adjustment Scenario

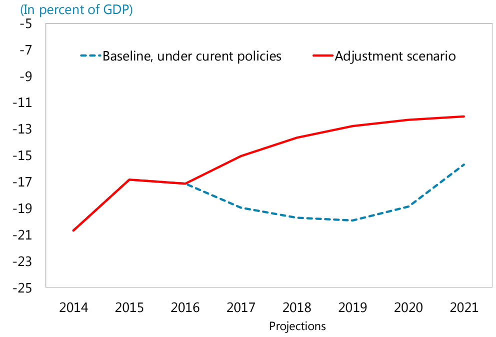
	Actual	Proj.	Alternative Scenario Projections				
	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Real GDP	7.5	6.9	5.8	6.2	7.2	7.9	8.1
Inflation	2.4	2.0	2.1	2.3	2.6	2.9	3.1
Current account (in percent of GDP)	-16.8	-17.1	-15.1	-13.7	-12.8	-12.3	-12.1
Fiscal deficit (percent of GDP)	2.7	5.9	5.7	3.5	3.4	3.2	3.2
Public debt (in percent of GDP)	65.8	67.8	66.9	64.5	61.2	58.0	55.0
Reserves (in months of imports)	1.5	1.9	2.2	2.5	2.9	3.5	4.2

Source: IMF staff estimates.
Note: In percent, unless otherwise stated.

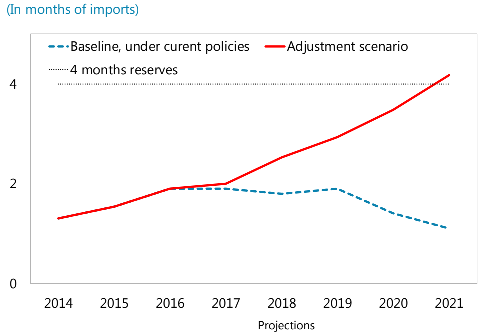
Real GDP Growth
(Year-on-year percent change)



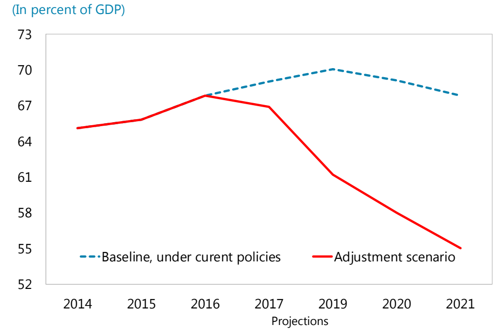
Current Account Balance
(In percent of GDP)



Reserves
(In months of imports)



Public Debt
(In percent of GDP)



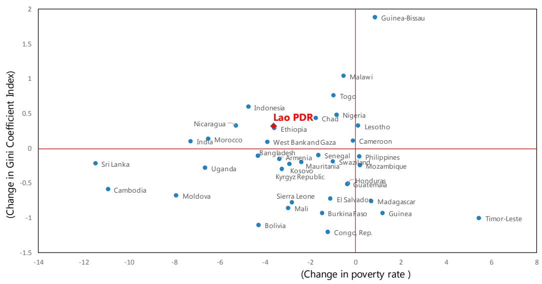
Sources: National authorities; and IMF staff calculations.

[1] Prepared by Sohrab Rafiq.

Figure 1. Lao P.D.R.: Poverty Has Fallen, but Inequality Has Risen and Financial Inclusion Remains Low

While poverty has been reduced, income inequality has been rising. Growth has not been inclusive.

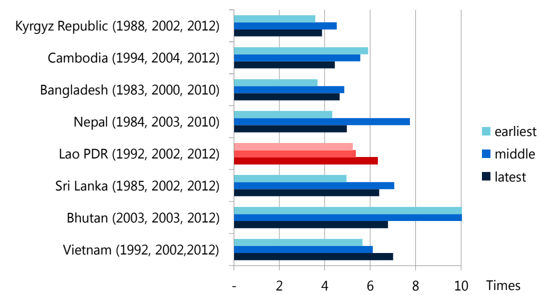
Poverty Reduction and Income Inequality, 2002–2013 1/
(Annual change, period average)



1/ Selected countries: low income countries and lower middle income countries; selected period: closest period to 2002–2013. National Poverty line is used to measure poverty rate.
Sources: World Bank; and IMF staff calculations.

Disproportionate allocation of income has resulted in a rising gap in wealth distribution.

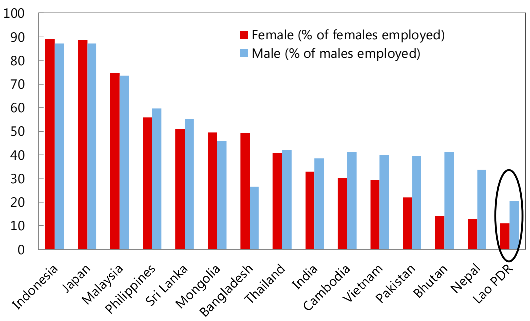
Ratio of Wealthiest 20% over the Poorest 20%
(Percent)



Sources: World Bank; and IMF staff calculations.

Despite high labor participation rate, Lao has a large unpaid work force...

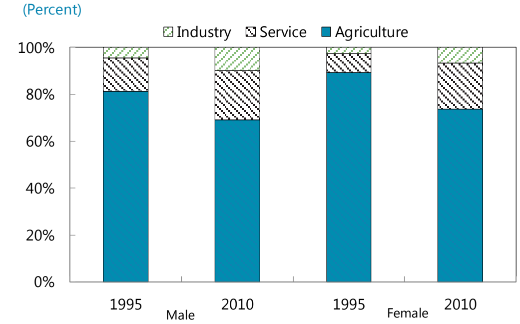
Wage and Salaried Workers
(Percent of total employed workers and by gender)



Sources: World Bank; and IMF staff calculations.

The most labor intensive sector is not the key driver of the country's economic growth.

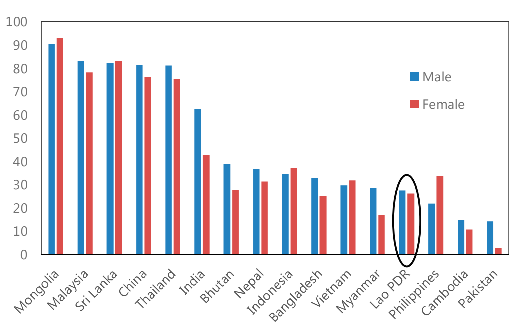
Employment by Sector and by Gender
(Percent)



Sources: World Bank; and IMF staff calculations.

Financial inclusion is still low in Lao....

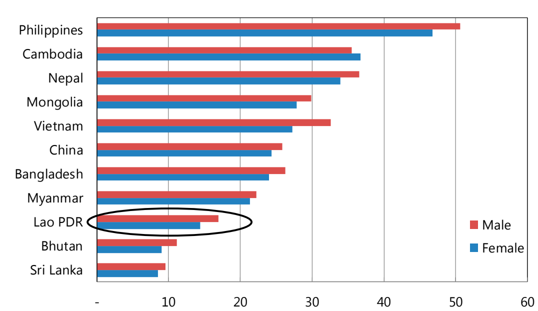
Financial Inclusion
(Percentage of men or women with account at financial institution)



Sources: Findex; and IMF staff calculations.

and access to financial institutions needs to be improved.

Borrowed Money from Friends or Families
(Percent and by gender)



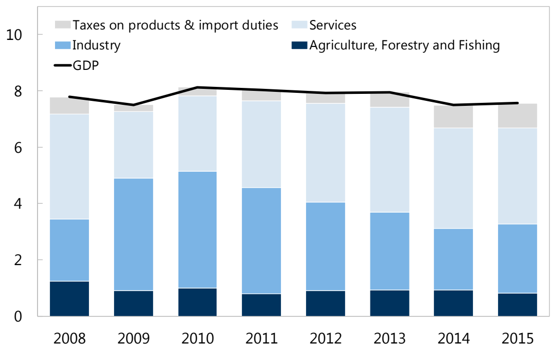
Sources: World Bank; and IMF staff calculations.

Figure 2. Lao P.D.R.: Growth Continues to Moderate and Inflation Is Contained

Real GDP growth was about 7.5 percent in 2015, with impetus from services. Manufacturing, construction and agriculture weakened ...

Contribution to Growth: by Industry

(Percentage points)

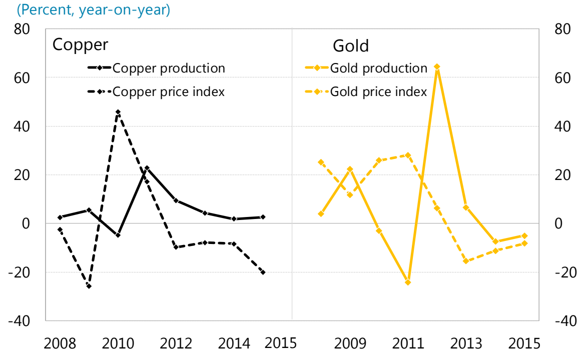


Sources: CEIC; and IMF staff calculations.

... along with mining production—the latter the result of a moratorium on new mines and metal price decline.

Mining Production

(Percent, year-on-year)

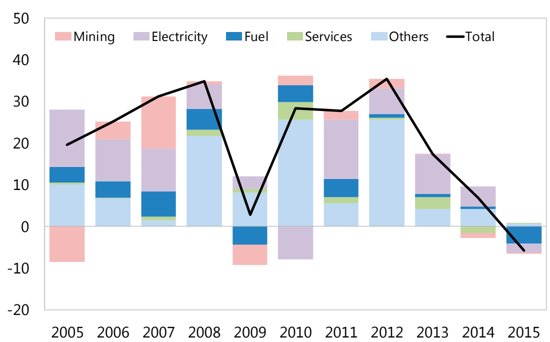


Sources: National authorities; and IMF staff calculations.

Imports contracted due to lower FDI and other investments.

Contribution to Import Growth

(Percentage points)

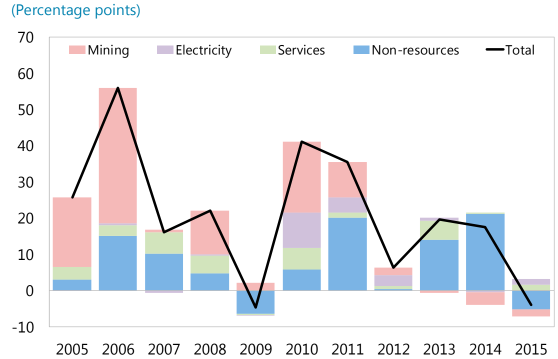


Sources: National authorities; and IMF staff calcualtions.

And exports contracted as China slowed and metal prices fell.

Contribution to Export Growth

(Percentage points)

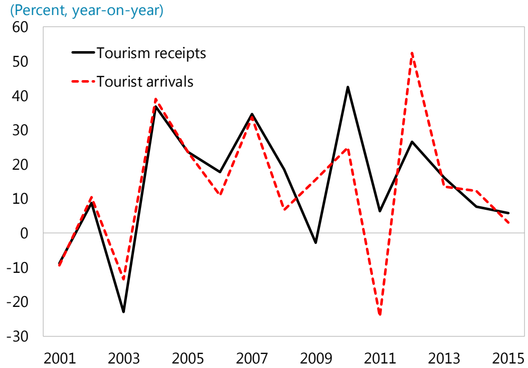


Sources: National authorities; and IMF staff calcualtions.

Tourism activity also remained sluggish.

Tourist Arrivals and Revenue

(Percent, year-on-year)

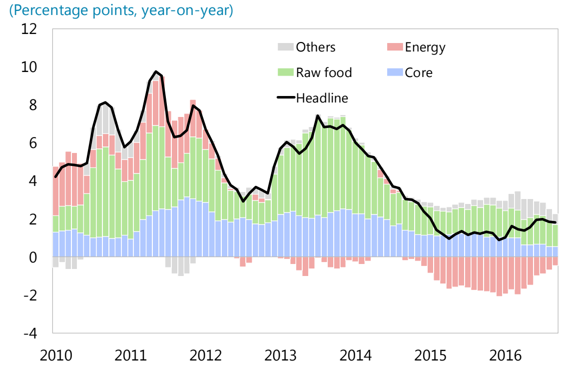


Sources: National authorities; and IMF staff calcualtions.

Headline inflation accelerated on higher food prices, but core inflation remains moderate and stable.

Contribution to Headline Inflation

(Percentage points, year-on-year)

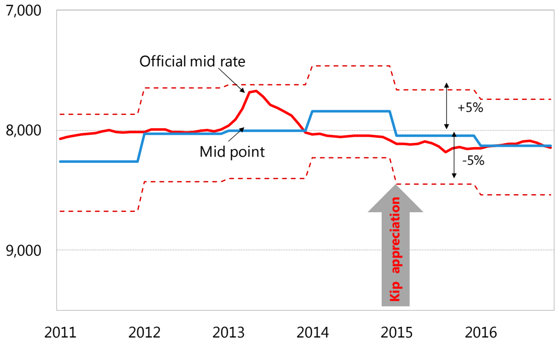


Sources: National Authorities; and IMF staff calculations.

Figure 3. Lao P.D.R.: External Vulnerabilities Remain Elevated

The USD/kip exchange rate has been tightly managed with respect to the US dollar since early-2014.

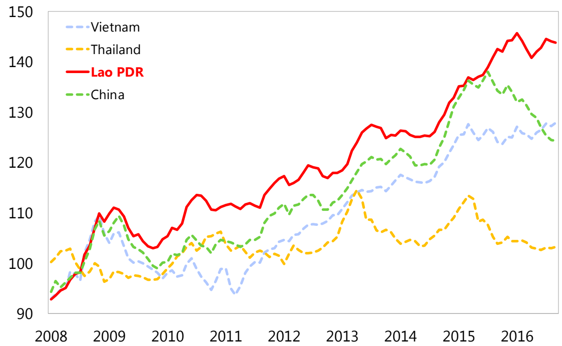
Exchange Rate
(Kip/USD)



Sources: National authorities; and IMF staff calculations.

The real exchange rate has maintained a trend appreciation

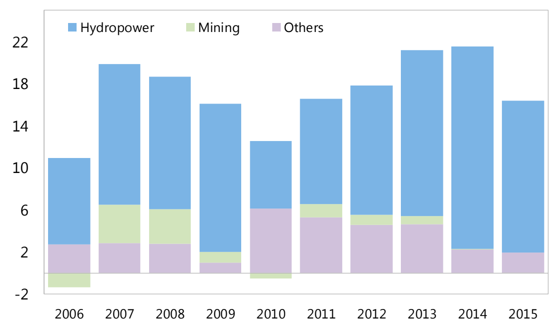
Real Effective Exchange Rate
(Index, 2008=100)



Sources: Bloomberg; IMF, Information Notice System; National authorities; and IMF staff calculations.

FDI continues to be concentrated in hydropower

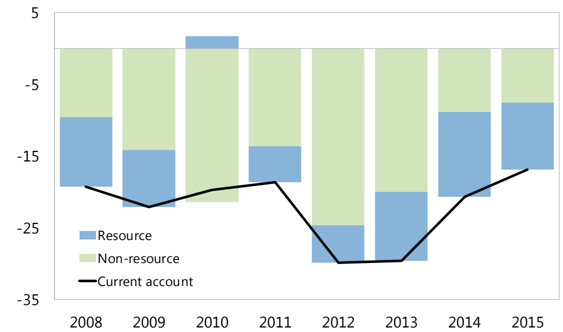
FDI, Private Sector
(Percent of GDP)



Sources: National authorities; and IMF staff calculations.

The current account deficit narrowed as imports contracted …

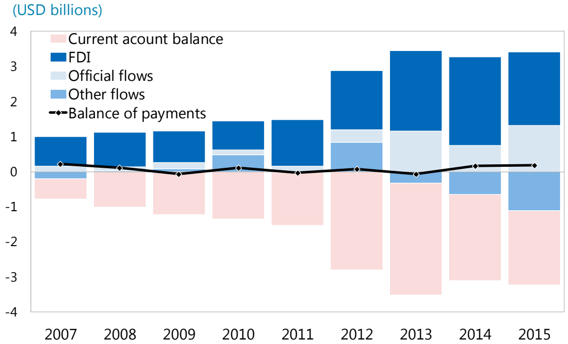
Current Account Balance
(Percent of GDP)



Sources: National authorities; and IMF staff calculations.

… due to lower FDI

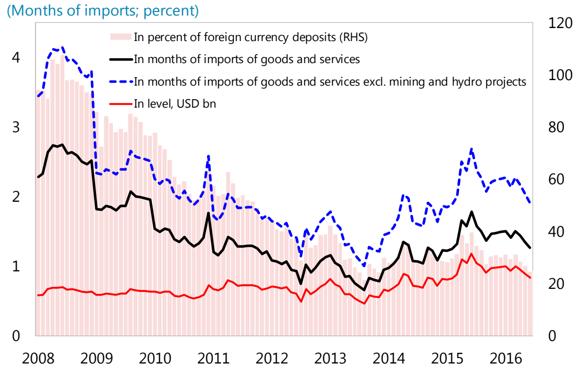
Balance of Payments
(USD billions)



Sources: National authorities; and IMF staff calculations.

International reserves remain well below precautionary needs.

Gross Official Reserves
(Months of imports; percent)

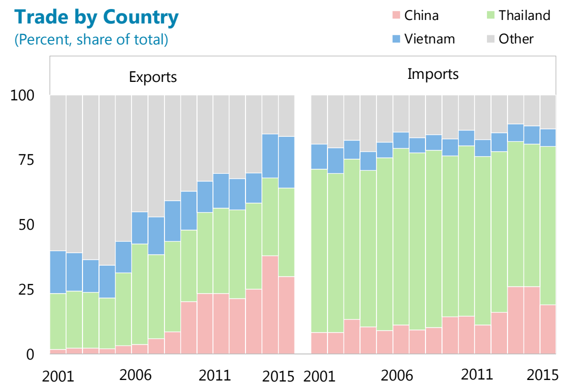


Sources: National authorities; and IMF staff calculations.

Figure 4. Lao P.D.R.: External Linkages Are Concentrated in Regional Partners

International trade is increasingly concentrated in three regional partners: Thailand, China, and Vietnam.

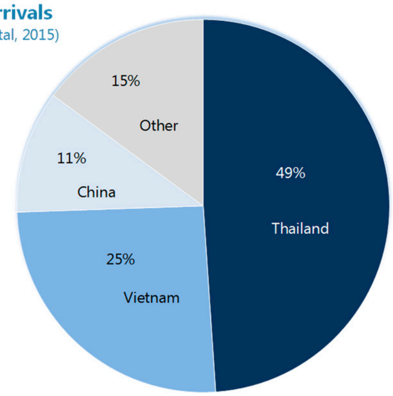
Trade by Country
(Percent, share of total)



Sources: IMF, Direction of Trade Statistics; and IMF staff calculations.

Tourism also follows a similar pattern.

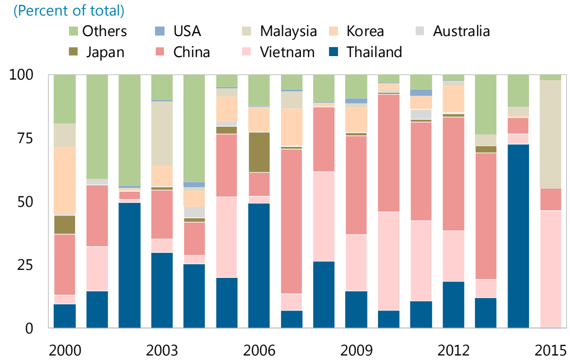
Tourist Arrivals
(Percent of total, 2015)



Sources: CEIC; and IMF staff calculations.

China, Thailand and Vietnam have also been the main source of FDI in Lao

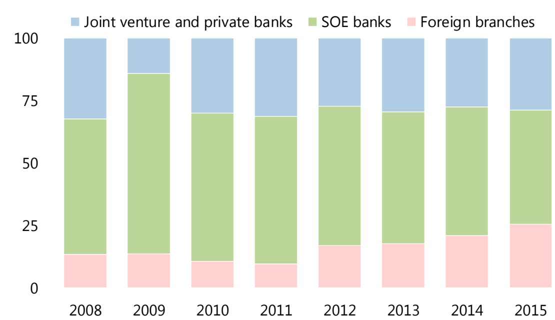
Foreign Direct Investment: By Country
(Percent of total)



Sources: CEIC; and IMF staff calculations.

Foreign banks account for about a fifth of total commercial bank assets and a tenth of deposits.

Commercial Banks: Assets
(Percent, by bank type)

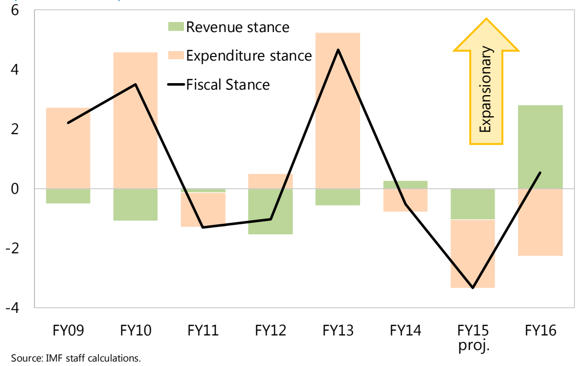


Sources: National authorities; and IMF staff calculations.

Figure 5. Lao P.D.R.: Fiscal Consolidation Has Been Reversed

The FY16 fiscal stance was largely neutral …

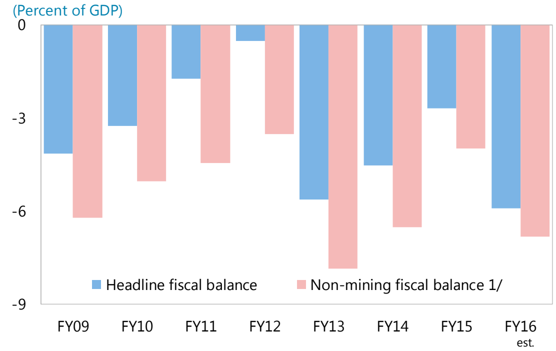
Fiscal Stance
(Percent of GDP)



Source: IMF staff calculations.

Despite a large increase in the fiscal deficit.

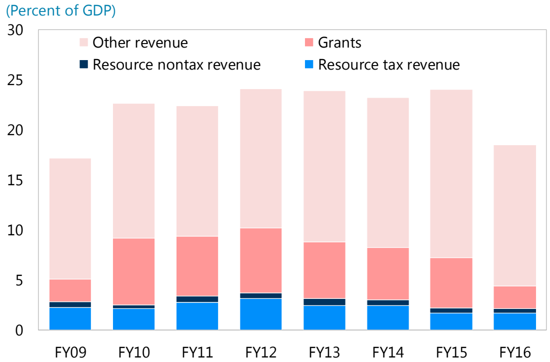
Fiscal Balance
(Percent of GDP)



Sources: National authorities; and IMF staff calculations.
1/ Net lending/borrowing minus mining revenues.

Grants and non-resource related revenue contracted…

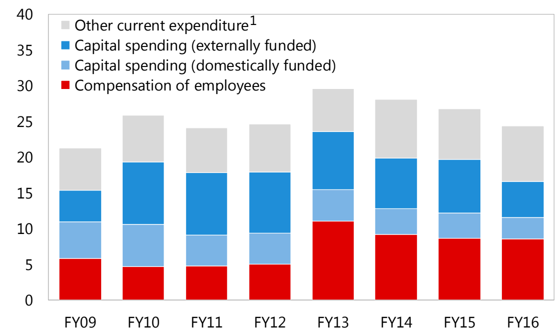
Revenue
(Percent of GDP)



Sources: National authorities; and IMF staff calculations.

… and capital spending declined.

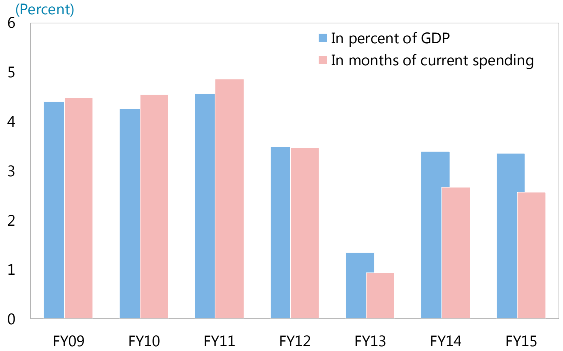
Expenditure
(Percent of GDP)



Sources: National authorities; and IMF staff calculations.
[1] Including grant-financed capital expenditure from 2010 onward.

The government's liquidity position has improved, but remains low.

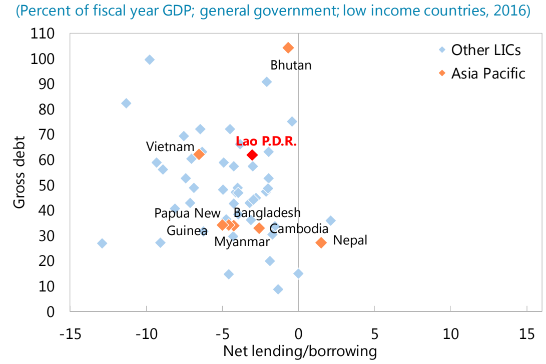
Government Deposits
(Percent)



Sources: National authorities; and IMF staff calculations.

Further consolidation is needed to rebuild fiscal space.

Fiscal Space
(Percent of fiscal year GDP; general government; low income countries, 2016)

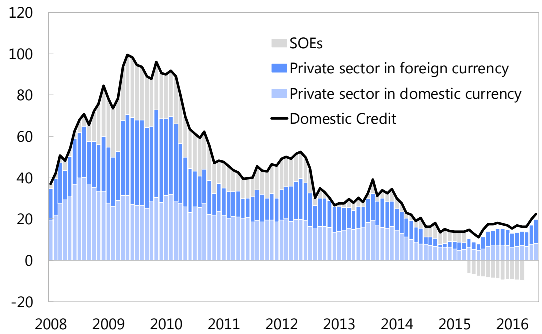


Sources: IMF, WEO; and IMF staff calculations.

Figure 6. Lao P.D.R.: Financial Conditions Have Tightened but Remain Accommodative

Credit growth has declined to safer levels, thanks partly to restraints on public investment.

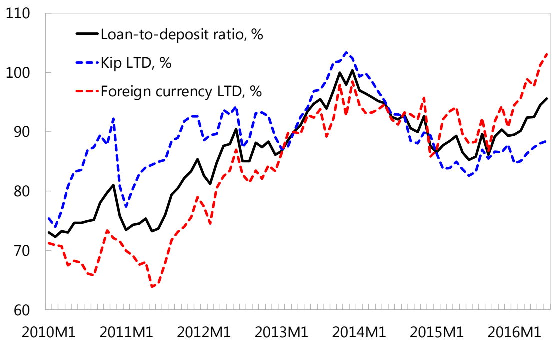
Contribution to Credit Growth
(Percentage points)



Sources: National authorities; and IMF staff calculations.

Banks' risk appetite seems to be recovering after a strong dip in 2014-15.

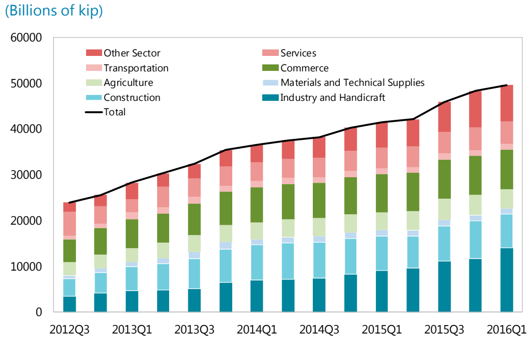
Commercial Banks: Loan-to-Deposit Ratios
(Percent)



Sources: National authorities; and IMF staff calculations.

Growth is concentrated in industry, construction and services.

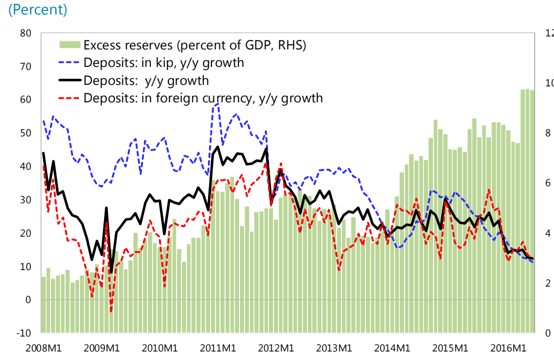
Credit by Sector
(Billions of kip)



Sources: National authorities; and IMF staff calculations.

With strong deposit growth, excess (kip) liquidity remains high.

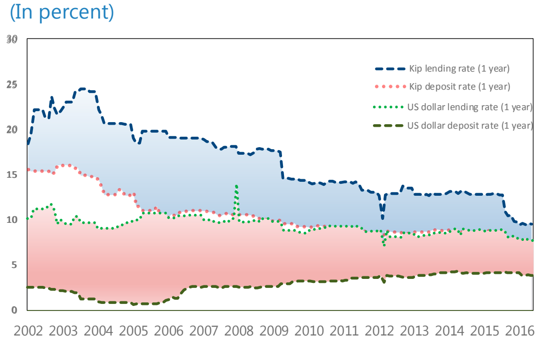
Banks' Excess Reserves and Credit
(Percent)



Sources: National authorities; and IMF staff calculations.

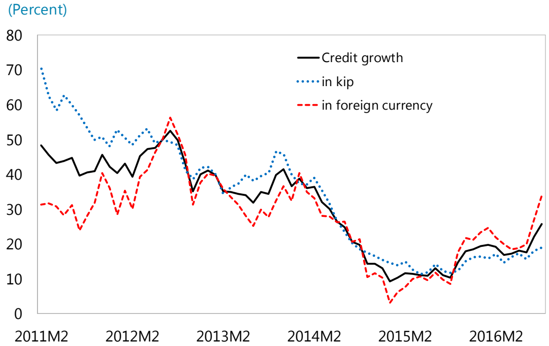
Caps on kip deposit and lending rates have lowered interest rates on kip lending.

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



But the recent pick-up in credit is concentrated in foreign currency lending.

Credit to Economy
(Percent)



Sources: National authorities; and IMF staff calculations.

Table 1. Lao P.D.R.: Selected Economic and Financial Indicators, 2011–17[1/]

	2011	2012	2013	2014	2015	2016 Proj.	2017 Proj.
GDP and prices (percentage change)							
Real GDP growth	8.0	7.9	8.0	8.0	7.5	6.9	6.8
CPI (annual average)	7.6	4.3	6.4	4.1	1.3	2.2	2.3
CPI (end year)	7.7	4.7	6.6	2.4	0.9	2.1	2.3
Public finances (in percent of GDP)							
Revenue and Grants	22.4	24.1	23.9	23.2	24.0	18.5	19.4
Of which: Resources	3.4	3.7	3.2	3.0	2.2	2.1	2.1
Of which: Mining	2.7	3.0	2.2	2.0	1.3	0.9	0.8
Of which: Hydro power	0.7	0.7	0.9	1.0	0.9	1.2	1.3
Of which: Grant	6.0	6.4	5.7	5.3	5.0	2.3	2.8
Expenditure	24.1	24.6	29.6	27.8	26.7	24.4	24.6
Expense	11.3	12.0	17.3	15.2	15.7	16.4	15.9
Net acquisition of nonfinancial assets 2/	12.9	12.6	12.3	12.6	11.0	8.0	8.7
Overall balance	-1.7	-0.5	-5.6	-4.5	-2.7	-5.9	-5.2
Nonmining balance 3/	-4.5	-3.5	-7.8	-6.5	-4.0	-6.8	-6.1
Public and public guaranteed debt (in percent of GDP)	56.0	56.8	62.5	64.9	65.8	67.8	69.0
Money and credit (annual percent change)							
Reserve money	16.2	27.2	7.7	30.3	6.6	9.8	11.0
Broad money	28.7	31.0	18.8	23.4	14.7	13.0	16.0
Bank credit to the economy 4/	45.8	26.6	34.5	14.2	16.8	17.2	15.0
Bank credit to the private sector	39.3	35.1	36.3	11.7	19.3	17.6	18.0
Balance of payments							
Exports (in millions of U.S. dollars)	3,120	3,323	3,883	4,687	4,387	4,804	5,124
In percent change	42.1	6.5	16.9	20.7	-6.4	9.5	6.7
Imports (in millions of U.S. dollars)	4,642	6,382	7,352	8,017	7,533	7,684	8,708
In percent change	28.1	37.5	15.2	9.1	-6.0	2.0	13.3
Current account balance (in millions of U.S. dollars)	-1,502	-2,808	-3,195	-2,450	-2,116	-2,351	-2,813
In percent of GDP	-18.6	-29.9	-29.6	-20.7	-16.8	-17.1	-19.0
Gross official reserves (in millions of U.S. dollars)	677	740	662	816	987	1,476	1,587
In months of prospective goods and services imports	1.2	1.1	0.9	1.2	1.5	1.9	1.9
External public debt and debt service							
External PPG debt							
In millions of U.S. dollars	3,666	4,262	5,489	6,061	6,495	7,422	8,240
In percent of GDP	45.5	45.3	50.9	51.1	51.7	54.1	55.6
External PPG debt service							
In percent of exports	2.7	4.2	5.1	5.6	5.2	7.1	7.7
Exchange rate							
Official exchange rate (kip per U.S. dollar; end-of-period)	8,019	7,982	8,030	8,096	8,119	…	…
Real effective exchange rate (2005=100)	135.0	136.3	144.9	153.5	166.6	…	…
Nominal GDP							
In billions of kip	64,727	75,251	84,572	95,406	102,543	112,188	122,518
In millions of U.S. dollars	8,062	9,400	10,788	11,851	12,561	13,722	14,831

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

1/ Public finances are on a fiscal year (October to September) while other data are on a calendar year.
2/ Includes off-budget investment expenditures.
3/ Net lending/borrowing excluding mining revenue.
4/ Includes Bank of Lao P.D.R. lending to state-owned enterprises and subnational levels of government.

Table 2. Lao P.D.R.: Balance of Payments, 2014–21

	2014	2015	2016	2017	2018	2019	2020	2021
			Projections					
(In millions of U.S. dollars; unless otherwise indicated)								
Current account	-2,450	-2,116	-2,351	-2,813	-3,181	-3,516	-3,638	-3,302
Merchandise trade balance	-3,330	-3,146	-2,880	-3,584	-3,969	-4,374	-4,452	-4,212
Exports, f.o.b.	4,687	4,387	4,804	5,124	5,596	5,842	6,107	6,705
Mining and hydropower	1,846	1,827	2,395	2,374	2,172	2,421	2,764	2,304
Other exports	2,841	2,560	2,409	2,750	3,425	3,421	3,343	4,401
Imports, c.i.f.	8,017	7,533	7,684	8,708	9,565	10,215	10,558	10,917
Mining and hydropower	2,951	2,692	2,449	2,194	1,797	1,628	1,266	776
Mining projects	463	435	436	374	237	219	134	0
Hydropower projects	2,488	2,257	2,013	1,820	1,560	1,409	1,133	776
Petroleum imports	720	376	323	402	451	501	556	606
Other imports	4,346	4,465	4,913	6,112	7,317	8,086	8,735	9,535
Services (net)	386	469	543	608	614	763	812	871
Of which: Tourism	621	684	738	803	810	962	1,011	1,072
Income (net)	-283	-245	-512	-448	-470	-582	-685	-681
Interest payments	-256	-182	-392	-434	-438	-458	-530	-452
Of which: Public	-180	-117	-159	-185	-211	-234	-253	-268
Mining and hydropower	-58	-53	-215	-232	-209	-200	-180	-161
Mining projects	0	0	0	8	11	0	0	0
Hydropower projects	-59	-52	-216	-240	-221	-200	-180	-161
Dividends and profit repatriation	-301	-309	-383	-296	-321	-440	-497	-530
Of which: Mining and hydropower	-241	-247	-318	-243	-241	-296	-419	-447
Of which: Mining projects	-171	-158	-107	-96	-83	-69	-55	0
Hydropower projects	-71	-89	-211	-147	-158	-227	-364	-447
Other	274	245	262	282	289	316	342	300
Transfers (net)	778	807	499	612	644	676	687	720
Private	176	185	194	204	214	225	236	248
Official	602	622	304	408	430	451	451	472
Capital and financial account	2,609	2,290	2,842	2,924	3,218	3,628	3,226	3,153
Public sector	738	1,318	840	842	802	746	720	688
Disbursements	863	1,475	1,093	1,134	1,145	1,088	1,062	1,030
Amortization	-125	-157	-252	-292	-342	-342	-342	-342
Banking sector (net)	-18	789	890	561	500	499	600	750
Private sector	1,890	183	1,112	1,522	1,916	2,383	1,907	1,714
Foreign direct investment (net) 1/	2,527	2,095	2,312	2,572	2,516	2,383	1,907	1,714
Of which: Mining and hydropower projects	2,267	1,850	1,537	1,962	1,758	1,583	1,061	820
Of which: Mining projects	10	-5	-15	-20	-8	-4	0	0
Hydropower projects	2,258	1,855	1,552	1,982	1,766	1,588	1,061	820
Other private flows 3/	-637	-1,912	-1,200	-1,050	-600	0	0	0
Overall balance	159	174	491	111	37	112	-411	-149
Core Balance (CA+FDI+ODA)	511	1,227	729	174	-213	-787	-1,431	-1,340
Financing	-159	-174	-491	-111	-37	-112	411	149
Central bank net foreign assets	-159	-174	-491	-111	-37	-112	411	149
Assets (increase -)	-154	-171	-490	-110	-36	-111	412	150
Liabilities (reduction -)	-5	-3	-1	-1	-1	-1	-1	-1
Memorandum items:								
Current account balance (in percent of GDP)	-20.7	-16.8	-17.1	-19.0	-19.7	-19.9	-18.9	-15.7
Excluding official transfers	-25.7	-21.8	-19.4	-21.7	-22.4	-22.5	-21.2	-17.9
Resource current account balance (in percent of GDP) 2/	-11.9	-9.3	-4.3	-2.0	-0.5	1.7	4.7	4.4
Nonresource current account balance (in percent of GDP)	-8.8	-7.6	-12.9	-17.0	-19.3	-21.6	-23.5	-20.1
Imports excluding hydropower and mining related	9.0	-4.4	8.1	24.4	19.3	10.5	8.2	9.1
Gold production (000s oz.)	169	222	244	205	120	120	120	0
Gold price (U.S. dollar per oz.)	1,266	1,160	1,276	1,343	1,373	1,387	1,396	1,418
Copper production (000s ton)	156	166	161	137	87	77	67	0
Copper price (U.S. dollar per ton)	6,863	5,510	4,816	4,960	4,985	5,011	5,040	5,065
FDI (in percent of GDP)	21.3	16.7	16.8	17.3	15.6	13.5	9.9	8.2
Gross official reserves	816	987	1,476	1,587	1,622	1,733	1,321	1,170
In months of prospective imports of goods and nonfactor services	1.2	1.5	1.9	1.9	1.8	1.9	1.4	1.1
(Excluding imports associated with large resource projects)	1.9	2.1	2.5	2.3	2.1	2.1	1.5	1.2
Nominal GDP at market prices	11,851	12,561	13,722	14,831	16,135	17,643	19,280	21,027

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

1/ Includes repayment of private debt. FDI in the balance of payments includes both equity and debt, whereas only the nondebt portion is included in the debt sustainability analysis.

2/ Pertains to large mining and hydropower (resource) projects.

3/ Includes errors and omissions.

Table 3. Lao P.D.R.: General Government Operations, 2013/14–2021

	2013/14	2014/15	2015/16	Calender year 2017	2018	2019	2020	2021
			Est.	Proj.	Proj.	Proj.	Proj.	Proj.
	(In percent of FY GDP, unless otherwise indicated)							
Revenue and Grants	23.2	24.0	18.5	19.4	19.7	19.9	20.1	20.2
Of which: Resource revenue 1/	3.0	2.2	2.1	2.1	1.9	1.8	1.9	1.8
Nonrenewable resources	2.0	1.3	0.9	0.8	0.6	0.5	0.4	0.2
Renewable resources	1.0	0.9	1.2	1.3	1.2	1.3	1.5	1.6
Nonresource revenue	15.0	16.8	14.1	14.5	15.2	15.5	15.8	16.1
Taxes	15.7	15.7	14.3	14.3	14.8	15.0	15.4	15.5
Of which: Resource revenue 1/	2.4	1.7	1.7	1.6	1.4	1.4	1.4	1.2
Nonrenewable resources	1.8	1.2	0.9	0.8	0.6	0.5	0.4	0.2
Renewable resources	0.6	0.5	0.8	0.8	0.8	0.9	1.0	1.0
Nonresource revenue	13.2	14.0	12.5	12.7	13.4	13.7	14.0	14.3
Income and profit taxes	3.1	3.2	2.9	2.6	2.6	2.6	2.7	2.8
Income taxes	1.1	1.1	1.0	1.0	1.0	1.1	1.2	1.2
Profit taxes	2.0	2.1	1.9	1.6	1.6	1.5	1.5	1.6
Of which: Mining	0.6	0.6	0.4	0.4	0.3	0.3	0.2	0.1
Of which: Nonmining	1.4	1.5	1.5	1.2	1.3	1.3	1.3	1.5
VAT	4.2	4.4	3.8	3.9	4.0	4.2	4.3	4.3
Excise duties	3.6	3.3	3.0	3.3	3.6	3.7	3.6	3.7
Import duties	1.6	1.3	1.5	1.5	1.6	1.7	1.7	1.8
Royalties	1.5	0.9	1.2	1.2	1.1	1.1	1.1	1.0
Mining	1.2	0.6	0.5	0.4	0.3	0.2	0.2	0.1
Hydropower	0.3	0.4	0.7	0.8	0.8	0.9	0.9	0.9
Other taxes	1.7	2.4	1.8	1.8	1.8	1.8	2.0	2.0
Other revenues	2.3	3.3	1.9	2.3	2.3	2.3	2.4	2.4
Of which: Dividends	0.8	0.9	0.9	0.9	0.8	0.7	0.8	0.9
Of which: Resource revenue 1/	0.6	0.5	0.4	0.5	0.5	0.4	0.5	0.6
Nonrenewable resources	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Renewable resources	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.6
Nonresource revenue	1.7	2.8	1.6	1.8	1.8	1.9	1.9	1.7
Grants 3/	5.3	5.0	2.3	2.8	2.7	2.6	2.3	2.3
Expenditure	27.8	26.7	24.4	24.6	24.9	25.0	25.1	25.2
Expense	15.2	15.7	16.4	15.9	16.2	16.2	16.1	16.2
Compensation of employees	9.2	8.7	8.6	8.2	8.2	8.2	8.2	8.2
Transfers	2.6	2.5	3.0	2.7	2.8	2.9	2.9	2.9
Interest payments	0.9	1.1	1.3	1.6	1.7	1.8	1.8	1.8
Of which: External	0.2	0.9	1.1	1.1	1.2	1.2	1.2	1.2
Other recurrent (including arrears)	2.5	3.3	3.5	3.4	3.4	3.4	3.3	3.3
Net acquisition of nonfinancial assets 3/	12.6	11.0	8.0	8.7	8.7	8.8	8.9	9.0
Externally financed	7.0	7.6	5.0	5.5	5.4	5.3	5.1	5.0
Net lending/borrowing	-4.5	-2.7	-5.9	-5.2	-5.2	-5.1	-5.0	-5.0
Net acquisition of financial assets	-0.6	-1.6	0.0	0.0	0.0	0.0	0.0	0.0
Domestic	-0.6	-1.6	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
Net incurrence of liabilities	5.9	5.0	5.9	5.2	5.2	5.1	5.0	5.0
Domestic	5.1	0.9	3.2	4.1	4.3	4.3	4.5	4.6
Foreign	0.8	4.1	2.7	1.1	0.9	0.8	0.5	0.4
Discrepancy	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Net lending including discrepancy	-5.2	-3.4	...	...	...	...	...	...
Nonmining balance 2/	-6.5	-4.0	-6.8	-6.1	-5.8	-5.6	-5.4	-5.2
Operating balance	8.0	8.3	2.1	3.5	3.5	3.7	3.9	3.9
Domestic financing	4.4	2.5	3.2	4.2	4.4	4.4	4.6	4.7
Mining revenue	2.0	1.3	0.9	0.8	0.6	0.5	0.4	0.2
Hydropower revenue	1.0	0.9	1.2	1.3	1.2	1.3	1.5	1.6
Nonresource revenue	15.0	16.8	14.1	14.5	15.2	15.5	15.8	16.1
GDP (fiscal year)	92,697	100,759	109,777	119,935	131,294	144,549	159,533	175,952
GDP (calender year)		102,543	112,188	122,518	134,219	147,992	163,380	180,143

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.
1/ Resource revenue comprises royalties, taxes, and dividends from the mining and hydropower sectors.
2/ Net lending/borrowing minus mining revenues.
3/ Data was revised to bring on budget grant-financed capital expenditure.

Table 4. Lao P.D.R.: Monetary Survey, 2013–16

	2013	2014	2015	2016 Q1	2016 Q2	2016 Proj.
	(In billions of kip, unless otherwise indicated)					
Bank of Lao P.D.R. (BoL)						
Net foreign assets	4,673	5,998	7,444	8,651	6,183	9,301
In millions of U.S. dollars	583	741	915	1,068	765	1,148
Net domestic assets	10,545	13,828	13,686	12,502	13,496	13,891
Government (net)	432	157	4	192	-471	-500
Claims	1,119	1,119	1,117	1,117	1,117	1,117
Deposits	-687	-962	-1,113	-925	-1,589	-1,600
State-owned enterprises	5,642	6,591	6,475	6,393	6,384	6,384
Banks	4,223	4,489	5,266	5,254	5,729	6,056
BoL securities	-1,949	-1,260	-2,066	-2,868	-2,860	-2,950
Other items (net)	2,197	3,850	4,006	3,531	4,714	4,900
Reserve money	15,217	19,826	21,131	21,153	19,678	23,191
Currency in circulation	7,906	8,361	8,290	8,432	8,165	9,780
Bank Reserves	7,311	11,465	12,840	12,721	10,291	13,411
Of which: Foreign currency	3,090	4,845	5,426	5,376	4,322	5,667
Monetary survey						
Net foreign assets	2,251	1,803	-2,029	-4,925	-8,523	-9,235
In millions of U.S. dollars	281	223	-249	-608	-1,055	-1,140
Of which: Commercial banks	-302	-519	-1,165	-1,675	-1,820	-2,288
Net domestic assets	40,158	50,519	62,028	64,534	69,726	77,029
Government (net)	1,872	3,654	4,794	5,055	5,415	6,254
Budget	1,285	3,067	4,207	4,467	4,828	5,667
Claims	2,893	5,988	7,067	7,420	7,905	9,067
Deposits	-1,609	-2,922	-2,860	-2,953	-3,077	-3,400
Other	588	588	588	588	588	588
Credit to the economy	41,066	46,882	54,766	56,013	59,532	64,186
In kip	21,098	23,813	27,250	27,169	28,097	32,603
In foreign currencies	19,968	23,068	27,516	28,844	31,435	31,583
Of which: Private credit	32,631	36,445	43,476	43,956	47,352	51,110
In kip	17,759	20,427	23,931	23,793	24,720	...
In foreign currencies	14,872	16,018	19,545	20,163	22,632	...
Other items (net)	-2,781	-17	2,467	3,467	4,779	6,589
Broad money	41,784	52,322	59,999	59,610	61,203	67,794
Currency in circulation	6,490	6,316	5,880	5,886	5,595	6,644
Kip deposits	17,580	23,050	27,486	27,850	28,254	31,057
Foreign currency deposits (FCDs)	17,714	22,956	26,633	25,873	27,354	30,094
	(Annual percent change, unless otherwise indicated)					
Reserve money	7.7	30.3	6.6	3.8	-7.9	9.8
Broad money	17.0	25.2	14.7	12.4	11.2	13.0
Credit to the economy	34.5	14.2	16.8	16.7	22.5	17.2
Credit to the private sector	36.3	11.7	19.3	18.1	25.7	17.6
In kip	39.1	15.0	17.2	17.4	19.0	...
In foreign currencies	33.2	7.7	22.0	19.0	33.8	...
Deposit growth	18.9	30.3	17.6	14.6	12.4	13.0
Memorandum items:						
Velocity	2.0	1.8	1.7	1.9	1.8	1.7
Money multiplier	2.7	2.6	2.8	2.8	3.1	2.9
Loan/deposit (percent)	92.5	79.2	80.3	92.4	95.6	94.5
In kip (percent)	101.0	88.7	87.1	85.4	87.5	...
In foreign currency (percent)	84.0	69.8	73.4	77.9	82.7	...
Gross official reserves (in millions of U.S. dollars) 1/	662	816	987	995	837	1,075
Exchange rate, end-of-period (kip per U.S. dollar)	8,020	8,090	8,132	8,103	8,079	...
Nominal GDP (in billions of kip)	84,572	95,406	102,543	112,748	112,748	112,748
Dollarization rate (FCDs/broad money; in percent)	42.4	43.9	44.4	43.4	44.7	44.4
Gross reserve/Reserve Money	35	33	38	38	34	38
Required reserves	2,121	2,758	3,226	3,174	3,314	3,645
Excess reserves (percent of GDP)	5.0	7.8	8.2	8.5	7.3	7.6

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

1/ Defined as foreign assets of the Bank of the Lao P.D.R.

Table 5. Lao P.D.R.: Medium-Term Macroeconomic Framework, 2013–21

	2013	2014	2015	2016	2017	2018	2019	2020	2021
						Projections			
Output and prices	(Percent change, unless otherwise indicated)								
Real GDP	8.0	8.0	7.5	6.9	6.8	6.7	7.0	6.9	7.0
Consumer prices (annual average)	6.4	4.1	1.3	2.2	2.3	2.7	3.1	3.3	3.1
Consumer prices (end-period)	6.6	2.4	0.9	2.1	2.3	2.6	2.9	3.1	3.1
GDP per capita (in U.S. dollars)	1,594	1,718	1,787	1,911	2,008	2,112	2,229	2,345	2,464
Public finances (in percent of GDP) 1/									
Revenue	23.9	23.2	24.0	18.5	19.4	19.7	19.9	20.1	20.2
Tax and nontax revenue	18.3	18.0	19.0	16.2	16.6	17.0	17.3	17.7	17.9
Mining	2.2	2.0	1.3	0.9	0.8	0.6	0.5	0.4	0.2
Hydro power	0.9	1.0	0.9	1.2	1.3	1.2	1.3	1.5	1.6
Others	15.1	15.0	16.8	14.1	14.5	15.2	15.5	15.8	16.1
Grant	5.7	5.3	5.0	2.3	2.8	2.7	2.6	2.3	2.3
Tax revenue	15.8	15.7	15.7	14.3	14.3	14.8	15.0	15.4	15.5
Expenditure	29.6	27.8	26.7	24.4	24.6	24.9	25.0	25.1	25.2
Expense	17.3	15.2	15.7	16.4	15.9	16.2	16.2	16.1	16.2
Net acquisition of nonfinancial assets 2/	12.3	12.6	11.0	8.0	8.7	8.7	8.8	8.9	9.0
Overall balance	-5.6	-4.5	-2.7	-5.9	-5.2	-5.2	-5.1	-5.0	-5.0
Nonmining balance 3/	-7.8	-6.5	-4.0	-6.8	-6.1	-5.8	-5.6	-5.4	-5.3
Balance of payments									
Current account balance	-3,195	-2,450	-2,116	-2,351	-2,813	-3,180	-3,515	-3,637	-3,301
In percent of GDP	-29.6	-20.7	-16.8	-17.1	-19.0	-19.7	-19.9	-18.9	-15.7
Trade balance	-3,469	-3,330	-3,146	-2,880	-3,584	-3,969	-4,374	-4,452	-4,212
Exports	3,883	4,687	4,387	4,804	5,124	5,596	5,842	6,107	6,705
In percent change	16.9	20.7	-6.4	9.5	6.7	9.2	4.4	4.5	9.8
Of which: Resources	2,034	1,846	1,827	2,395	2,374	2,172	2,421	2,764	2,304
In percent change	0.6	-9.2	-1.0	31.1	-0.9	-8.5	11.5	14.2	-16.6
Other	1,849.4	2,841.4	2,560.2	2,409.2	2,749.8	3,424.5	3,420.7	3,342.6	4,401.0
Imports	7,352	8,017	7,533	7,684	8,708	9,565	10,215	10,558	10,917
In percent change	15.2	9.1	-6.0	2.0	13.3	9.8	6.8	3.4	3.4
Of which: Resources	2,705	2,951	2,692	2,449	2,194	1,797	1,628	1,266	776
In percent change	33.6	9.1	-8.8	-9.0	-10.4	-18.1	-9.4	-22.2	-38.7
Services and income (net)	36	103	224	30	159	144	181	127	190
Income (net)	-211	-283	-245	-512	-448	-470	-582	-685	-681
Services (net)	246	386	469	543	608	614	763	812	871
Transfers	238	778	807	499	612	644	676	687	720
Capital account balance	3,118	2,609	2,290	2,842	2,924	3,218	3,628	3,226	3,153
Of which: FDI	2,286	2,527	2,095	2,312	2,572	2,516	2,383	1,907	1,714
Overall balance	-77	159	174	491	111	37	112	-411	-149
Debt and debt service (excluding unidentified arrears)									
Public and public guaranteed debt (in percent of GDP)	62.5	64.9	65.8	67.8	69.0	70.3	70.0	69.1	67.8
Public Domestic debt (in percent of GDP)	11.6	13.7	14.1	13.8	13.5	14.6	15.5	16.4	17.5
External debt (in percent of GDP)	86.9	92.7	95.5	98.1	100.2	100.4	99.5	97.4	94.4
External public and public guaranteed debt (in percent of GDP)	50.9	51.1	51.7	54.1	55.6	55.7	54.5	52.7	50.3
External public debt service (in percent of exports)	5.1	5.6	5.2	7.1	7.7	9.1	9.8	10.5	11.0
Gross official reserves									
In millions of U.S. dollars	662	816	987	1,476	1,587	1,622	1,733	1,321	1,170
In months of imports	0.9	1.2	1.5	1.9	1.9	1.8	1.9	1.4	1.1
In months of imports (excluding resource projects)	1.4	1.9	2.1	2.5	2.3	2.1	2.1	1.5	1.2
Memorandum items:									
Nominal GDP (in billions of kip)	84,572	95,406	102,543	112,188	122,518	134,219	147,992	163,380	180,143

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

1/ Fiscal year basis (October to September) from 2013 to 2016 and calender year basis from 2017 to 2021.

2/ Includes off-budget investment expenditures.

3/ Net lending/borrowing minus mining revenue.

Table 6. Lao P.D.R.: Financial Soundness Indicators, 2009–15

	2009	2010	2011	2012	2013	2014	2015 2/
Capital adequacy ration (Basel I)	20.1	21.6	...	...	25.9	20.9	20.8
State-owned commercial banks (SOCBs)	3.8	4.8	6.0	...	6.7	...	...
Joint-venture banks	9.0	9.9	...	...	30.3	...	...
Foreign bank branches	34.0	37.7	...	...	12.1	...	...
Private banks	33.5	34.1	...	...	54.3	...	...
NPL ratio	3.8	3.8	2.2	1.8	2.1	4.2	3.2
State-owned commercial banks	1.3	1.5	...	1.9	2.7	8.2	....
Joint-venture banks	1.3	1.6	...	1.3	1.9	4	....
Foreign bank branches	10.5	10.8	...	3.9	3.8	4.2	....
Private banks	1.9	1.2	...	0.1	0.1	0.2	....
Return on assets (select SOCBs only) 1/	...	...	...	...	...	...	...
Banque pour le Commerce Exterieur Lao	...	3.1	3.2	...	...	...	...
Lao Development Bank	...	...	...	...	...	...	...
Agricultural Promotion Bank	...	...	...	...	...	...	...
Number of banks	23	25	25	31	32	37	40
State-owned commercial banks	4	4	4	4	4	4	4
Joint-venture banks	2	2	2	2	2	3	3
Foregin bank branches	10	11	11	19	19	23	26
Private banks	7	8	8	6	7	7	7
Sectoral allocation of bank credit (in percent of total)							
Industry and handicraft	19	19	20	16	18	21	24
Construction	4	12	13	18	21	20	17
Materials and technical supplies	8	5	4	4	5	3	3
Agriculture	13	16	13	8	10	10	9
Commerce	23	23	21	24	21	20	18
Transportation	3	4	4	4	4	3	2
Services	8	13	17	16	12	11	10
Other	22	9	8	10	10	12	17

Source: Bank of Lao P.D.R., External Audit Reports.

1/ Profit before tax divided by total balance sheet assets.

2/ Data as of Q2 2015

Table 7. Lao P.D.R.: Millennium Development Goals Indicators

Millennium Development Goals	Indicator	Baseline	Current Status	2015 Target
1. Eradicate extreme poverty and hunger	Proportion of population below the national poverty line	46	23.2	24
	Employment-to-population ratio	84.9	77.7	no target
	Prevalence of underweight children under five years of age	44	27	22
	Prevalence of stunting in children under five years of age	48	44	34
2. Achieve universal primary Education	Proportion of pupils starting grade 1 who reach grade 5	48	70	95
	Literacy rate in the age group of 15–24 years	71	73.1	99
3. Promote gender equality and empower Women	Number of girls per 100 boys enrolled in:			
	Primary	79	91	100
	Lower secondary	70	89	100
	Upper secondary	67	83	100
	Tertiary	42	77	100
	Share of women in wage employment	38	34	no target
4. Reduce child mortality	Under–five mortality rate	170	79	70
	Proportion of one-year-old children immunized against measles	33	55	90
5. Improve maternal Health	Proportion of births attended by skilled birth personnel	14	42	50
	Maternity mortality rate (per 100,000 live births)	796	357	260
6. Combat HIV/AIDS, malaria and other diseases	HIV prevalence among general pop. (percentage)	0.1	0.28	less than 1
7. Ensure Environmental Sustainability	Proportion of land areas covered by forests (percentage)	49.1	40.3	65
	Consumption of ozone-depleting substances (mt)	43.3	2.5	0

Sources: United Nations and Government of Lao P.D.R. (http://www.la.one.un.org/images/publications/MDGs_Factsheet).

LAO PEOPLE'S DEMOCRATIC REPUBLIC

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS[1]

January 6, 2017

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The risk of Lao P.D.R. facing external debt distress has risen from moderate to high.[2] External debt distress indicators are more elevated than in the 2014 DSA, owing to the higher initial external PPG debt stock and projected debt flows to support public investment. Some external debt indicators breach the respective policy-dependent indicative thresholds for some years, indicating limited buffers in the case of adverse shocks. Also, the present value (PV) of public sector debt-to-GDP ratio breaches the benchmark for some years. Given the considerable share of foreign-currency-denominated debt, a large and sudden exchange rate depreciation could significantly raise the level of those indicators, putting debt dynamics on an unsustainable path. Though revenues from large resource projects are expected to mitigate risks over the long term, external borrowing should remain on concessional terms as much as possible to reduce the debt burden. The deterioration of the debt distress risk rating suggests the urgent need to recalibrate fiscal policy to rebuild fiscal buffers, adopt clear guidelines for the issuance of sovereign debt and guarantees to help contain and monitor contingent liabilities, and strengthen the debt management capacity, including developing a comprehensive medium-term debt management strategy and regularly performing a debt sustainability analysis to inform borrowing decisions.

[1] This DSA has been prepared by IMF and World Bank staff, in consultation with the Lao P.D.R. authorities.

[2] The low-income country debt sustainability framework (LIC DSF) recognizes that better policies and institutions allow countries to manage higher levels of debt, and thus the threshold levels for debt indicators are policy-dependent. In the LIC-DSF, the quality of a country's policies and institutions is measured by the World Bank's Country Policy and Institutional Assessment (CPIA) index and classified into three categories: strong, medium, and weak. Lao P.D.R.'s policies and institutions, as measured by the CPIA, averaged 3.34 over the past three years. Since its average CPIA index has been above 3.25 for three years in a row, Lao P.D.R.'s policy performance remains classified as medium according to the "Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-income Countries" (www.imf.org/external/np/pp/eng/2010/012210.pdf). Therefore, the relevant indicative thresholds for this category are: 40 percent for the PV of debt-to-GDP ratio, 150 percent for the PV of debt-to-exports ratio, 250 percent for the PV of debt-to-revenue ratio, 20 percent for the debt service-to-exports ratio, and 20 percent for the debt service-to-revenue ratio. These thresholds are applicable to public and publicly guaranteed external debt.

BACKGROUND

Lao P.D.R.: External Public Debt Indicators		
	Indicative thresholds	End-2015
Present value of debt, as a percent of:		
GDP	40	40.1
Exports	150	95.5
Revenue	250	218.1
Debt service, as a percent of:		
Exports	20	5.2
Revenue	20	11.9

Sources: Lao P.D.R. authorities; and IMF and World Bank estimates.

1. **The 2014 Debt Sustainability Analysis (DSA) classified Lao P.D.R.'s risk of debt distress as moderate, but it was on the borderline of high risk, with heightened vulnerabilities for public debt.**

2. **This DSA reclassifies the risk of debt distress from moderate to high, due to increased external borrowing.** The indicative debt distress thresholds remain unchanged from the 2014 DSA, since the classification of Lao P.D.R.'s policy performance, according to the Country Policy and Institutional Assessment (CPIA) index, remains moderate.[3] Under the baseline scenario of the current DSA, some of the external and public debt distress indicators breach the policy-dependent indicative thresholds for some years, although the net present value (PV) of external debt follows a downward trend and returns to levels below the respective thresholds in the medium term. Under the alternative scenarios, some indicators also breach the thresholds for some periods. The breach of at least one indicator both under the baseline and alternative scenarios classifies the risk of debt distress as high.

Lao P.D.R.: Stock of External PPG Debt at End-2015			
	In Billions of U.S. Dollars	As a Share of Total External Debt	In Percent of GDP
Total	6.5	100	51.7
Multilateral	1.5	22.8	11.8
Bilateral	4.2	64.4	33.3
Commercial 1/	0.8	12.8	6.6

Sources: Lao P.D.R. authorities; and IMF and World Bank staff estimates.
1/ Commercial debt includes Thai bond issuance.

3. **Lao P.D.R.'s external public and publicly guaranteed (PPG) debt has risen for the past few years.** The nominal stock of PPG external debt increased from US$5.4 billion at end-2013 to about US$6.5 billion at end-2015, due mainly to higher borrowing from Thailand and China and sovereign bond issuance in the Thai market. The rise in debt was in part driven by heavy investment in power generation projects, part of the strategy to use the country's abundant hydropower resources to export energy to the rapidly growing neighborhood.[4] Thus, the PPG external debt rose from 50.9 percent of GDP at end-2013 to 51.7 percent of GDP at end-2015. The corresponding net present value (PV) of PPG external debt increased from 39.8 percent of GDP at end-2013 to 40.1 percent at-end 2015, which is above the 40 percent indicative threshold.

[3] Lao P.D.R.'s CPIA index declined from 3.36 in 2014 to 3.29 in 2015 and averaged 3.34 over the past three years, not sufficient to change the classification of its policy performance, which remains moderate.

[4] The installed capacity in Lao P.D.R.'s power system increased from around 600MW in early 2000 to above 6,000MW most recently with most of the generated electricity is exported to Thailand. The installed capacity is expected to reach above 10,000MW by 2020.

4. **Bilateral creditors have been a greater source of loans than multilateral creditors in 2015, and this trend is expected to continue in the projection period.** Bilateral creditors—mainly China, Russia, Thailand, Japan, and Korea—account for 64.4 percent of total external PPG debt at end-2015. Multilateral creditors consist mainly of the Asian Development Bank (AsDB—12.2 percent of total external PPG debt), and the International Development Association (IDA—7.8 percent of total external PPG debt). Sovereign bonds have also been issued in the Thai capital market starting in May 2013 and the outstanding sovereign bonded debt at end-2015 was US$838 million, 12.8 percent of total external PPG debt (Box 1).

Box 1. Lao P.D.R.: Sovereign Bond Issuance in the Thai Market

Lao P.D.R first issued baht-denominated bonds in Thailand in May 2013, followed by three more issuances in December 2013, October 2014, and June 2015. In December 2015, Lao P.D.R. also issued its first US dollar-denominated floating-rate bonds, amounting to US$182 million. The bond proceeds have financed the budget deficit as well as the government's share in power projects. The table below summarizes the sovereign bond issuances since 2013.

The outstanding bonded debt at end-2015 was US$838 million, accounting for 12.8 percent of total external PPG debt. The authorities have indicated that they intend to continue to issue bonds in the Thai market after 2016.

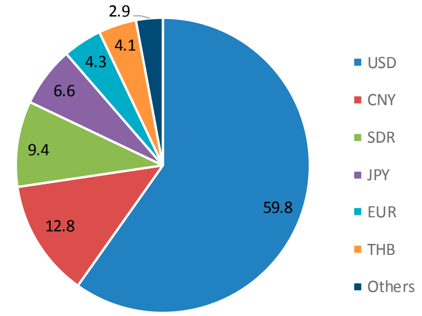
The issuance of bonds with different maturities, ranging from 3 to 12 years, indicates the authorities' goal to establish a yield curve. A credit rating agency based in Thailand (TRIS Rating Co., Ltd) provided an investment grade rating of BBB+ for the Lao government bonds in the Thai market. This rating is based on strong growth, Lao's abundance of natural resources, rising government revenue from hydropower, and the government's commitment to modernize the economy and alleviate poverty.

	2013			2014			2015				
Issue date	30-May	4-Dec	4-Dec	10-Oct	10-Oct	10-Oct	25-Jun	25-Jun	25-Jun	8-Dec	8-Dec
Maturity (years)	3	3	5	3	5	7	3	5	10	10	12
Volume (million Thai Bath)	1,500	434	2,566	1,794	1,830	1,466	1,000	5,000	6,000	5,813	718
Volume (US$ million equivalent)	50	13	80	55	56	45	30	148	178	162	20
Currency	THB	THB	THB	THB	THB	THB	THB	THB	THB	USD	USD
Yield to maturity (%)	4.5	4.7	5.2	4.76	5.2	5.5	3.56	4.32	5	6 month libor+3.38	6 month libor+3.48

Sources: Lao P.D.R. authorities; and IMF and World Bank staff estimates.

5. **About 60 percent of total external PPG outstanding debt was contracted in U.S. dollars.** The rest consists of yen, euro, Thai baht and others. Currency composition has moved significantly towards U.S. dollars at end-2015 compared with end-2014, from about 51.1 percent of total outstanding debt to 59.8 percent.

Currency Composition of External PPG Debt
(Percent of total)



Sources: Lao P.D.R. authorities; and IMF and World Bank staff estimates.

6. **The high level of concessionality of official borrowing helps to reduce the external debt service burden.** PPG external debt service-to-exports ratio is expected to remain below the policy-dependent indicative threshold throughout the projection period in

the baseline scenario. However, PPG external debt service-to-revenue ratio is expected to exceed the threshold for some periods. Furthermore, given high share of U.S. dollars in the currency composition of outstanding external debt and declining concessionality of new borrowing under the current DSA assumptions, these debt service ratios are sensitive to large sudden currency depreciation shocks.

7. The rising external debt-to-GDP and debt service-to-revenue ratios, as well as near-term threshold breaches, underscore the need to strengthen debt management capacity, including drawing up a comprehensive medium-term debt management strategy. When contracting new debt, debt sustainability considerations should be taken into account, particularly because the country is expected to shift from concessional to more market-based terms as it graduates from Least Developed Country (LDC) status. Additional near-term external borrowing, for example to finance large projects, could push the debt-to-GDP ratio further over the indicative thresholds for a protracted period, potentially undermining debt sustainability. A mitigating factor for Lao P.D.R.'s external debt burden lies in the prospective returns on the hydropower and mining projects that have been financed in part by the external PPG debt. The long-term power purchase agreements for these projects and the resulting government revenues in the form of royalties, dividends, and profit tax payments help reduce the risk of debt distress in the long run.

8. Recorded domestic PPG debt rose from 11.6 percent of GDP in 2013 to about 14.1 percent of GDP at end-2015. Domestic debt consists of bond/T-bill holdings and the legacy of Bank of the Lao P.D.R.'s direct lending to local government's off-budget infrastructure projects in the past. Given higher costs of domestic borrowing, the share of domestic PPG debt remains relatively small. Going forward, as domestic financial markets deepen, the share of domestic public debt is likely to increase. Total domestic and external PPG debt stood at 65.8 percent of GDP at end-2015, up from 62.5 percent at end-2013.

ASSUMPTIONS UNDERLYING THE DEBT SUSTAINABILITY ANALYSIS

9. The medium-term macroeconomic assumptions underlying the DSA are summarized in Box 2. The baseline scenario—which is based on current policies and consistent with the macroeconomic framework presented in the staff report—projects annual GDP growth to moderate to 6.9 and 6.8 percent in 2016 and 2017, respectively. Average real GDP growth over the projected period (2016–36) is expected to be 6.3 percent, lower than in the 2014 DSA, reflecting lower economic growth momentum due to a less favorable external environment, including a slight slowdown in major trading partners and lower prices of key exports such as commodities and food. GDP deflator growth (in USD terms) is projected to be about 2.1 percent, higher than in the 2014 DSA, in line with a pickup in

Lao P.D.R. Macroeconomic Assumptions
Comparison with 2014 DSA
(Average over the 20 years projection period)

	2014 DSA	2016 DSA
GDP growth	6.6	6.3
GDP deflator in U.S. dollar terms (percent)	1.5	2.1
Non-interest current account deficit	10.6	11.3
Primary deficit	1.9	2.8

Sources: Lao P.D.R. authorities; and IMF and World Bank staff estimates.

global inflation. The non-interest current account deficit is projected to widen to 11.3 percent of GDP. On the fiscal side, the primary deficit is expected to deteriorate from an historical average of 1.9 percent of GDP to an average of 2.8 percent over the projection period due to weaker tax revenue growth.

10. As a result, a higher level of financing is assumed than in the 2014 DSA. To meet the country's financing needs, a higher level of new borrowing is projected to finance investment that would support the country's ambition to graduate from LDC status by 2020. External financing is assumed to remain largely on concessional terms in the near future except for sovereign bond issuance on the Thai market. Going forward, however, the new disbursement schedule is assumed to rely less on multilateral creditors, and more on bilateral and commercial creditors. Multilateral assistance will slowly shift from grant- to credit-based conditions, and the AsDB and the World Bank Group are expected to remain the principal suppliers of multilateral credit, with IDA loans slowly phasing out and being replaced by IBRD loans with less concessional terms. The level of grant financing is projected to decline over the projection period, adding to the higher projected borrowing needs. As the domestic financial market deepens, the private sector is assumed to rely more on domestic sources of financing, lowering the need for foreign borrowing in the long term.

DEBT SUSTAINABILITY

A. External Debt Sustainability Analysis

11. Under the baseline scenario, the PV of external debt-to-GDP ratio is projected to be above the policy dependent indicative threshold and decline in the medium term (Figure 1). This indicates that the debt distress risk is more elevated than in the 2014 DSA. The change is driven primarily by the higher debt stock at the end of 2015, and higher projected new borrowing, with less concessional terms going forward, as Lao P.D.R. graduates from the LDC status. As a result, the current DSA forecasts a breach of the policy dependent indicative threshold for some periods with respect to three indicators: 1) the PV of external PPG debt-to-GDP ratio, 2) the PV of debt-to-revenue ratio, and 3) the debt service-to-revenue ratio. Other debt and debt service indicators, namely the PV of debt-to-exports ratio and the debt service-to-exports ratio, remain below the policy-dependent indicative threshold during the entire forecast period under the baseline scenario.

12. Under the historical scenario, in which key variables are set at their historical averages, debt dynamics become unsustainable for all debt indicators. The historical scenario is based on 10-year averages of higher current account deficit, real GDP growth, and growth of exports of goods and services than assumed under the baseline scenario, requiring higher debt accumulation rates and putting debt dynamics on an unsustainable path. As shown in Figure 1, all debt indicators except the debt service-to-exports ratio are projected to breach the respective policy dependent indicative thresholds.

Box 2. Lao P.D.R.: Baseline Scenario—Underlying Assumptions (2016–36)

Real GDP growth is projected to average 6.8 percent during 2016–21. Growth has slowed in 2016, partly due to a less favorable external environment, including a slowdown in major trading partners and lower metals prices. Real GDP is expected to moderate to 6.3 percent on average during 2016–36, as production in the resource sector reaches maturity. Graduation from Least Developed Country (LDC) status is projected around early-2020s.

Inflation (measured by GDP deflator in USD terms) is projected to average about 2.1 percent in 2016–36, in line with a possible pickup in global inflation.

The balance of payments continues to be driven by developments in the resource sector, which has an important bearing both on the current account and the capital and financial account. The non-interest current account deficit is estimated to have narrowed to about 14.3 percent of GDP in 2016 and is expected to widen over the medium term, as the railway project is implemented, before it declines to 11.3 percent of GDP on average in the longer term, as the resource balance improves due to the beginning of operation of large-scale power projects. FDI inflows are assumed to be vigorous, driven by growing investment inflows into both resource and non-resource sectors.

External financing is assumed to remain largely on concessional terms in the near term. In the longer-run, however, the degree of concessional financing decreases with economic development, while the new disbursement schedule will shift from multilateral to commercial and bilateral creditors.

- **Multilateral Creditors**: Projected loan disbursements in the medium term are relatively higher than the authorities' projection. New disbursements from IDA is expected to be US$70 million. Lao P.D.R. is expected to gradually establish IBRD creditworthiness which will result in gradual transition from IDA and increasing borrowing at IBRD terms over the projection period. Over the longer term, the share of multilateral loans in total disbursements is expected to decline.
- **Bilateral and Commercial Creditors**: Over the medium and longer term, project loan disbursements increase, as donors provide support to the government's development agenda. This DSA assumes a US$480 million loan from China to build the Lao-China railway (Box 3). As Lao P.D.R. exits from low income country status, a larger share of external borrowing is expected to come from bilateral and commercial creditors, with lower degree of concessionality. This DSA incorporates historical and projected sovereign bond issuance in the Thai market and assumes their continuous roll-over and new bond issuances in the medium term.

Fiscal policy is projected to be neutral in the medium-term. The primary deficit is projected to peak at 4.4 percent of GDP in 2016 and decline gradually to about 3.5 percent of GDP on average over the medium term. Over the long-term the primary deficit is expected to average around 2.8 percent as improvements in non-mining revenue collection come on line, while capital expenditure is expected to decline and other expenditure categories are expected to remain constant as a percent of GDP.

Domestic debt is expected to increase over the long-term as the country relies more on domestic funding. Going forward, as global interest rates are projected to rise and domestic financial markets deepen, a larger share of financing needs is likely to be satisfied by domestic creditors.

Box 3. The Lao P.D.R. Section of the Kunming – Singapore Railway Line

The project involves the construction of a 420 kilometer single track electrified rail line from Vientiane to the border with China on the North. Around 60 percent of the railway line will go through tunnels or on bridges. The railway line is a section of the proposed Kunming – Singapore Trans Asian Railway corridor. The start of works on the section of the proposed corridor going through China was announced earlier in 2016. Other countries on the corridor have announced plans for upgrades to existing lines and construction of new lines; however, actual works have not been initiated.

The Lao P.D.R. section project has been estimated at US$6.7 billion, out of which 30 percent will be provided by a joint venture company already formed between Lao P.D.R. and China. Lao P.D.R. will need to contribute with 30 percent in the capital of this company (or around US$700 million) in annual installments over the medium term. Out of this, US$480 million will be borrowed from China while the remaining funds will be provided by the Budget. The joint venture company will need to secure the remaining 70 percent of the project costs. Lao P.D.R. Ministry of Finance has noted that no sovereign guarantee will be provided. According to the 2012 Feasibility Study, the IRR is 4.56 percent and the repayment period of investment is 23 years.

The formal start of works was announced in December 2015. However, progress has been slow due to still unresolved property issues as well as detailed design works. More recently, six lots for construction works (covering the full length of the proposed railway) were tendered with the awards being given to two Chinese companies with considerable experience in the field. The Lao P.D.R. Ministry of Finance envisages start of construction activities at some point during 2017.

13. **Debt dynamics are markedly worse under the stress test scenarios, with the exchange rate depreciation risk having the largest impact.** An abrupt exchange rate depreciation remains the most important risk to sustainability, given a large share of foreign currency debt and a very thin international reserves cushion. As shown in Figure 1, a one-off 30 percent depreciation shock would cause the breach of the indicative threshold of the PV of debt-to-GDP ratio, the PV of debt-to-revenue ratio, and debt service-to-revenue ratio over a prolonged period. While the PV of external PPG debt declines over the projection period, liquidity indicators worsen, as indicated by the increasing debt service ratios. In addition, an assumed negative shock to FDI inflows—a scenario with net official transfers and net FDI falling in 2016–17 below their historical averages—deteriorates the debt trajectory, forcing Lao P.D.R. to reduce its current account deficit in order to avoid worsening the external debt position.

B. Public Sector Debt Sustainability Analysis

14. **The PV of public sector debt in percent of GDP is projected to breach the benchmark for many years and decline over the long run under the baseline scenario.** Current public sector debt dynamics show a worsening situation than in the 2014 DSA. The PV of public sector debt was estimated at 54.1 percent of GDP in 2015 and is expected to exceed 56.0 percent of the public debt benchmark for many years in the baseline scenario. The breach is primarily driven by a faster amortization schedule on existing 2015 debt and a higher projected disbursement schedule necessary to support growth. The public sector debt is estimated at 65.8 percent of GDP at end-2015 and expected to rise to 70.3 percent of GDP by 2018 before declining over the long run.

15. The deterioration in the baseline and stress test scenarios compared to the 2014 DSA highlights the growing risk of debt distress and the importance of fiscal consolidation over the medium term. As shown in Figure 2 for the fixed primary balance scenario, which assumes an unchanged primary balance from 2016 for the entire projection period, the PV of the debt-to-GDP and debt-to-revenue ratios would be higher than the baseline over the projection period.

16. The PV of public sector debt remains sensitive to a large, abrupt exchange rate depreciation and the realization of contingent liabilities. Owning to significant reliance on external borrowing, a sudden 30-percent depreciation of the kip against the U.S. dollar would immediately raise the PV of public sector debt-to-GDP in the medium-term, indicating unfavorable implications for debt sustainability. Also, given the fragile public banks, recapitalization costs, which are estimated to be at least about US$250 million (1.8 percent of GDP), could add to the debt burden.

AUTHORITIES' VIEWS

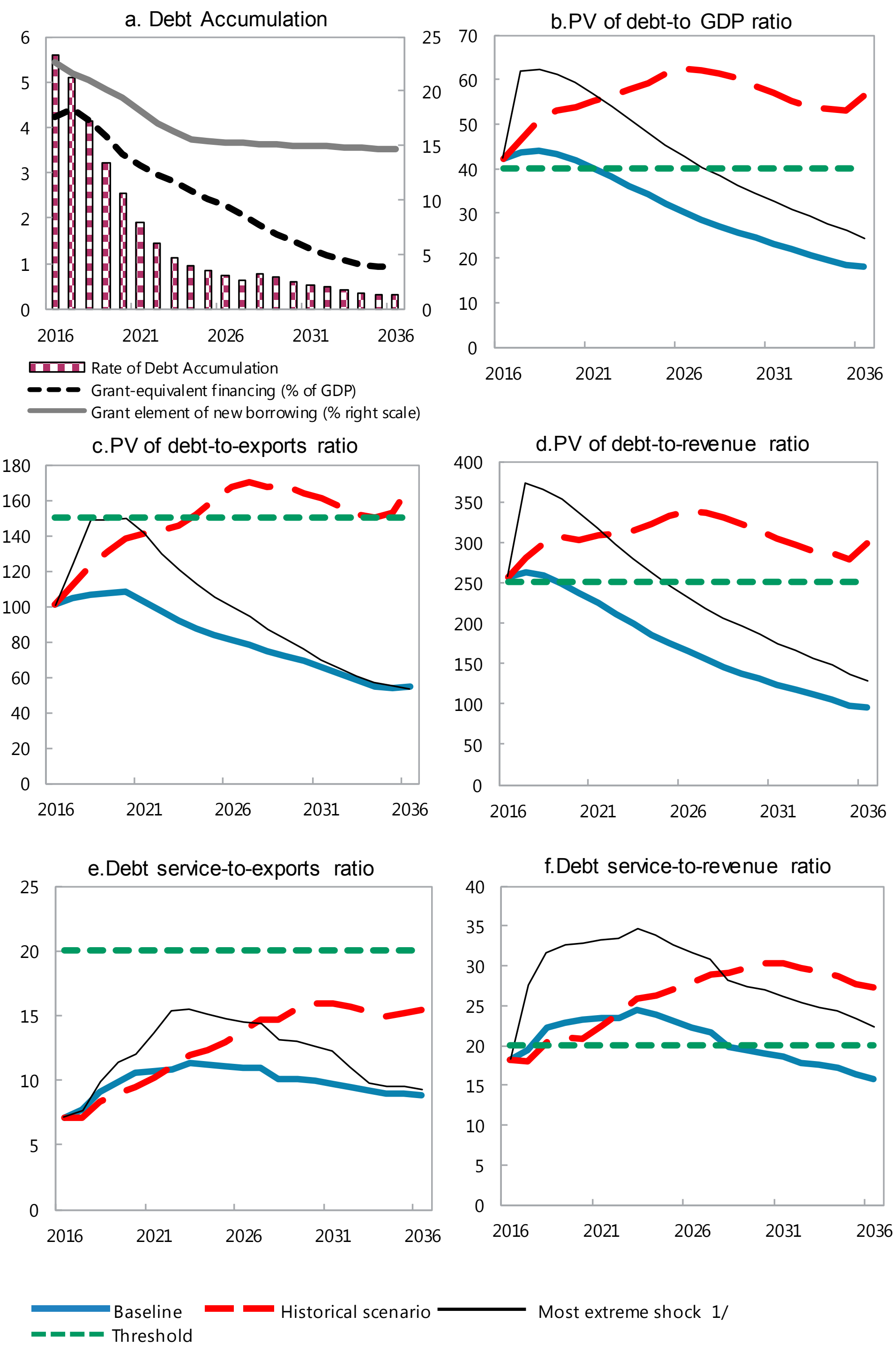
17. The authorities broadly agree with the overall assessment, recognizing that the increased public debt puts pressure on the government budget, and the importance of focusing on servicing existing debts rather than creating new debts. The government has an explicit debt target for external PPG debt of 50 percent of GDP and has taken steps to limit the contracting of additional debt to concessional borrowing. A new legal framework for the contracting and management of public debt is also being prepared, and the Ministry of Finance has been reorganized to merge the management of all debt (domestic and foreign) in one department. The government has also eliminated the contracting of central bank financing of off-budget investments.

18. The authorities highlight that a significant part of the external debt is related to large, commercially viable hydroelectric projects and do not foresee difficulties in servicing debt. They project that energy projects will generate high and stable economic returns upon completion and will supply enough foreign exchange to service debt. A relatively long maturity profile of loans, as well as U.S. dollar returns of the exporting sectors, would help mitigate the risks of debt distress. The authorities anticipate a decrease in disbursements of new funds from some bilateral donors between 2016 and 2022 given that the authorities are no longer allowed to start new investment projects not included in budget passed by the National Assembly. Borrowing is expected to shift from external to domestic sources over time, as domestic debt markets deepen and financing becomes cheaper.

CONCLUSION

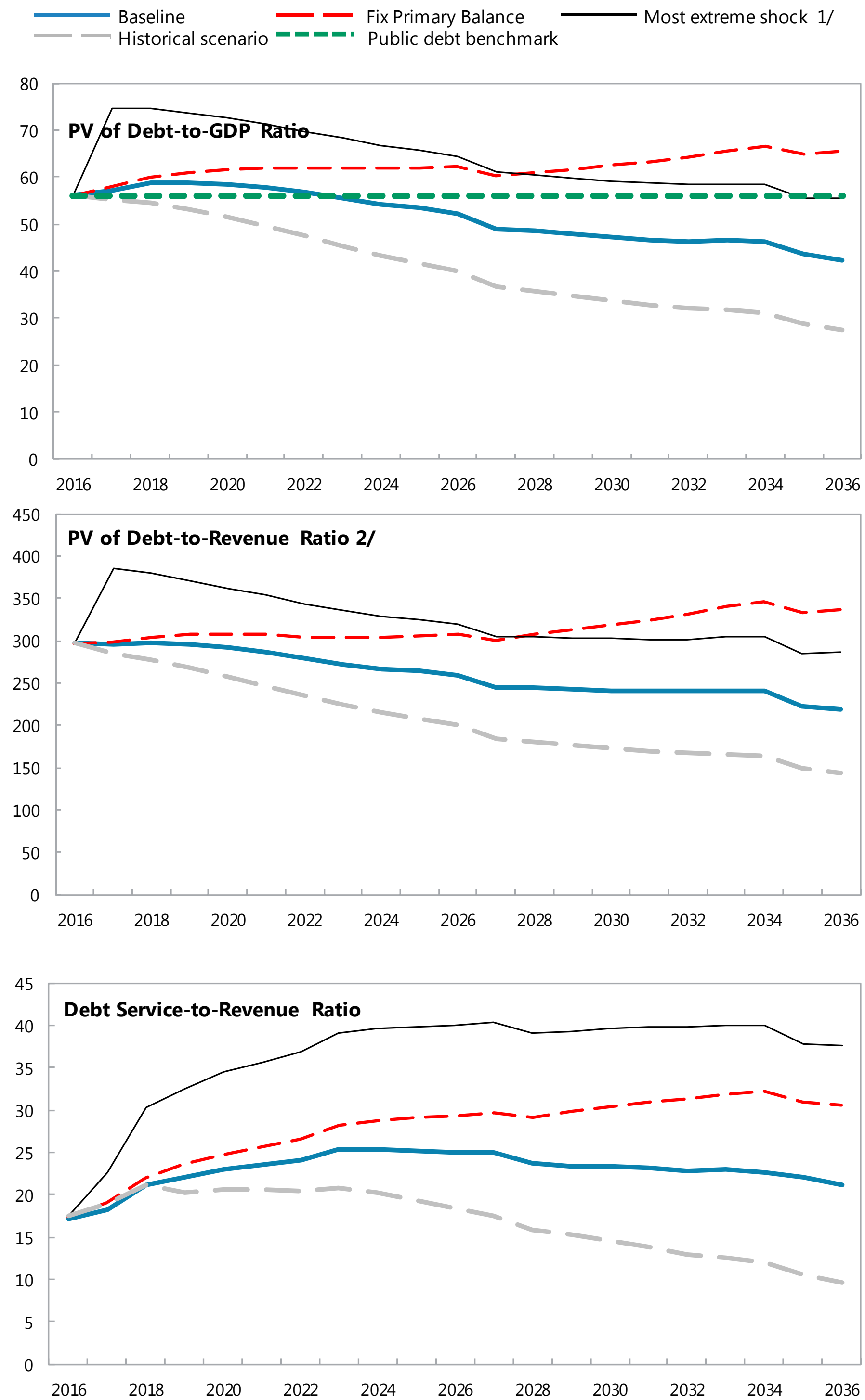
19. Lao P.D.R.'s risk of external debt distress is reclassified from moderate to high, suggesting the urgent need to tighten fiscal policy, strengthen public financial management, and develop a comprehensive medium-term debt management strategy. The PV of external debt-to-GDP ratio, the PV of external debt-to-revenue ratio, and debt service-to-revenue ratio breach the respective policy-dependent indicative thresholds for some years. Also, the PV of public sector debt-to-GDP ratio breaches the benchmark for some years. The projected increase in debt undermines fiscal space for countercyclical needs and potential banking sector or other contingent costs. Given the considerable share of foreign currency denominated debt, a large sudden exchange rate depreciation could significantly raise the level of those indicators, putting debt dynamics on an unsustainable path. To reduce debt burden, external borrowing should be contracted on concessional terms as much as possible. The authorities should recalibrate fiscal policy to rebuild fiscal buffers through stronger revenue mobilization efforts and expenditure rationalization, adopt clear guidelines for the issuance of sovereign debt and guarantees to help contain and monitor contingent liabilities, and accelerate the strengthening of the debt management function including developing a comprehensive medium-term debt management strategy and a regular debt sustainability analysis to inform borrowing decisions.

Figure 1. Lao P.D.R.: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2016–36 1/



Sources: Country authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio on or before 2026. In figure b. it corresponds to a One-time depreciation shock; in c. to a Non-debt flows shock; in d. to a One-time depreciation shock; in e. to a Non-debt flows shock and in figure f. to a One-time depreciation shock

Figure 2. Lao P.D.R.: Indicators of Public Debt Under Alternative Scenarios, 2016–36 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2026.

2/ Revenues are defined inclusive of grants.

Table 1. Lao P.D.R.: External Debt Sustainability Framework, Baseline Scenario, 2013–36 1/

(Percent of GDP, unless otherwise indicated)

	Actual			Historical 6/ Average	Standard 6/ Deviation	Projections									
	2013	2014	2015			2016	2017	2018	2019	2020	2021	2016-2021 Average	2026	2036	2022-2036 Average
External debt (nominal) 1/	**86.9**	**92.7**	**95.5**			**98.1**	**100.2**	**100.4**	**99.5**	**97.4**	**94.4**		**78.0**	**44.5**	
of which: public and publicly guaranteed (PPG)	50.9	51.1	51.7			54.1	55.6	55.7	54.5	52.7	50.3		37.6	22.8	
Change in external debt	-4.4	5.8	2.8			2.6	2.1	0.2	-0.9	-2.1	-3.0		-3.2	-1.8	
Identified net debt-creating flows	9.4	5.0	0.8			-0.1	1.3	0.1	0.8	1.9	-0.4		-2.3	0.0	
Non-interest current account deficit	**28.0**	**18.5**	**15.4**	**18.6**	**5.9**	**14.3**	**16.0**	**17.0**	**17.3**	**16.1**	**13.6**		**9.2**	**7.5**	9.5
Deficit in balance of goods and services	29.9	24.8	21.3			17.0	20.1	20.8	20.5	18.9	15.9		10.0	8.3	
Exports	43.2	46.3	42.0			42.1	41.7	41.5	40.5	38.9	39.1		37.4	33.4	
Imports	73.1	71.1	63.3			59.1	61.8	62.3	60.9	57.8	54.9		47.5	41.7	
Net current transfers (negative = inflow)	-2.2	-6.6	-6.4	-3.4	1.7	-3.6	-4.1	-4.0	-3.8	-3.6	-3.4		-2.7	-1.3	-2.2
of which: official	-1.4	-5.1	-5.0			-2.2	-2.8	-2.7	-2.6	-2.3	-2.2		-1.7	-0.5	
Other current account flows (negative = net inflow)	0.4	0.2	0.5			0.9	0.1	0.2	0.7	0.8	1.1		1.8	0.5	
Net FDI (negative = inflow)	**-8.5**	**-7.9**	**-10.8**	**-7.7**	**3.1**	**-11.2**	**-11.6**	**-13.5**	**-12.8**	**-10.7**	**-10.0**		**-8.1**	**-5.8**	-7.5
Endogenous debt dynamics 2/	**-10.2**	**-5.6**	**-3.8**			**-3.2**	**-3.2**	**-3.4**	**-3.7**	**-3.5**	**-4.0**		**-3.4**	**-1.7**	
Contribution from nominal interest rate	1.6	2.2	1.4			2.8	2.9	2.7	2.6	2.8	2.2		1.3	0.6	
Contribution from real GDP growth	-6.3	-6.3	-6.5			-6.1	-6.1	-6.1	-6.3	-6.3	-6.1		-4.7	-2.3	
Contribution from price and exchange rate changes	-5.4	-1.5	1.3			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**-13.7**	**0.8**	**2.0**			**2.7**	**0.8**	**0.0**	**-1.7**	**-4.0**	**-2.5**		**-0.9**	**-1.7**	
of which: exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	83.9			86.3	88.4	88.7	88.2	86.6	84.3		70.8	39.8	
In percent of exports	...	...	199.9			205.2	211.8	213.5	217.9	222.7	215.8		189.1	119.1	
PV of PPG external debt	**...**	**...**	**40.1**			**42.3**	**43.7**	**44.0**	**43.3**	**42.0**	**40.2**		**30.4**	**18.1**	
In percent of exports	**...**	**...**	**95.5**			**100.5**	**104.8**	**106.0**	**106.9**	**107.8**	**103.0**		**81.1**	**54.3**	
In percent of government revenues	**...**	**...**	**218.1**			**257.2**	**263.2**	**258.5**	**249.6**	**236.9**	**224.6**		**164.2**	**96.1**	
Debt service-to-exports ratio (in percent)	**13.6**	**12.8**	**12.3**			**20.6**	**22.1**	**23.1**	**24.3**	**25.7**	**24.6**		**20.8**	**8.9**	
PPG debt service-to-exports ratio (in percent)	**5.1**	**5.6**	**5.2**			**7.1**	**7.7**	**9.1**	**9.8**	**10.5**	**10.7**		**11.0**	**8.9**	
PPG debt service-to-revenue ratio (in percent)	**12.3**	**14.2**	**11.9**			**18.2**	**19.4**	**22.3**	**22.9**	**23.1**	**23.3**		**22.3**	**15.7**	
Total gross financing need (Billions of U.S. dollars)	2.7	2.0	1.2			1.6	2.0	2.1	2.5	3.0	2.8		2.8	3.2	
Non-interest current account deficit that stabilizes debt ratio	32.4	12.8	12.6			11.7	14.0	16.8	18.2	18.2	16.5		12.3	9.2	
Key macroeconomic assumptions															
Real GDP growth (in percent)	8.0	8.0	7.5	7.9	0.3	6.9	6.8	6.7	6.9	6.9	6.8	6.8	6.3	5.5	6.0
GDP deflator in US dollar terms (change in percent)	6.3	1.7	-1.4	8.2	7.3	2.2	1.2	2.0	2.3	2.2	2.1	2.0	2.1	2.8	2.1
Effective interest rate (percent) 5/	2.0	2.8	1.7	1.9	0.4	3.3	3.2	3.0	2.8	3.0	2.4	3.0	1.8	1.4	1.7
Growth of exports of G&S (US dollar terms, in percent)	19.6	17.6	-3.9	20.6	19.4	9.5	7.2	8.3	6.5	5.0	9.5	7.7	5.9	4.7	7.2
Growth of imports of G&S (US dollar terms, in percent)	17.3	6.9	-5.7	20.0	14.2	2.0	13.0	9.8	6.9	3.6	3.7	6.5	6.1	5.5	6.3
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	22.6	21.6	21.1	20.2	19.3	18.2	20.5	15.3	14.7	15.3
Government revenues (excluding grants, in percent of GDP)	17.9	18.1	18.4			16.4	16.6	17.0	17.3	17.7	17.9		18.5	18.9	18.6
Aid flows (in Billions of US dollars) 7/	0.6	0.6	0.5			0.5	0.6	0.6	0.6	0.6	0.6		0.6	0.5	
of which: Grants	0.6	0.6	0.5			0.3	0.4	0.4	0.5	0.5	0.5		0.5	0.4	
of which: Concessional loans	0.0	0.0	0.0			0.2	0.2	0.2	0.2	0.1	0.1		0.1	0.1	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			4.2	4.4	4.2	3.8	3.4	3.2		2.3	0.9	1.8
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			40.7	42.4	42.7	43.6	43.5	44.0		40.6	28.0	35.5
Memorandum items:															
Nominal GDP (Billions of US dollars)	10.8	11.9	12.6			13.7	14.8	16.1	17.6	19.3	21.0		32.0	69.3	
Nominal dollar GDP growth	14.8	9.9	6.0			9.2	8.1	8.8	9.3	9.3	9.1	9.0	8.5	8.5	8.3
PV of PPG external debt (in Billions of US dollars)			5.1			5.8	6.5	7.1	7.6	8.0	8.4		9.7	11.9	
(PVt-PVt-1)/GDPt-1 (in percent)						5.6	5.1	4.1	3.2	2.5	1.9	3.8	0.7	0.3	0.7
Gross workers' remittances (Billions of US dollars)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of PPG external debt (in percent of GDP + remittances)	...	...	40.1			42.3	43.7	44.0	43.3	42.0	40.2		30.4	18.1	
PV of PPG external debt (in percent of exports + remittances)	...	...	95.5			100.5	104.8	106.0	106.9	107.8	103.0		81.1	54.3	
Debt service of PPG external debt (in percent of exports + remittanc	...	...	5.2			7.1	7.7	9.1	9.8	10.5	10.7		11.0	8.9	

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 c

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

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

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

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

8/ 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).

Table 2. Lao P.D.R.: Public Sector Debt Sustainability Framework, Baseline Scenario, 2013–36

(Percent of GDP, unless otherwise indicated)

	Actual					Estimate			Projections						
	2013	2014	2015	Average 5/	Standard Deviation 5/	2016	2017	2018	2019	2020	2021	2016-21 Average	2026	2036	2022-36 Average
Public sector debt 1/	62.5	64.9	65.8			67.8	69.0	70.3	70.0	69.1	67.9		59.5	47.0	
of which: foreign-currency denominated	50.9	51.1	51.7			54.1	55.6	55.7	54.5	52.7	50.3		37.6	22.8	
Change in public sector debt	5.4	2.4	0.9			2.1	1.2	1.3	-0.2	-0.9	-1.3		-1.5	-1.1	
Identified debt-creating flows	-0.6	-1.4	-0.4			0.8	0.0	-0.4	-0.9	-1.0	-0.8		-0.4	0.8	
Primary deficit	4.1	3.0	2.4	1.9	1.3	4.4	3.7	3.5	3.3	3.2	3.2	3.5	2.7	2.4	2.5
Revenue and grants	23.4	23.3	22.7			18.9	19.4	19.7	19.9	20.1	20.2		20.2	19.4	
of which: grants	5.5	5.2	4.3			2.4	2.8	2.7	2.6	2.3	2.3		1.7	0.5	
Primary (noninterest) expenditure	27.5	26.3	25.0			23.2	23.0	23.2	23.2	23.2	23.3		22.9	21.8	
Automatic debt dynamics	-4.7	-4.4	-2.7			-3.5	-3.7	-3.8	-4.2	-4.2	-4.0		-3.2	-1.5	
Contribution from interest rate/growth differential	-3.9	-3.5	-3.7			-4.0	-3.8	-3.9	-4.1	-4.1	-4.0		-3.2	-2.4	
of which: contribution from average real interest rate	0.3	1.1	0.8			0.3	0.5	0.5	0.4	0.4	0.4		0.4	0.1	
of which: contribution from real GDP growth	-4.2	-4.6	-4.5			-4.3	-4.3	-4.3	-4.5	-4.5	-4.4		-3.6	-2.5	
Contribution from real exchange rate depreciation	-0.8	-0.9	1.0			0.5	0.2	0.0	-0.1	-0.1	0.0		...	...	
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		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	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		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	6.0	3.8	1.3			1.2	1.2	1.6	0.6	0.1	-0.4		-1.1	-1.9	
Other Sustainability Indicators															
PV of public sector debt	...	...	54.1			56.0	57.2	58.6	58.8	58.4	57.8		52.3	42.4	
of which: foreign-currency denominated	...	...	40.1			42.3	43.7	44.0	43.3	42.0	40.2		30.4	18.1	
of which: external	...	...	40.1			42.3	43.7	44.0	43.3	42.0	40.2		30.4	18.1	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	12.8	8.7	9.1			11.9	11.4	11.8	12.1	12.4	12.8		13.9	11.6	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	238.9			297.0	295.2	297.4	295.2	291.1	286.4		259.4	218.3	
PV of public sector debt-to-revenue ratio (in percent)	...	...	294.9			340.9	344.3	344.1	339.0	329.7	322.6		282.9	224.4	
of which: external 3/	...	...	218.1			257.2	263.2	258.5	249.6	236.9	224.6		164.2	96.1	
Debt service-to-revenue and grants ratio (in percent) 4/	10.9	8.8	10.7			17.2	18.3	21.1	22.1	22.9	23.5		25.0	21.1	
Debt service-to-revenue ratio (in percent) 4/	14.3	11.2	13.2			19.8	21.3	24.4	25.4	26.0	26.5		27.2	21.7	
Primary deficit that stabilizes the debt-to-GDP ratio	-1.3	0.6	1.5			2.3	2.5	2.2	3.6	4.1	4.4		4.2	3.4	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	8.0	8.0	7.5	7.9	0.3	6.9	6.8	6.7	6.9	6.9	6.8	6.8	6.3	5.5	6.0
Average nominal interest rate on forex debt (in percent)	2.0	3.4	1.9	1.5	0.8	2.4	2.5	2.6	2.6	2.6	2.7	2.6	2.7	2.9	2.8
Average real interest rate on domestic debt (in percent)	0.8	2.9	5.5	-1.5	5.5	0.0	1.5	1.3	0.9	0.8	0.9	0.9	1.0	-0.5	0.6
Real exchange rate depreciation (in percent, + indicates depreciation	-1.9	-1.9	2.0	-5.6	7.4	0.9	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	4.1	4.5	0.0	5.3	5.1	2.3	2.3	2.7	3.1	3.3	3.2	2.8	3.2	2.8	3.2
Growth of real primary spending (deflated by GDP deflator, in percer	22.5	3.4	2.3	2.9	7.0	-0.9	6.0	7.3	7.0	7.0	7.3	5.6	5.5	0.0	5.2
Grant element of new external borrowing (in percent)	...	...	...	...	...	22.6	21.6	21.1	20.2	19.3	18.2	20.5	15.3	14.7	...

Sources: Country authorities; and staff estimates and projections.

1/ Public sector debt covers general government and gross debt is used

2/ 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.

3/ Revenues excluding grants.

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

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 3. Lao P.D.R.: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2016–36

(Percent)

	Projections							
	2016	2017	2018	2019	2020	2021	**2026**	2036
PV of debt-to GDP ratio								
Baseline	42	44	44	43	42	40	**30**	18
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	42	47	51	53	54	55	**62**	56
A2. New public sector loans on less favorable terms in 2016-2036 2/	42	45	47	47	47	46	**39**	30
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	42	43	43	42	41	39	**30**	17
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	42	46	50	49	48	45	**33**	17
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	42	44	44	44	42	41	**31**	17
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	42	52	62	60	58	55	**37**	18
B5. Combination of B1-B4 using one-half standard deviation shocks	42	46	49	48	47	44	**31**	16
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	42	62	62	61	59	57	**43**	24
PV of debt-to-exports ratio								
Baseline	101	105	106	107	108	103	**81**	54
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	101	112	122	131	138	141	**167**	168
A2. New public sector loans on less favorable terms in 2016-2036 2/	101	108	113	117	121	118	**104**	89
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	101	104	106	106	107	102	**81**	51
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	101	116	137	137	138	132	**99**	59
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	101	104	106	106	107	102	**81**	51
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	101	124	149	149	149	141	**99**	53
B5. Combination of B1-B4 using one-half standard deviation shocks	101	112	121	121	122	116	**85**	49
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	101	104	106	106	107	102	**81**	51
PV of debt-to-revenue ratio								
Baseline	257	263	258	250	237	225	**164**	96
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	257	281	298	306	303	308	**338**	298
A2. New public sector loans on less favorable terms in 2016-2036 2/	257	272	276	273	266	258	**212**	157
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	257	260	253	244	232	220	**161**	89
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	257	275	295	283	268	253	**177**	92
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	257	263	261	252	239	226	**165**	92
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	257	312	362	347	328	307	**201**	94
B5. Combination of B1-B4 using one-half standard deviation shocks	257	278	289	278	263	247	**170**	86
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	257	373	366	353	335	317	**232**	129

Table 3. Lao P.D.R.: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2016–36 (concluded)

(Percent)

Debt service-to-exports ratio								
Baseline	7	8	9	10	11	11	**11**	9
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	7	7	8	9	9	10	**14**	15
A2. New public sector loans on less favorable terms in 2016-2036 2/	7	8	8	8	8	9	**12**	13
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	7	8	9	10	11	11	**11**	9
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	7	8	11	12	13	13	**14**	10
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	7	8	9	10	11	11	**11**	9
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	7	8	10	11	12	14	**15**	9
B5. Combination of B1-B4 using one-half standard deviation shocks	7	7	9	10	11	12	**12**	9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	7	8	9	10	11	11	**11**	9
Debt service-to-revenue ratio								
Baseline	18	19	22	23	23	23	**22**	16
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	18	18	20	21	21	22	**28**	27
A2. New public sector loans on less favorable terms in 2016-2036 2/	18	19	19	19	18	20	**24**	23
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	18	19	22	23	23	23	**22**	15
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	18	19	23	24	24	25	**25**	16
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	18	19	23	23	23	24	**23**	16
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	18	19	24	27	26	30	**29**	16
B5. Combination of B1-B4 using one-half standard deviation shocks	18	19	22	23	23	25	**24**	15
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	18	28	32	33	33	33	**32**	22
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	11	11	11	11	11	11	**11**	11

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline, while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 4. Lao P.D.R.: Sensitivity Analysis for Key Indicators of Public Debt 2016–2036

	Projections							
	2016	2017	2018	2019	2020	2021	2026	2036
PV of Debt-to-GDP Ratio								
Baseline	56	57	59	59	58	58	52	42
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	56	55	54	53	51	50	40	28
A2. Primary balance is unchanged from 2016	56	58	60	61	62	62	62	65
A3. Permanently lower GDP growth 1/	56	57	59	59	59	58	53	45
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	56	57	57	57	57	56	49	38
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	56	57	58	58	58	57	52	42
B3. Combination of B1-B2 using one half standard deviation shocks	56	56	56	56	55	54	48	36
B4. One-time 30 percent real depreciation in 2017	56	74	75	74	73	71	64	55
B5. 10 percent of GDP increase in other debt-creating flows in 2017	56	66	67	67	66	65	58	46
PV of Debt-to-Revenue Ratio 2/								
Baseline	297	295	297	295	291	286	259	218
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	297	284	277	268	257	247	200	143
A2. Primary balance is unchanged from 2016	297	298	304	307	307	307	308	337
A3. Permanently lower GDP growth 1/	297	295	298	296	292	288	264	231
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	297	293	291	288	283	277	246	194
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	297	293	294	292	288	283	257	216
B3. Combination of B1-B2 using one half standard deviation shocks	297	288	284	280	275	270	238	187
B4. One-time 30 percent real depreciation in 2017	297	384	379	370	362	354	319	286
B5. 10 percent of GDP increase in other debt-creating flows in 2017	297	342	342	337	330	324	290	239
Debt Service-to-Revenue Ratio 2/								
Baseline	17	18	21	22	23	24	25	21
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	17	19	21	20	21	21	18	10
A2. Primary balance is unchanged from 2016	17	19	22	24	25	26	29	31
A3. Permanently lower GDP growth 1/	17	19	22	23	24	24	25	18
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	17	19	22	22	23	23	23	14
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	17	19	22	22	23	24	24	17
B3. Combination of B1-B2 using one half standard deviation shocks	17	19	21	21	22	23	22	13
B4. One-time 30 percent real depreciation in 2017	17	23	30	33	34	36	40	38
B5. 10 percent of GDP increase in other debt-creating flows in 2017	17	19	24	33	25	27	29	20

Sources: Country authorities; and staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.

2/ Revenues are defined inclusive of grants.

INTERNATIONAL MONETARY FUND

LAO PEOPLE'S DEMOCRATIC REPUBLIC

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

January 6, 2017

Prepared By

Asia and Pacific Department
(In consultation with other departments)

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FUND RELATIONS

(As of October 31, 2016)

Membership Status: Joined on July 5, 1961.

General Resources Account:

	SDR Million	Percent Quota
Quota	105.80	100.0
Fund holdings of currency (Exchange Rate)	92.58	87.50
Reserve Tranche Position	13.23	12.50

SDR Department:

	SDR Million	% Allocation
Net cumulative allocation	50.68	100.00
Holdings	37.85	74.68

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

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 the Fund[2]
(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2016	2017	2018	2019	2020
Principal					
Charges/Interest	0.00	0.02	0.02	0.02	0.02
Total	0.00	0.02	0.02	0.02	0.02

[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. Since January 2015, the kip has stabilized within a 2 percent band against the U.S. dollar. Therefore, the de facto exchange rate arrangement was reclassified to stabilized from a crawl-like arrangement, effective January 22, 2015. The authorities' objective is to limit currency fluctuations vis-à-vis major currencies, including the U.S. dollar and Thai baht, within ±5 percent per annum. The Bank of the Lao P.D.R. (BOL) sets a daily official reference rate, which is calculated as a weighted average of the previous day's interbank rates. Commercial banks and foreign exchange bureaus are required to maintain their buying and selling rates within ±0.25 percent of the BOL's daily reference rate for the U.S. dollar. For the euro and baht, the buying and selling rates may not exceed a margin of 0.5 percent. For other currencies, a margin of 2 percent applies.

On May 28, 2010, Lao P.D.R. accepted the obligations under Article VIII, Section 2, 3, and 4, following the elimination of one restriction subject to Fund jurisdiction under Article VIII arising from a requirement to obtain tax payment certificates for some transactions. Lao P.D.R. now maintains an exchange system free of restrictions on the making of payments and transfers for current international transactions, except for restrictions imposed solely for the preservation of national or international security notified to the Fund pursuant to Decision No. 144-(52/51).

Article IV Consultation

The last Article IV consultation discussions were held in Vientiane during October 16–28, 2014 and were concluded by the Executive Board on January 14, 2015. The staff report (Country Report No. 15/45) was published February, 2015.

Technical Assistance

Over the past three years, Lao P.D.R. has received technical assistance in the areas of: banking supervision and interbank market development; customs, tax and natural resource revenue administration; price statistics; external sector statistics; government finance statistics; and the national accounts. A Bangkok-based IMF office was set up in September 2012 to facilitate technical assistance to Lao P.D.R. as well as Myanmar, and has provided technical assistance in macroeconomic analysis and forecasting, monetary operations and public financial management.

Resident Representative

Jonathan Dunn assumed the Resident Representative post for Vietnam and Lao P.D.R., based in Hanoi, on October 16, 2015.

IMF-WORLD BANK COLLABORATION

The World Bank and the IMF country teams for Lao P.D.R. met on October 1, 2016 to discuss economic issues and outlook and to coordinate the two teams' work for FY2015. The teams were led by Mr. Evgenij Najdov (Senior Country Economist, Macro and Fiscal Management Global Practice, World Bank), and Mr. Geoffrey Bannister (IMF Mission Chief for Lao P.D.R.).

The teams agreed that although Lao P.D.R. has made progress on macroeconomic stabilization, significant vulnerabilities remain. While fiscal consolidation has been initiated, more efforts could be made to reduce external vulnerabilities and restore fiscal sustainability. Tighter fiscal and monetary policies, a more flexible exchange rate and strengthened banking supervision will be needed to build international reserves and ensure macrofinancial stability. In the longer run, a key challenge is to promote inclusive growth and poverty reduction through more diversification into non-resource sectors and sustainable development of natural resources. Much progress has been made in recent years on product and labor market openness and poverty reduction. Further trade integration will improve the business climate, and promote private investment and institutional reform. Upgrading health and education infrastructure will raise the growth potential and help reduce inequality.

Table 1. Lao P.D.R.: World Bank Group and Fund Planned Activities in Macro-Critical Structural Reform Areas, October 2013–December 2017

Title	Products	Provisional Timing of Missions	Delivery Date
1.World Bank Program	Green Growth Development Policy Operation (GGDPO)	New series of development policy operations (preparation mission in November 2016)	Implementation throughout fiscal year. GGDPO1 Board discussion expected in FY17
	Customs and Trade Facilitation Project (CTFP), Lao PDR second Trade Development Facility project (TDF2), Advisory Services to support Investment Climate	Ongoing	CTFP to close at the end of FY17; TDF2 received additional financing and extension to September 2018; Advisory Services planned until December 2019
	Public Finance Management Modernization Program (TA)	Ongoing	Implementation throughout September 2017
	Hydro-Mining Technical Assistance Project	Ongoing	Implementation throughout FY17 (project closing in September 2018)
	Technical assistance to the financial sector on improving: the regulatory framework, financial soundness indicators, payment systems, accounting & auditing standards, deposit insurance, and insolvency & creditor rights.	Ongoing	Implementation throughout FY17

Table 1. Lao P.D.R.: World Bank Group and Fund Planned Activities in Macro-Critical Structural Reform Areas, October 2013–December 2017 (concluded)

	SME Access to Finance lines of credit and technical assistance	Ongoing	Implementation throughout FY17
	Lao Statistical Capacity Building Project (LAOSTAT) (focus on economic statistics and macro framework in coordination with IMF TA below)	Ongoing	Implementation throughout FY17 (project closing at the end of FY17)
	Analytical work: macroeconomic monitoring (Lao economic monitors)	Ongoing	Implementation throughout FY17
	Lao PDR Systematic Country Diagnostic	Ongoing	January 2017
2. IMF Work Program	Periodic staff visits by IMF HQ team and resident representative based in Hanoi	July 2014	June 2015
	Technical Assistance mission on natural resource revenue administration	Completed	December 2013
	Technical Assistance mission on tax administration	Completed	January 2014
	Technical Assistance on bank-supervision and regulations	Completed	December 2013; November, 2014
	Technical Assistance on consumer prices/producer prices	Completed	February 2014
	Technical Assistance on national accounts statistics	Completed	March 2014
	Technical Assistance on monetary policy implementation	Ongoing	Implementation throughout FY15
	Technical Assistance on crisis management	Completed	June 2014
	Article IV Consultation	October 2014	Board discussion January 2015
	TAOLAM assistance on external sector statistics compilation	Regular staff visits	Implementation throughout FY15
	TAOLAM assistance on strengthening fiscal reporting, Government Finance Statistics (GFS)	Regular staff visits	Implementation throughout FY15
	TAOLAM on public financial management - implementation of the cash-based IPSAS	Regular staff visits	Implementation throughout FY15
	TAOLAM on macroeconomic framework	Regular staff visits which started in October 2013.	Implementation throughout FY15

RELATIONS WITH THE ASIAN DEVELOPMENT BANK

The Asian Development Bank's (ADB) current Country Partnership Strategy (CPS) 2012–2016 is aligned with the government's Eighth Five-Year National Socio-Economic Development Plan, 2016-2020. It promotes inclusive and sustainable growth and poverty reduction through (i) engagement in four priority sectors (agriculture, natural resources and rural development; education; energy; and water and other urban infrastructure and services); and (ii) more effective private sector development, gender equity, public sector management and regional cooperation and integration as crosscutting concerns. The CPS aims to maximize efficiency and sustainability through larger operations implemented over a longer period; maximize synergies with the implementation of Greater Mekong Subregion (GMS) strategic framework 2012–22; and also increase responsiveness to emerging issues in a rapidly changing economy. The new CPS 2017–2021 is under preparation. The performance-based allocation of the Asian Development Fund (ADF), based on the country performance assessment (CPA) finalized in 2014, provided Lao P.D.R. with an ADF allocation in the amount of US$116.6 million for the biennial period 2015–16. The CPA exercise for the next allocation period (2017–18) was endorsed by the ADB's management in October 2016.

As of end-2015, active loans/grants were worth US$761.8 million, of which US$356.9 million had been disbursed. During 2015, contract awards totaled US$67.7 million and disbursement was US$65.8 million. ADB approved three new loan projects and three new technical assistance (TA) projects for a total of US$95 million and US$1.7 million in 2015 respectively, including Health Sector Governance Program, Second GMS Corridor Town Development Project and Vientiane Sustainable Urban Transport Project; TA projects related to Second Technical Vocational Education Project, Support for Governance and Capacity Development, and Northern Rural Infrastructure Development Project – Due Diligence of Additional Financing.

Lao P.D.R.: Asian Development Bank Commitments and Disbursements 2005-2015 1/

(In millions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 2/
Commitments	87.0	60.7	47.4	46.6	81.2	55.3	53.2	73.65	102.6	80.1	67.7	64.3
Disbursements	78.7	76.8	74.8	56.9	75.9	61.5	73.2	68.6	76.4	78.9	65.8	47.2

Source: Data provided by the Asian Development Bank.

1/ Starting from 2006, the commitments and disbursements included both loans and grants.

2/ The commitments and disbursments were estimated for 2016.

STATISTICAL ISSUES

Lao People's Democratic Republic—Statistical Issues Appendix As of December 6, 2016
I. Assessment of Data Adequacy for Surveillance
General: Data provision has serious shortcomings that significantly hamper surveillance, especially regarding national accounts, government finance, and external sector statistics. These shortcomings are mostly due to lack of capacity, which could be addressed through further efforts on the part of the agencies involved. The IMF is conducting technical assistance (TA) and training programs to address the specific needs with a focus to mitigate near-term risks, covering the areas of national accounts, prices, government finance statistics, monetary and financial statistics, and external sector statistics.
National Accounts: National accounts (NA) comprise annual estimates of GDP by activity at current and constant prices (base year=2002), broadly following the *System of National Accounts (SNA) 1993*. Lao P.D.R. participated in the IMF's Statistics Department (STA) project to implement the SNA and International Comparison Project (ICP), funded by the government of Japan through the Japan Administered Account for Selected Activities (JSA), and has received technical assistance (TA) to improve annual national accounts and develop quarterly national accounts (QNA). Under this project, Lao PDR made some methodology improvements in the annual GDP by activity estimates, and has moved closer to completing a new annual expenditure measure of GDP and a preliminary GNI series. Some progress had also been made toward the development of a new quarterly GDP series. The compilation of a new benchmark GDP figure based on a supply and use table for 2012 has been carried out with the help of a World Bank expert; the new benchmark GDP figure together with some back series are expected to be released by the end of 2016.
Price Statistics: Lao P.D.R. compiles a monthly CPI. A new base year of 2015 (December 2015=100) has been applied since July 2016. There are two major changes in the estimation including: 1) the items in the basket increased from 245 to 485 items; and 2) all 18 provinces are covered instead of 12 previously. The updated weights are based on the 2012 Lao Social Indicator Survey (LSIS). The major change in the weights is a higher weight of Food and Non-Alcoholic Beverages from 36.5 percent to 46.1 percent. However, the full list of the updated weights has not yet been disclosed. The 2015 Population Census was launched in October 2016. The 2015 Statistical Year Book was available in October 2016. The Lao Labor Survey is planned to start in November 2016 with support of International Labor Organization and will finish in July 2017. The Enterprise Survey design is underway and it will be completed in December 2016.
Government Finance Statistics: Government finance statistics remain weak. The timeliness of fiscal reporting needs significant improvement. Off-budget activities are not included in the fiscal data, although they have expanded rapidly in recent years. Annual budget and outturn data formats do not follow international standards for government finance statistics. Except for the annual data disseminated in the Official Gazette, no fiscal data are disseminated in the country. STA appointed a Government Finance Statistics (GFS) Advisor to the IMF Technical Assistance Office for the Lao PDR and the Republic of the Union of Myanmar (TAOLAM) in September 2014, whose activities are funded by the government of Japan. The main focus of the advisor is to assist the Ministry of Finance (MoF) in upgrading the compilation and dissemination procedures of fiscal data in line

with the IMF's Government Finance Statistics Manual 2014 (*GFSM 2014*) and improve timely data dissemination to the IMF, as well as reduce fiscal data discrepancies. The advisor also has initiated discussions with the MoF and line ministries to gather information on extra-budgetary funds administered by government departments for the purpose of compiling consolidated GFS for the central government sector.

Monetary and Financial Statistics: The classification of monetary data by institutional sector and by financial instrument as well as valuation principles need to be strengthened. The latest monetary data reported to STA refer to December 2010. The Standardized Report Forms (SRFs), which embody the IMF-recommended framework for compiling monetary statistics, have yet to be introduced.

Financial sector surveillance: Lao P.D.R. does not produce official Financial Soundness Indicators (FSIs) yet.

External sector statistics: STA appointed an External Sector Statistics (ESS) Advisor to the Technical Assistance Office for Lao P.D.R. and Myanmar (TAOLAM) in February 2014. While significant room exists for improving the quality and coverage of balance of payments and external debt statistics in Lao PDR and for compiling data on the international investment position, recent engagement between the advisor and Lao PDR officials has been limited to participation in a series of regional topical workshops on ESS. The missions assisted in reconciling the discrepancy between imports data published by the Bank of Lao and imports derived from partner countries' data in the Direction of Trade Statistics and found that the use of minimum prices to value vehicles and petroleum imports might explain some of the differences. Greater use of hands-on technical assistance from TAOLAM could accelerate progress in filling data gaps on and improving the quality of ESS in Lao P.D.R. In addition, several balance of payments components are missing due to the lack of source data. The BOL balance of payments compilers have designed an FDI survey questionnaire in the context of the World Bank's LAOSTAT-Strengthening the National Statistical System Project. Coordination on FDI is needed as the European Union has also appointed an expert to assist on FDI statistics. Implementation of the new international transactions reporting system (ITRS) is ongoing and testing of the new ITRS is expected by June 2015. The BOL does not yet compile an international investment position statement.

II. Data Standards and Quality

Lao P.D.R. is currently not a General Data Dissemination System (GDDS) participant. The government has expressed its intention to collaborate with the IMF in moving Lao's macroeconomic statistics closer to the international standards, including to join the IMF's GDDS, and use it as a framework for development of the national data compilation and dissemination practices. No Data ROSC mission has been conducted.

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

(As of December 6, 2016)

	Date of Latest Observation	Date Received	Frequency of Data[1]	Frequency of Reporting[1]	Frequency of Publication[1]
Exchange Rates	11/29/16	11/29/16	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[2]	08/11/ 2016	11/02/16	M	I	Q
Reserve/Base Money	08/11/2016	11/02/16	M	I	Q
Broad Money	08/11/2016	11/02/16	M	I	Q
Central Bank Balance Sheet	08/11/ 2016	11/02/16	M	I	Q
Consolidated Balance Sheet of the Banking System	08/11/ 2014	11/02/16	M	I	Q
Interest Rates[3]	September 2015	11/02/16	M	M	M
Consumer Price Index	10/24/ 2016	11/09/16	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[4]—General Government[5]	05/22/ 2016	09/13/16	I	I	I
Revenue, Expenditure, Balance and Composition of Financing[4]—Central Government	05/22/ 2016	09/13/16	Q	I	M
Stocks of Central Government and Central Government-Guaranteed Debt[6]	05/18/2016	08/04/16	NA	NA	NA
External Current Account Balance	09/16/ 2016	11/02/16	Q	I	I
Exports and Imports of Goods and Services	10/21/ 2014	Q1/16	Q	I	I
GDP/GNP	09/30/15	07/11/16	A	A	A
Gross External Debt	05/18/ 2016	08/04/16	A	A	I
International Investment Position[7]			NA	NA	NA

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 Including currency and maturity composition.

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

Statement by Marzunisham Omar, Executive Director for Lao People's Democratic Republic and Hung Vinh Nguyen, Senior Advisor to the Executive Director and Phengphaivanh Sitpraxay, Advisor to the Executive Director
January 30, 2017

1. The Lao authorities would like to express their gratitude to the mission team for the constructive and comprehensive discussions on macroeconomic developments and policy issues during the 2016 Article IV consultation held from September 19-30, 2016. They broadly agree with staff's assessment and appreciate the invaluable policy advice on strengthening fiscal buffers, containing external risks, enhancing financial sector resilience, and undertaking structural reforms to achieve a more sustainable and inclusive growth. The authorities will take into account staff's recommendations in formulating future policies, in particular to support the implementation of the National Socio-Economic Development Plan (NSEDP) 2016-20.

Recent Economic Developments and Outlook

2. **The Lao economy has been growing robustly in recent years, supported by the strong performance of the resource sector despite a less favorable external environment**. The economy is projected to grow by 6.9 percent in 2016 on account of increased investments in infrastructure, real estate development, trade and manufacturing, as well as significantly higher hydropower generation and tourism receipts. The growth is however lower than the 7.5 percent recorded in 2015 due to a decline in exports following lower commodity prices, slowdown in major trading partners and lower agricultural output as a result of poor weather conditions. Core inflation in 2016[1] stood at 1 percent, while headline inflation remained low at 1.6 percent mainly reflecting higher domestic food prices in the second half of the year which more than offset lower prices in the communication and transportation sectors. On the external front, the current account deficit declined to 8.5 percent of GDP for the first three quarters of 2016, as a result of improvements in trade balance and transfers while FDI flows remained high. The international reserves at end-September stood at USD 998.59 million, equivalent to 6.44 months of imports.

3. **The overall fiscal deficit in FY2015-16[2] rose to 6.9 percent reflecting a large decline in tax and non-tax revenues.** The shortfall in tax revenue was mainly due to the economic slowdown and the decline in commodity prices, while lower non-tax revenue reflected the absence of the sale of state assets. Even though capital expenditure was lower in line with reduced externally financed investment, current expenditure remained high due to an increase in interest payments and transfers. Money supply grew at an appropriate pace to support productive economic activities without putting pressure on prices. The exchange rate

[1] Based on the average of actual monthly data in 2016
[2] Lao fiscal year runs from October 1 to September 30. Starting in 2017, the fiscal year will coincide with the calendar year.

remains stable, with the Lao Kip moving within the +/- 5 percent range against the US dollar. The banking system remains sound. Though there was a slight increase in the ratios of foreign currency deposits and credit to total deposits and credit respectively, dollarization has continued its downward path. As of end-September 2016, the NPL ratio was at 3.03 percent which was slightly higher than targeted but still manageable and lower compared to 2015.

4. **The authorities expect real GDP to grow by 7 percent in 2017**, underpinned by increased agriculture production, completion of hydropower projects and higher foreign investments. Inflation is expected to remain low and below 5 percent. The current account deficit is projected to narrow in the medium term, following the completion of several hydropower projects together with an increase in exports and tourism receipts. The authorities remain positive on sustained FDI inflows and strongly commit to structural reforms that will enhance the business environment and improve the efficiency of public investments, which will in turn promote greater economic diversification as well as generate comfortable levels of official reserves to cover the equivalent of 5 months of imports.

5. **The authorities note staff's assessment that downside risks to the economic outlook stem from several challenges**, particularly those arising from limited fiscal space, accumulated public debt stock, undercapitalized state-owned banks and an uncertain external environment. They therefore commit to exercising vigilance and prudence in their policy implementation.

Fiscal Policy

6. **The authorities recognize the importance of increasing fiscal buffers to enhance the economy's resilience to potential shocks.** In this regard, the medium-term budget plan projects a declining fiscal deficit for 2016-20, with an average of 4.06 percent of GDP, which is close to staff's adjustment scenario. The declining deficit will support the authorities' commitment to bring down public debt to 60 percent of GDP by 2020. In addition, the authorities are also working on the "Strategic Public Financial Management Plan toward 2025", which is expected to be adopted by mid-2017, as well as in the process of drafting a law on public debt to strengthen public debt management and limit the off-budget payment.

7. **On domestic revenue mobilization, measures are being taken to improve revenue collection and broaden the tax base in line with the recently approved five-year budget plan.** Revenue collection will be strengthened by enforcing compliance of tax and duty exemptions and VAT deductibles, removing tax exemptions for vehicles and construction materials for public investment projects, and focusing on large taxpayers and taxes on vehicles, petrol and luxury goods. The authorities are also reviewing existing tax rates to ensure they remain appropriate. In addition, taxes on vehicles and luxury goods are expected to generate higher revenue as they are now based on market prices instead of baseline prices as was the previously the case. Several major steps are also being taken to improve tax administration: (i) the central tax office will now be responsible for large taxpayers while the

provincial offices will focus on small and medium enterprises; (ii) the central and local authorities are closely working to reduce tax and other revenue leakages, while transfer of revenue to central budget from local authorities will also be audited and monitored closely; and (iii) the authorities will modernize its approach to tax collection from businesses, e.g. through non-cash payment, which will enable closer monitoring.

8. **The authorities are also committed to pursue expenditure rationalization and enhancements to public spending efficiency.** These include: (i) rationalizing investment incentives; (ii) upgrading a decree on public procurement to be a law; (iii) containing current spending by reforming the civil service to lower the public sector wage bill; and (iv) improving monitoring of contingent liabilities, particularly from public-private partnerships (PPPs). The authorities recently reformed the SOE committee and are currently drafting a decree on PPPs. In addition, the restructuring and privatization of some SOEs will be continued, namely the Enterprise of Telecommunications Lao (ETL), the Lao Airline Company and two state-owned banks. For example, the state's share in the ETL has been reduced to 49 percent from 100 percent.

9. **The authorities commit to keep public debt on a sustainable path.** Although non-concessional borrowings increased in recent years, these borrowings were used to support the construction of hydropower projects which will contribute to generating foreign currency income to support repayments. Future borrowings would remain mainly on concessional terms and oriented towards necessary investments. Moreover, under the current legislation, external borrowings require government's detailed consideration of specific amount and concessionality.

Monetary and Exchange Rate Policy

10. **The managed float exchange rate regime is an effective policy in anchoring inflation given the limited effectiveness of monetary policy implementation due to dollarization and cash-based economy.** In a long history of dollarization, expectations of rapid depreciation could lead to macroeconomic instability. Therefore, the authorities see the need to minimize volatility and maintain exchange rate stability, while taking steps to improve market monitoring and building up reserves. While agreeing with staff that greater exchange rate flexibility would help in building-up reserves, the authorities consider the current level of reserves to be adequate. To improve the exchange rate policy framework, the central bank has since the end of 2016 started carrying out foreign exchange rate auctions with commercial banks and big exchange rate bureaus. In addition, the central bank will continue efforts to spur the development of the domestic forex derivative market by taking a lead role in operating forward, future and swap arrangements.

11. **The authorities will continue to manage the growth of broad money in line with supporting growth and price stability.** In order to enhance the effectiveness of monetary policy and to promote the use of Lao Kip, efforts will be directed at strengthening the transmission mechanism, developing payment systems and the inter-bank money market, and

introducing a liquidity management framework. At the end of 2015, the authorities introduced the ad-hoc interest rate policy to provide commercial banks with guidance to lower the cost of lending in Lao Kip to more appropriate levels in order to promote greater access to credit by SMEs. This temporary arrangement is expected to have positive effects on productive sectors of the economy. In addition, the authorities are strictly enforcing the Foreign Currency Management Law to limit the use of foreign currencies and promote the use of Lao Kip, such as issuing a guidance at the end of 2016 to support transaction for vehicle retail sales to be made via bank transactions and in Lao Kip only for cash payments.

12. **The authorities recognize the importance of capacity building in supporting their efforts to improve the policy frameworks and therefore, are appreciative of ongoing Fund TA**. In addition, the authorities have devoted resources to developing economic models to support policy evaluation and formulation as well as improving the quality of statistics towards meeting international standards.

Financial Stability

13. **To maintain a stable and sound banking system, the authorities are implementing policies consistent with the "Lao Strategic Financial System Development Plan 2016-2020 and Vision toward 2030".** These policies include improving the central bank's legal framework to strengthen risk-based supervision and transition towards adoption of most Basel-core principles and the Basel II standard; restructuring state-owned banks and enhancing transparency of their operations; upgrading accounting standards in line with the International Financial Reporting Standards; revising guidelines for bank licensing in line with AML/CFT standards; and developing the crisis management framework. In this regard, the authorities are in the process of drafting a master plan and action plan for BASEL II implementation. In addition, they are considering additional macroprudential measures to curtail potential risks from a rise in funding from non-core foreign sources. At the end of 2016, the authorities introduced amendments to regulations related to overseas funding of commercial banks in order to support their domestic lending as well as improve tracking records of funding flows and ensure the repayment ability of the banks.

14. In addition, as part of continued efforts to strengthen financial stability, the authorities appreciate Fund TA on on-site and off-site supervision manuals, as well as the World Bank's TA to improve banking supervision tools and relevant regulation frameworks. The authorities are also in the process of improving the compilation of financial soundness indicators which have benefitted from Fund/Bank TA.

Structural Reforms

15. **Structural reforms continue to be the policy priority of the government**, together with efforts to continue improving the quality of life, enhancing the business environment to attract more FDI, and diversifying the economy for sustainable development. To improve living conditions, the authorities will remain actively engaged in the improvement and

prioritization of education and health care. On health care, the authorities will continue to focus on improving maternal health, early childcare, and nutrition in line with improving the quality of public health services. On education development, efforts will continue to be directed at enhancing the quality of primary education in the rural areas and promoting technical and vocational training to address skill mismatches and promote specialization. The authorities are working with the World Bank to improve the efficiency of public investments in education and health care.

16. **The authorities are prioritizing public infrastructure projects in roads, railways, bridges, and transmission lines**, which are essential in improving the rural areas and diversifying the economy. The completion of key hydropower projects in the near term will help to meet the energy needs of a growing economy and thus, enhance the business climate and competitiveness. To attract more investment inflows, the authorities have continued to improve the regulatory framework, such as by amending the investment law in early 2016, to allow for targeted and time-bound tax exemptions for businesses that invest in the rural areas and allowing a lower tax rate for investments made in the special economic zone while preparing to upgrade a decree on special economic zone to be a law in 2017. To promote sustainable development, the authorities are introducing measures to safeguard the sustainability of natural resources, such as suspending licenses for new mining projects and export of unprocessed wood. To increase financial inclusion, the authorities have introduced "BCEL Community Money Express" in 2015, which allows microfinance institutions to utilize commercial banks' branches to expand their outreach to the rural areas. The authorities are also close to completing a draft national financial inclusion strategic plan for 2016-20.

Conclusion

17. The Lao authorities are in the process of implementing the new NSEDP to address the remaining bottlenecks to graduate from the least developing country list by 2020 as well as to meet the Sustainable Development Goals. The authorities note that economic expansion needs to bring a durable reduction in poverty and substantial improvements in socio-economic conditions. The authorities are committed to maintain macroeconomic and financial stability, promote sustainable and inclusive growth, and stand ready to implement any measures deemed appropriate. Mindful of the challenges ahead, efforts will be intensified to improve efficiency of public service delivery, reform public financial management, strengthen the banking regulatory and supervisory framework, and enhance the business environment.