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Lao People's Democratic Republic: 2008 Article IV Consultation—Staff Report; Staff Supplement; Staff Statement; and Public Information Notice on the Executive Board Discussion

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 2008 Article IV consultation with Lao People's Democratic Republic, the following documents have been released and are included in this package:

- The staff report for the 2008 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on May 13, 2008, 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 July 7, 2008. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- A staff supplement on the joint World Bank/IMF debt sustainability analysis.
- A staff statement of July 30, 2008, updating information on recent developments.
- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its July 30, 2008 discussion of the staff report that concluded the Article IV consultation.

The documents listed below have been or will be separately released.

Statistical Appendix
Second Poverty Reduction Strategy Paper
Annual Progress Report on the Second Poverty Reduction Strategy Paper
Joint Staff Advisory Note

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

LAO PEOPLE'S DEMOCRATIC REPUBLIC

Staff Report for the 2008 Article IV Consultation

Prepared by the Staff Representatives for the 2008 Consultation
with the Lao People's Democratic Republic

Approved by Daniel Citrin and Adnan Mazarei

July 7, 2008

- **The 2008 Article IV Consultation discussions were held in Vientiane during April 30−May 13** with Minister of Finance Duangdy, Bank of Lao P.D.R. Governor Khamphounvong, other senior officials, and private sector and donor representatives. The staff team comprised Mr. Cowen (Head), Ms. Mineshima, Mr. Wu (all APD), Mr. Shin (FAD), and Ms. Ogawa (OAP), and was assisted by Mr. Bingham (Senior Resident Representative) and Mr. Ngaosrivathana (Country Manager). Mr. Ludlow (FAD), as part of a World Bank-led mission on customs administration, also participated in several meetings. Ms. Vincelette and Mr. Painchaud (both World Bank) worked with the team on the debt sustainability analysis. Ms. Sucharitakul, Alternate Executive Director, and Mr. Eng, Advisor to the Executive Director, participated in the discussions.

- **Prior consultations:** The conduct of fiscal policy has been mostly in line with recent IMF advice, although the composition of spending should be more supportive of growth and poverty reduction. Monetary policy, including prior recommendations to develop basic instruments for managing domestic liquidity, has been less effective, but exchange rate management generally reflects recent advice. The pursuit of banking reform has been mostly consistent with earlier recommendations, notwithstanding rapid expansion in bank credit recently, which could undermine progress.

- **Exchange rate system:** Lao P.D.R.'s exchange rate regime is classified as a managed float. Currently, it maintains no exchange restrictions under the transitional arrangements of Article XIV, Section 2, but does maintain restrictions for the preservation of national or international security notified pursuant to Decision No. 144-(52/51) and a restriction subject to IMF approval under Article VIII (tax payment certificates are required for some transactions). Staff advised the authorities to eliminate the latter restriction before accepting the obligations under Article VIII.

- **Economic statistics:** Further improvements are needed in the quality, coverage, and timeliness of macroeconomic and financial data to enhance the effectiveness of surveillance.

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EXECUTIVE SUMMARY

Macroeconomic performance remains strong, but possible overheating could dampen near-term prospects unless properly managed. So far, global economic weakness and financial turbulence have had little direct impact on Lao P.D.R. Real GDP growth was nearly 8 percent in 2007, and is expected to be near the same in 2008 on favorable mining and hydropower activity. However, headline inflation began accelerating in mid-2007, initially reflecting global energy and food price trends, but now also local demand pressures. Fueling demand is rapidly accelerating credit growth, with monetary conditions lax owing to large external inflows associated with the natural resource sector.

The medium-term outlook remains positive, but hinges on sound development of the resource sector and other steps to strengthen competitiveness. The resource sector is expected to continue as a major driver of growth, but it poses potential fiscal risks and remains vulnerable to external shocks. More balanced and sustained high growth will require accelerated structural reforms, strengthened human capital, and sound infrastructure development, supported by enhanced capacity in macroeconomic and resource management.

Policy discussions focused on near-term challenges to maintaining macroeconomic stability, as well as on a few key structural issues. The main staff recommendations, with which the authorities generally agreed, are:

- **More decisive action is needed on the inflation front to preserve hard-fought stability gains.** Monetary tightening is warranted, supported by further exchange rate appreciation. However, available tools may be inadequate and transmission channels weak, requiring monetary policy be backed by tighter prudential regulation and enhanced bank supervision. The authorities recognized these challenges, but viewed recent credit growth as less a factor in possible overheating. Nonetheless, they agreed close monitoring was needed of state-owned commercial banks, given rapid growth in their lending and with these banks' restructuring still at an early stage.

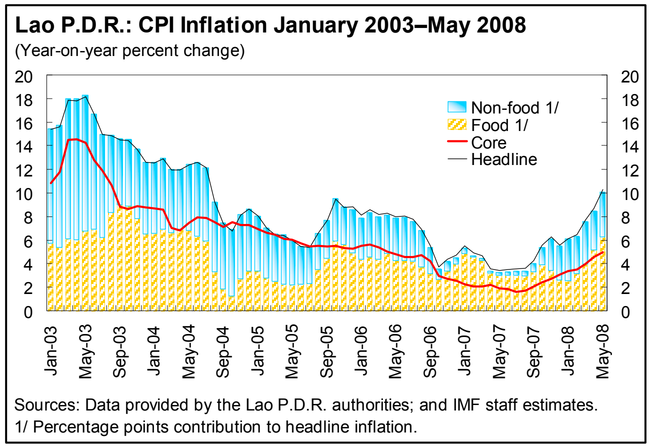
- **A low fiscal deficit is necessary given a still high level of public external debt and to help contain aggregate demand.** Resource revenues have been a major contributor to recent consolidation, but given their uncertainty, maintaining a sound fiscal stance necessitates steady progress on recentralizing fiscal authority, enhancing budget controls, and broadening the tax base—including through a well-executed value added tax.

- **Sound development and management of the resource sector requires a comprehensive strategy to help contain macro-financial risks.** An immediate priority should be to ensure a framework is in place to properly manage external inflows, expected budget windfalls, and new debt obligations arising from sector development, including close scrutiny of those needed to finance the government's own equity participation.

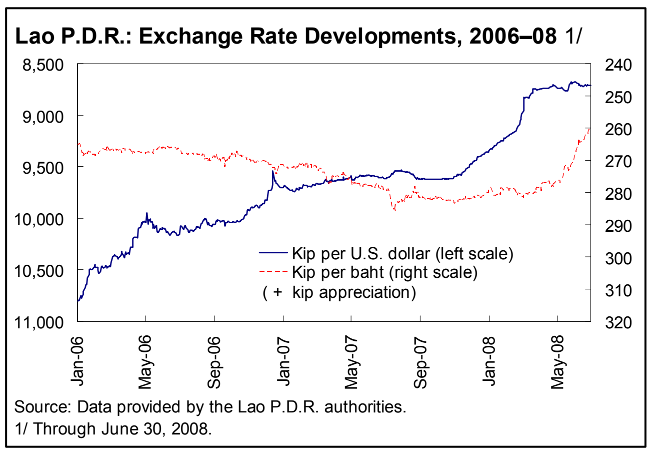
I. Macroeconomic Developments

1. **The Lao economy has performed well in recent years, reflecting generally stable macroeconomic conditions and a rapidly expanding natural resource sector.** The fiscal position has further improved, on rising resource and more recently nonresource revenues. Despite a sharp widening in the external current account deficit, the overall external position has strengthened, given large inflows associated with resource sector development. However, these inflows are also increasingly driving monetary and exchange rate developments, presenting new challenges for policy makers.

2. **Overall, the economy continued to expand at an elevated pace in 2007, with real GDP growth estimated at nearly 8 percent.** Resource (investment), tourism, and trading activity led the way (Table 1 and Figure 1). Inflation began increasing in mid-2007 and reached 5.6 percent (y/y) by year-end, mainly reflecting global food and energy price trends. The current account deficit shot up to more than 17 percent of GDP on rising oil and capital imports. However, as foreign private and official inflows also picked up, gross official reserves increased to $539 million at end-2007 (3.7 months of prospective nonresource imports) (Table 2).[1]



3. **Monetary conditions became more lax in 2007, due to large inflows.** In response, the Bank of Lao P.D.R. (BoL) allowed the kip to strengthen gradually vis-à-vis the U.S. dollar, with the pace accelerating toward year end in line with global currency developments. Broad money increased by 39 percent (y/y) (Table 3), with credit growth



[1] Nonresource imports exclude those imports associated with major mining (gold and copper) and hydropower projects.

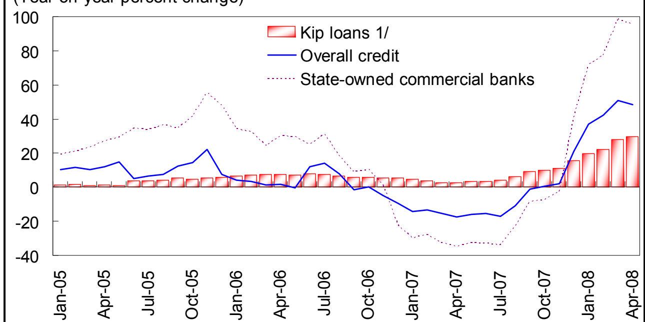
reaching 21 percent (y/y). Demand for kip loans was especially strong owing to local construction activity and government's effort to encourage kip use. Kip deposits also grew rapidly, driven by further currency substitution and a widening kip–dollar interest rate differential.

4. **The fiscal outturn in 2006/07 was generally positive, notwithstanding some expenditure slippages.** Based on staff estimates, the overall budget deficit declined by around 1 percentage point to 2¾ percent of GDP in 2006/07 owing largely to higher resource revenue (Table 4 and Figure 2). A modest reduction was also achieved in the underlying (nonresource) deficit, even though spending slightly exceeded the budget target.[2] The deficit continued to be financed through external concessional borrowing. For 2007/08, the final budget plan targeted an overall deficit equivalent to 3¾ percent of GDP—about the same as the previous year's budget plan. Resource revenue would continue rising, but recurrent expenditure would also increase, largely due to a higher government wage bill.[3] However, capital expenditure would be lower than in recent years, in part because of the near-completion of the Nam Theun 2 project, but also given a more cautious approach by donors in line with government capacity.

5. **Performance so far in 2008 suggests the economy is facing overheating.** Headline inflation reached 10.3 percent in May 2008—the highest level in nearly four years (Box 1). Core inflation also rose to 5 percent. In addition to higher food and energy costs, demand-pull elements are now exerting pressure, partly stoked by monetary easing. Credit growth reached 48 percent (y/y) at end-April, driven by the state-owned commercial banks (SOCBs), which face government pressure to lend to small- to medium-scale enterprises, including agriculture. Wage pressures may also be rising, given the recent pace of economic expansion and greater demand for skilled workers. The kip has been allowed to further strengthen against the U.S. dollar and more recently the Thai baht, given large inflows and to offset inflation pressures.

Lao P.D.R.: Credit Growth, January 2005–April 2008

(Year-on-year percent change)



Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates.
1/ Percentage points contribution to overall credit growth.

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[2] For spending on early preparations for the Southeast Asia (SEA) Games, which Lao P.D.R. will host in 2009.

[3] Government wages were increased by an average of 25 percent in October 2007, on top of an increase of 11 percent in October 2006. However, civil servant wages remain compressed compared to the private sector.

Box 1. Recent Inflation in Lao P.D.R.

Inflation has been rising in Lao P.D.R. since mid-2007, but the headline rate remains considerably lower than in neighboring Cambodia and Vietnam. As elsewhere, food and energy price increases are a leading cause in Lao P.DR. However, food prices have risen less and been a smaller contributor to overall inflation than in other parts of the region. Retail petroleum prices in Lao P.D.R. have generally increased in line with world oil price movements, with diesel and gasoline up 51 and 25 percent (y/y), respectively, as of end-May.

Several factors may explain lower inflation in Lao P.D.R. than other parts of the region.

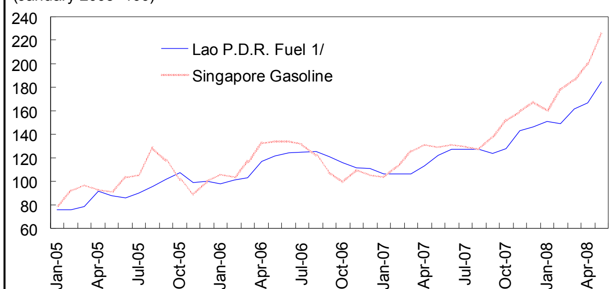
- *Domestic agricultural conditions have been conducive to relatively low food price inflation*. Agricultural output expanded by 2.9 percent in 2007 (and rice production by 3.9 percent)—up from 2.1 percent the previous year. Rice production is also primarily glutinous rice, which has a limited export market (rice exports were US$14 million in 2006/07 (October–September)—only around 3 percent of the annual crop). The government encourages producers to sell in local markets, although no export duties or controls exist on rice. Food imports also tend to be low, reflecting the government's policy of food self-sufficiency. The recent rise in food prices appears more likely driven by higher input costs, including fertilizer and transport.
- *Greater exchange rate flexibility in Lao P.D.R may also provide a better cushion against inflation*, as the kip has strengthened more recently than have other currencies in the region vis-à-vis the U.S. dollar and in nominal effective terms. Furthermore, around 70 percent of Lao imports also come from Thailand, where inflation has been comparatively lower.[1]
- *Finally, bank credit has expanded at a slower pace in Lao P.D.R.* than in either Cambodia or Vietnam, although there has been considerable catching up the past year.

Regional Inflation Indicators

	2006	2007	2008 (Latest)
Headline inflation (y/y, in percent) 1/			
Lao P.D.R.	6.8	4.5	10.3
Cambodia	4.7	10.6	18.7
Thailand	4.6	2.2	7.6
Vietnam	7.4	8.4	25.3
Headline inflation (share attributable to food) 1/			
Lao P.D.R.	56.8	72.9	56.1
Cambodia	63.3	84.0	75.0
Thailand	38.1	70.0	59.7
Vietnam	50.9	57.8	71.8
Core inflation (y/y, in percent) 1/			
Lao P.D.R.	4.4	2.2	5.0
Thailand	2.3	1.0	2.8
Vietnam	6.6	6.2	14.4
Credit growth (y/y, in percent) 2/			
Lao P.D.R.	-1.5	23.0	48.3
Cambodia	51.6	76.0	102.7
Vietnam	25.4	53.9	64.0

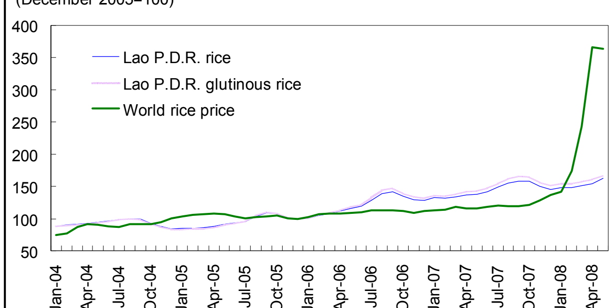
Sources: National agencies; and IMF staff estimates.
1/ For 2008, as of May except Cambodia (January 2008).
2/ As of April 2008.

Lao P.D.R.: Petroleum Price Index, January 2005–May 2008
(January 2005=100)



Sources: Data provided by the Lao P.D.R. authorities; IMF WEO database; and IMF staff estimates.
1/ From Lao P.D.R. consumer price index.

Lao P.D.R.: Rice Prices, January 2004–May 2008
(December 2005=100)



Sources: Data provided by the Lao P.D.R. authorities; IMF, Commodity Price System database; and IMF staff estimates.

[1] Based on the IMF's *Direction of Trade Statistics* for 2006. Some of these imports may be re-exports from other countries and/or settled in currencies other than the Thai baht.

II. Outlook and Risks

6. **Growth is projected by staff at 7½ percent in 2008, but downside risks have emerged with the recent acceleration in inflation.**[4] Driving growth are similar factors as last year, as well as higher mining output. However, measures may be needed to reduce overheating, mainly by curbing credit growth. Staff still expect inflation will stay in the low double digits this year—but well above the government's target of 6 percent, with recent global trends pointing to further upside pressure. Notwithstanding high mineral prices, the external current account deficit is expected to widen to around 18 percent of GDP in 2008 on continued large oil and capital imports. However, the overall external position should improve on strong inflows, in particular those for hydropower development.

7. **The medium-term outlook for Lao P.D.R. remains favorable, but rests on sound development of the resource sector and steps elsewhere to strengthen competitiveness.** Staff's growth projections are in line with the government's target at 7.5–8.0 percent per year (Table 5), led by resource activity (Box 2). Underlying (nonresource) growth is also expected rise to 6 percent over the medium term, but this requires a more dynamic financial sector, better investment climate, and further trade integration in the region and beyond, as well as human capital and infrastructure development. The current account deficit should begin to decline significantly starting in 2012, assuming resource project-related imports moderate, world oil prices stabilize, and new hydropower projects come on stream as planned, including the large Nam Theun 2 project from end-2009. Under this scenario, external vulnerability is reduced, with the reserve cover reaching nearly six months of nonresource imports over the medium term.

8. **Despite this positive outlook, substantial risks remain going forward.** The most immediate threat would be a further rise in oil and food prices. A higher oil import bill could also offset rising mining export receipts. Over the medium term, large inflows could result in "Dutch disease" absent reforms noted above needed to ensure more balanced and sustained growth. On the other hand, a persistence in tight global credit conditions could raise borrowing costs and cause start-up delays in resource sector projects, with negative fiscal and growth consequences. Demand for raw materials, fueled by emerging markets, could also come down sharply if global prospects further soared.

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[4] The official projection for is 7.9 percent, with the authorities expecting a greater contribution from services.

Box 2. Resource Sector: Medium-Term Outlook

Under the current baseline, hydropower is expected expand rapidly, with installed generation capacity projected to increase nine-fold by 2014, provided current plans are fully implemented. Investment in this sector alone could reach US$5.2 billion over the next five years (averaging the equivalent of around 14 percent of GDP a year).

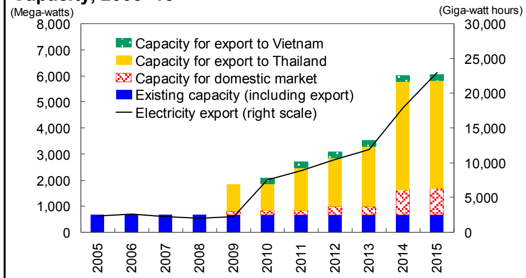
Mining capacity should also increase, but at a more measured pace, based on current investment plans. The government has recently shortened the concession period for new mining licenses to encourage faster exploration and development. Mining (gold and copper) and electricity exports are expected to account for around 60 percent of total exports over the next decade.

Resource revenue is expected to level off at around 3 percent of GDP over the medium term. This projection may appear conservative based on recent trends and does not account the spillover effects to other activities. In addition, it could change significantly depending on the extent of the government's equity stake in resource projects above current expected levels. Resource revenues also remain subject to volatile commodity prices and an uncertain external environment.

The public sector's planned stake in large resource projects poses a potential fiscal risk. Based on current plans, equity participation in the hydropower sector by public entities (including state enterprises) could total nearly US$600 million between now and 2014, most of which is expected to be financed through external borrowing. Other possible financing mechanisms include deferred dividends from or tax waivers for project operators, which could limit available resources for other budget priorities.[1]

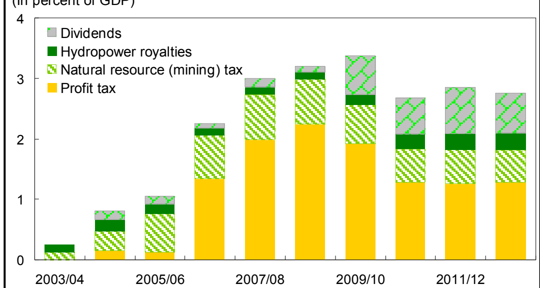
[1] So far, the government has funded its 25 percent equity stake in the Nam Theun 2 dam project largely through donor concessional loans and grants. It also has equity stakes in several large mining projects, with financing through deferred dividends.

Lao P.D.R.: Electricity Exports and Installed Generation Capacity, 2005–15



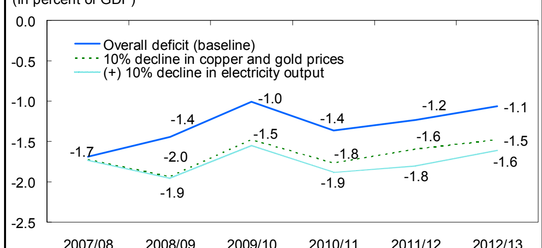
Sources: Ministry of Energy and Mines; Electricité du Laos; and IMF staff estimates.

Lao P.D.R.: Resource Revenue Projection, 2003/04–2012/13
(In percent of GDP)



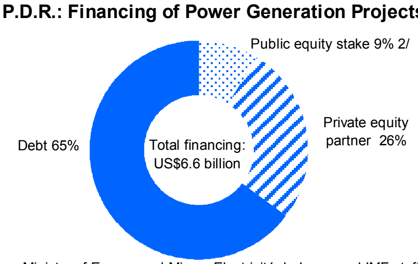
Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates.

Lao P.D.R.: Sensitivity of the Fiscal Balance to Resource Prices and Output, 2007/08–2012/13 1/
(In percent of GDP)



Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates.
1/ Direct price effect only.

Lao P.D.R.: Financing of Power Generation Projects 1/



Sources: Ministry of Energy and Mines; Electricité du Laos; and IMF staff estimates.
1/ For hydropower projects (including planned) and Hongsa Lignite Plant to 2014.
2/ Financing modalities may involve debt financing.

III. Policy Discussions

9. **Policy discussions focused on three key issues:** (i) improving monetary management, including as a complement to banking reform; (ii) pursuing a sound fiscal stance, supported by strengthened public financial and resource revenue management; and (iii) managing resource-related investment effectively.

A. Monetary and Exchange Rate Policy and Near-Term Stability

10. **Under current conditions, staff indicated more decisive action was needed to contain excess liquidity arising from external inflows.** Monetary tightening was advised, including allowing for further exchange rate appreciation. In particular, stricter control was recommended over growth in net domestic assets (NDA) of the BoL. This would likely need to come through higher reserve requirements (kip and foreign currency), given the lack of available instruments.[5] Open market operations could also be employed, possibly through the issuance of monetary stabilization bonds, as the BoL is now better able to bear the financial costs associated with indirect instruments. To increase policy effectiveness, staff again emphasized the need to develop an interbank money market. As a first step, a more efficient payments and settlement system is required, so that banks can avoid holding excess reserves at the BoL and manage their liquid balances more effectively, including through interbank activity.

11. **The authorities recognized the challenges posed by current conditions, but were reluctant to tighten monetary policy to stem the recent credit growth.** At the same time, the BoL would consider ways over time to improve capacity in monetary control, including foreign reserves management, and continue pursuing a flexible exchange rate policy. The authorities noted that bank credit in Lao P.D.R. was small by most measures (8 percent of GDP at end-2007) and needed to increase rapidly to sustain growth. Staff indicated these factors should be weighed against the risk of undermining macroeconomic and financial stability.

12. **In line with greater exchange rate flexibility, more efforts are needed to deepen the foreign exchange market.** Formal intervention by the BoL appears limited mostly to smoothing short-term volatility and so as to keep the official market rate (i.e., the exchange rate band around the BoL's daily reference rate) in line with the

[5] Staff also noted an earlier recommendation to develop a standing deposits facility (i.e., through remunerated excess reserves).

parallel market rate.[6] However, the lack of trading in the interbank markets requires the BoL to step in on occasion to help banks manage their foreign liquidity needs. Staff noted that greater interbank trading could be facilitated by better information sharing between banks, including through more automated transactions. Related to this, consideration should be given to widening the daily trading band.

B. Fiscal Policy and Resource Management

13. **Initial indicators point to further fiscal consolidation in 2007/08 on continued revenue gains.** The overall budget deficit is projected to fall to 1.7 percent of GDP—significantly outperforming the official target. Revenue is expected to be boosted by still buoyant mining taxes and royalties and improved tax administration. However, overall performance will be tempered by fiscal measures taken to mitigate the impact of high energy price. Starting in May 2008, caps were placed on the dutiable price of petroleum imports, effectively providing tax relief on gasoline, diesel, and kerosene in the event of further price rises.[7] The authorities generally agreed that any further measures, including on food, would be well targeted and minimally distorting, with a limited impact on the overall fiscal position, including in next year's budget.

14. **Based on preliminary budget preparations, the government is expected to continue pursuing a moderately low fiscal deficit in 2008/09.** Staff supported this move, given the size of public debt and to help contain aggregate demand pressures. However, it needs to be complemented by further efforts to broaden the tax base, improve revenue administration, and strengthen expenditure management, in line with the government's public finance management strengthening program (PFMSP). Despite long delays, staff also urged caution in proceeding with a value-added tax (VAT) planned for January 2009 and recommended postponement, if necessary, given work to be done on taxpayer registration, refunds, and education. To meet the targeted date, the authorities noted a limited rollout might be considered by raising the compulsory VAT threshold, but staff noted this could present further administrative challenges by restricting the

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[6] Currently, commercial banks must limit the bid-ask spread on their daily foreign exchange transactions to ±0.25 percent of the BoL's daily reference rate (reduced from ±0.30 in August 2007). The BoL typically uses this daily trading band as well as regional currency trends to set the next day's reference rate, although on occasion the reference rate is set outside the band to account for broader (i.e., parallel) market conditions. Spreads between official and parallel market rates fluctuate, but generally remain less than 1 percent.

[7] At the time, staff estimated the cost of this measure was about 0.3 percent of GDP in foregone revenue in 2007/08. However, given most petroleum taxes are collected on an *ad valorem* basis, total collections for the year should more than exceed the budget target owing to much higher-than-anticipated petroleum import prices.

number of taxpayers.[8] On expenditure, staff recommended caution on any further large wage bill increases, including to avoid crowding out critical spending on operations and maintenance and in key social sectors. Plans to expand the civil service would also be weighed carefully against the existing budget envelope.[9] The authorities also concurred with staff on the need to show spending and financing for the 2009 SEA Games transparently.

15. **Discussion also focused on progress made in strengthening budget execution and performance.** Under the PFMSP, focus remains on recentralizing fiscal authority and improving overall accountability in line with the revised Budget Law (2006), with support from the World Bank's Poverty Reduction Support Operations (PRSO) and other donors.

- On recentralizing tax and customs administration, government instructions have been issued guiding the process, with initial pilots establishing central authority through regional customs offices and provincial tax offices now under way in several larger provinces. More resources are also being devoted to developing and staffing a large taxpayers unit.
- To strengthen inter-governmental fiscal relations, an implementation decree was issued in early 2008 guiding the framework on revenue and expenditure assignment. However, considerable work remains in setting budget norms to ensure adequate spending in priority areas with shared revenues.
- New budget nomenclature has been approved consistent with *GSFM 2001*, and a revised chart of accounts is expected to be introduced for fiscal year 2008/09. Regulations are also being devised for introducing a Treasury Single Account framework over the next few years to strengthen cash management and control.

16. **The staff encouraged the government to develop a comprehensive strategy for resource management.** The need was reiterated for a medium-term fiscal framework that accounts for potential volatility in resource revenues and ensures expenditure priorities are properly funded. Underpinning this would be a transparent fiscal regime,

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[8] The VAT replaces the turnover tax for large taxpayers and introduces a standard 10 percent rate. Under current plans, compulsory registration will be required for those enterprises with annual turnover of more than kip 400 million (US$45,000)—around 1,800. Based on staff's estimate, postponement of the VAT in 2008/09 would result in lower revenue by 0.2 percent of GDP.

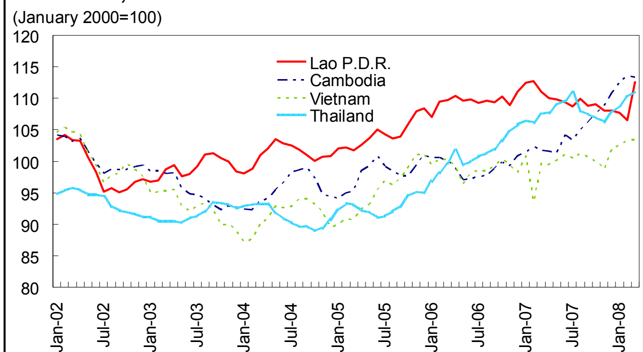
[9] The government indicated it plans to increase the number of civil servants between now and 2010 by around 4–5 percent a year, mainly to hire new education and health workers, but also to establish a new agency to cover water and environment issues.

which a revised Mining Law is expected to contain for that sector when finalized later this year. With a State Accumulation Fund (SAF) for resource revenues now operating, staff also urged the accounting for and use of the SAF remain on-budget, consistent with the IMF's *Guide on Resource Revenue Transparency*. Staff also noted that any strategy should lay out the conditions for government equity ownership in the resource sector, to ensure they are consistent with maximizing revenue and limiting risk exposure. Closer monitoring was also urged of new debt-creating obligations for public entities in the hydropower sector, including on-lent funds to and direct loan guarantees for Lao Holding State Enterprise and Electricité du Laos (EDL).

C. External Viability and Competitiveness and Debt Sustainability

17. **The authorities agreed with the staff assessment that the value of the kip is broadly in line with fundamentals.** CGER-type estimates indicate scope for a further modest appreciation, although these results should be interpreted cautiously.[10] Recognizing this, more should be done to strengthen external competitiveness. A major component of the World Bank's current PRSO is aimed at improving the investment climate and lowering business costs, including streamlining licensing for business start-ups and harmonizing the investment regime for domestic and foreign investors—all consistent with the Enterprise Law (2005).[11] The government has also committed to revising customs laws and procedures to simplify and automate the import-export license regime and customs clearance process, with World Bank and IMF technical support. Staff also encouraged continued progress on trade integration. The authorities indicated they remain committed to WTO accession by 2010, but this will

Real Effective Exchange Rates: Lao P.D.R. and Selected Economies, 2002–08



Source: IMF Information Notice System database.

[10] Based on total trade and nonresource balances for the period 1991−2007, the estimated results suggest the real effective exchange rate (REER) is undervalued by 7½ percent and 1 percent, respectively, relative to the medium-term level of its fundamental determinants. However, their robustness may be limited given major structural changes to the Lao economy, weak and incomplete macroeconomic data, and a limited number of observations.

[11] A Prime Minister's decree was issued in April 2008 approving a "negative list," which is expected to streamline business approvals.

require timely interventions by the government through forthcoming working party meetings and additional work on amending regulations to be WTO compliant.

18. **The debt sustainability analysis for Lao P.D.R. continues to show the debt stock well above policy-based indicative thresholds, suggesting a high risk of debt distress.** Nonetheless, debt indictors have become more favorable in recent years, supported by strong economic growth, a more stable macroeconomic environment, and favorable external conditions. The total stock of external public and publicly-guaranteed debt was US$2.4 billion at end-2007, or 60 percent of GDP. Debt sustainability continues to depend on sustained high growth, as well as on improved external competitiveness and largely concessional borrowing. Strong control over quasi-fiscal risks arising from the state sector will also be necessary, including borrowing and guarantees for resource sector projects, as noted above.

D. Banking Sector and State Enterprise Reforms

19. **Banking reform should continue to be pursued vigorously, given the financial recovery of SOCBs is still at an early stage.** Nonperforming loans (NPLs) have been reduced noticeably at the larger SOCBs, but weak capital positions still leave these banks vulnerable (Box 3). Interest rate spreads also remain large, suggesting the need for improved operating efficiency and greater competition. To bring the banks up to the minimum stipulated capital-adequacy ratio of 8 percent in the next few years, staff encouraged the authorities to continue carefully recapitalizing the SOCBs, improving their profitability, and seeking possible strategic investors. The SOCBs viewed rapid credit expansion as key to increased profitability. However, staff cautioned that given the current pace and with risk controls not yet fully tested, these banks continued to warrant close monitoring to avoid new NPLs. Efforts are also needed to develop a credit information system and strengthen the payment culture. As a complementary move, staff urged stricter enforcement of the existing prudential and regulatory framework, including through more off-site monitoring. In support, the authorities indicated plans to issue soon a full set of implementation regulations for the commercial bank law. Staff also noted that better disclosure of banks' financial condition, including through development of financial soundness indicators, was essential to safeguarding the banking system.[12]

20. **Further progress has been made on state-owned enterprise reform.** Under the World Bank's first series of PRSO, the larger SOEs began undergoing external audits in

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[12] The BoL will require banks to publish annual reports starting in 2009.

Box 3. Banking Sector Reform

Lao P.D.R. has pursued a reform program since 2003 aimed at strengthening banking oversight and restructuring the state-owned commercial bank (SOCB) sector. It also seeks to level the playing field for private and foreign banks and encourage their entry, given the small size of the banking system and dominance by the SOCBs (which accounted for 63 percent of total system assets at end-2002, compared to 54 percent as of April 2008). Reforms were necessitated by a sharp deterioration in the quality of SOCBs' balance sheets as a result of poor risk management and large directed lending (particular to state-owned enterprises). Conditions were exacerbated by weak monetary discipline and lapse bank supervision.

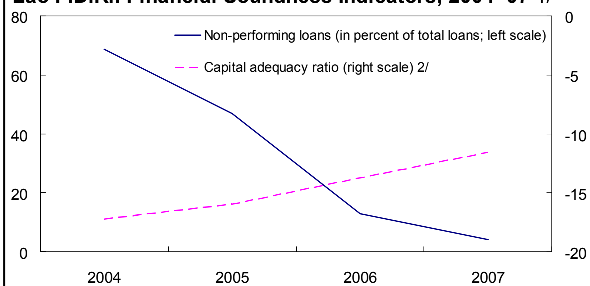
Following initial delays, some progress has been made, with donor technical and financial support mainly from the Asian Development Bank (AsDB), as well as the World Bank.

- **The Law on Commercial Banks approved in 2006** aimed at strengthening bank governance, with prudential regulations in line with Basel Core Principles. The law also allows majority foreign ownership of banks.

- **Non-performing loans (NPLs) have declined significantly at the SOCBs.** Progress has been achieved through loan work-outs and write-offs, but some NPLs are off-balance sheet awaiting final resolution. Banks have increased loan-loss provisioning, but their loan-to-deposit ratios has also fallen sharply, limiting profits.

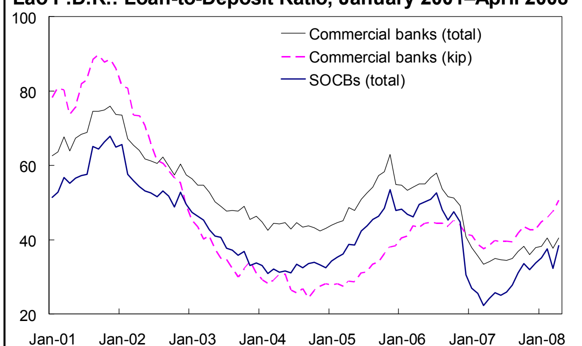
- **Improvements in SOCBs' capital positions have lagged.** By official estimates, each SOCB remains insolvent but this, too, is changing. Since June 2006, the government has issued kip 350 billion of a planned kip 600 billion in recapitalization bonds. The rest is expected by late 2008, which should further strengthen SOCBs' capital base.

Lao P.D.R.: Financial Soundness Indicators, 2004–07 1/



Sources: Data provided by the Bank of Lao P.D.R.; and IMF staff estimates.
1/ Indicators for 2005–07 are for Banque pour le Commerce Exterieur Lao (BCEL), Lao Development Bank (LDB), and Agricultural Promotion Bank (APB), while those for 2004 are for BCEL and LDB.
2/ Asset–weighted average of capital adequacy ratios for BCEL, LDB, and APB.

Lao P.D.R.: Loan-to-Deposit Ratio, January 2001–April 2008



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

- **Oversight of all banks has also been strengthened.** The BoL has increased its on-site supervision and off-site monitoring, although capacity remains weak. Branch lending caps and lending limits on related parties and single borrowers have been imposed, but the recent increase in the latter limit from 10 to 25 percent of Tier 1 capital merits close watch by the BoL. The two large SOCBs now undergo external audits consistent with governance agreements between them and the BoL. However, the BoL continues as both SOCB regulator and owner, which creates potential conflicts.

- **A small policy bank was created in early 2007 as a spin-off from an SOCB.** However, the government continues to pressure SOCBs to lend to certain sectors, which could compromise their financial recovery.

The government has indicated interest in attracting strategic investors for SOCBs, including foreign banks. Consideration is also being given to transforming the two large SOCBs into publicly-held companies at the targeted launch of a stock market in 2010. Competition from private and foreign banks is also increasing. Since 2003, 4 new deposit-taking institutions (2 local and 2 foreign banks) have been licensed, bringing the total to 15, with 3 more foreign bank expected this year. Nonbank activity remains limited, although three insurance companies were licensed over the last year and a private leasing company is being formed.

early 2008. EDL's financial performance has also improved through further clearance of government arrears (with plans now in place to settle those through fiscal year 2005/06) and more frequent adjustments in electricity tariffs. In furtherance of the commercialization of SOEs, staff supported efforts to create an operational body to monitor their financial performance, including debt management, as well as to transform or liquidate non-strategic or loss-making enterprises.

E. Other Issues

21. **A government decree is being prepared authorizing the removal of exchange restriction on tax payment certificates**, as a possible precursor to accepting the obligations under Article VIII, Sections 2, 3, and 4 of the IMF's Articles of Agreement. No firm timetable was given, but the authorities noted the decision to remove the restriction was in conjunction with plans to ratify the World Customs Organization's revised Kyoto Convention on simplifying and harmonizing customs procedures.

22. **On macroeconomic and financial data, shortcomings remain that hamper surveillance.** Priority should be placed on strengthening balance of payments (BOP) statistics and national income accounts, as well as external public debt (including guarantees) and subnational fiscal accounts. Better measurement of BOP-related activity, in particular, would enhance policy formulation in managing inflows and containing vulnerabilities. Automation of customs procedures is expected to improve trade statistics over the next few years, but more coordination among statistical agencies, greater use of banking data, and a direct survey of foreign-invested activity are also needed.

IV. Staff Appraisal

23. **The Lao economy has entered a critical stage of development, as it opens to large-scale inflows and creates conditions for sustaining high growth.** A combination of favorable commodity price trends and growing electricity demand in the region are expected to help sustain growth and strengthen external position over the medium term. While much more remains to be done to improve competitiveness, the government's reform agenda appears supportive of these objectives. Maintenance of a stable macroeconomic environment will also be important to lowering business costs and attracting foreign investment, including outside the resource sector.

24. **The economy remains resilient to global economic slowdown and financial turbulence, but inflation pressures present a growing challenge to the authorities.** More decisive action is needed to counter these pressures, given their current sources and potential costs, in particular to the large number of impoverished households in Lao P.D.R. Exchange rate appreciation has helped mitigate some of the impact, and a further strengthening of the kip could ease pressures. However, rapid expansion of credit growth is fueling demand pressures, which risks reversing recent stability gains.

25. **Under these circumstances, monetary tightening is warranted, but the effectiveness of the BoL will depend on how quickly it moves to improve its capacity for managing domestic liquidity.** Over the near term, consideration should be given to using available indirect instruments as recommended in this staff report and earlier ones. Absent effective monetary operations, tighter prudential regulations may be necessary to contain credit growth, in particular by still-fragile SOCBs. The government should also resist pressuring these banks to lend to certain sectors. Staff views the move to greater exchange rate flexibility as appropriate, in facilitating a tightening of monetary policy and enhancing the economy's resiliency to external shocks. Given the REER appears somewhat undervalued, a more flexible exchange rate should also allow quicker adjustment to the equilibrium level and reduce spreads between official and parallel rates.

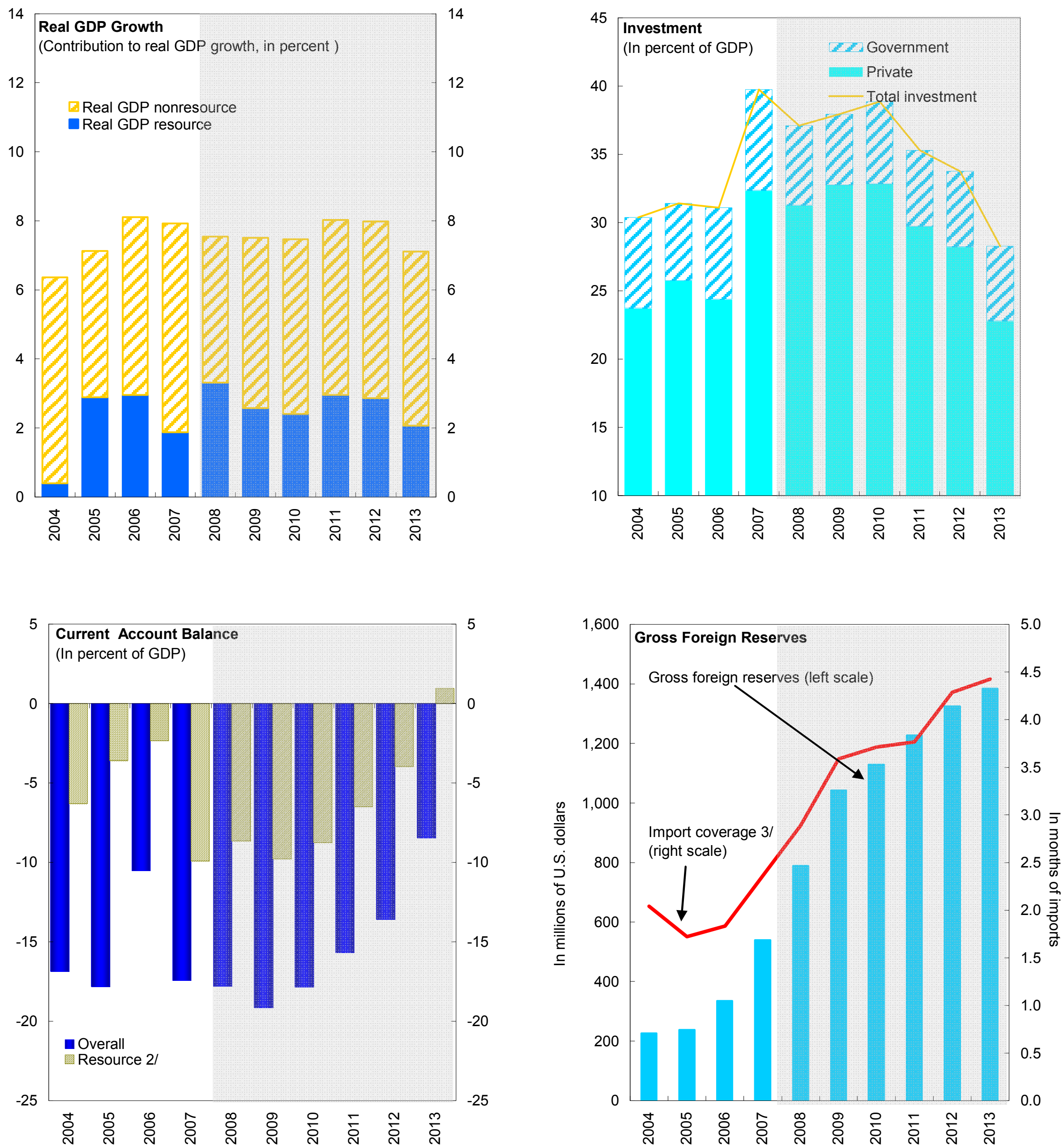
26. **The fiscal stance is broadly appropriate, with maintenance of a low deficit consistent with reducing external vulnerability and containing demand pressures.** To this end, the authorities will need to remain vigilant in recentralizing its fiscal authority, to ensure it can avoid past problems with weak revenue collections and spending oversight. Full implementation of the VAT should proceed carefully, including formulation of a reasonable timetable and with sound technical advice. The government should also carefully consider the size of its wage bill to ensure it is consistent with the available budget envelope and does not crowd out more critical spending priorities. The new SAF could potentially be used to address longer-term expenditure needs, but this should be guided by a sound strategy for managing and using funds and anchored by a medium-term fiscal framework.

27. **External viability and sustained growth will depend on sound development and management of the resource sector.** The potential rewards are large, but so are the risks if poor sector governance comes with reduced external competitiveness, excessive government indebtedness, or increased vulnerability to shocks. The authorities recognize these challenges, but will also need to develop sound fiscal, legal, and regulatory regimes, as well as environmental standards, to maximize gains from sector development.

28. **Important steps have been taken on banking reform, but the challenge remains in ensuring banks further improve their financial soundness.** Avoidance of a costly recurrence of NPLs and disintermediation by the banking system necessitates a commitment on the part of SOCBs to ensuring lending decisions are guided by proper risk management and controls. On its part, the BoL will need to ensure its regulatory and supervisory framework and capacity are supportive of developing a sound financial system. To this end, adherence to the banking reform strategy developed with donor partners and implementation of the new commercial bank law are key.

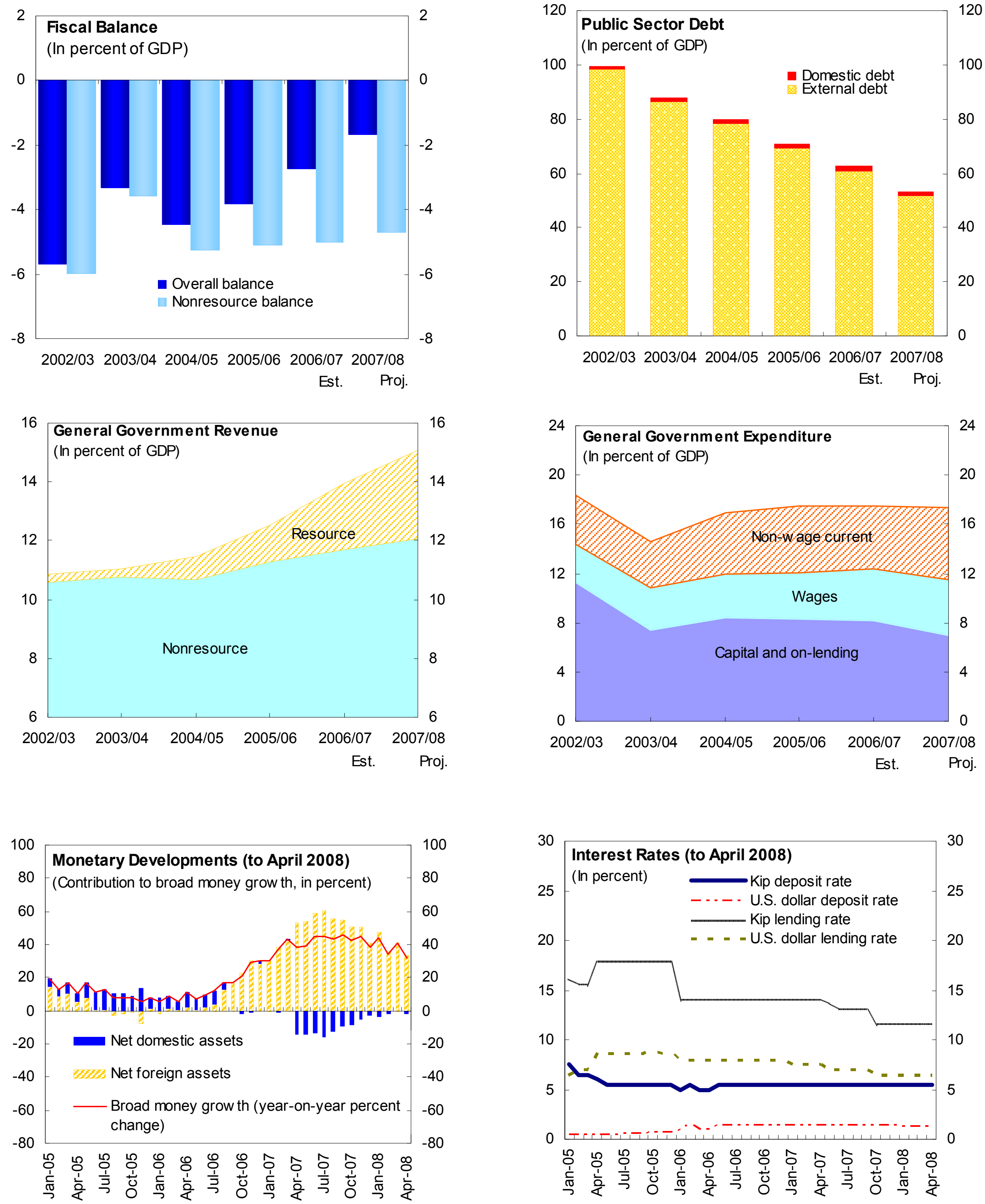
29. It is recommended that Lao P.D.R. remain on the 12-month consultation cycle.

Figure 1. Lao P.D.R.: Real and External Developments 1/



Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.
1/ From 2008, IMF staff projections.
2/ Directly related to mining and hydropower activity.
3/ In months of prospective imports of goods and nonfactor services.

Figure 2. Lao P.D.R.: Fiscal and Monetary Developments



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

Table 1. Lao P.D.R.: Selected Economic and Financial Indicators, 2004–08

Nominal GDP (2007 est.): $4,108 million
Population (2007 est.): 6.1 million
GDP per capita (2007 est.): $673

	2004	2005	2006	2007	2008
				Est.	Proj.
GDP and prices (percent change)					
GDP at constant prices	6.4	7.1	8.1	7.9	7.5
CPI (end-year)	8.6	8.8	4.7	5.6	13.1
Annual average	10.5	7.2	6.8	4.5	10.8
Public finances (in percent of GDP) 1/					
Revenue	11.0	11.5	12.5	14.0	15.1
Of which: Resources 2/	0.3	0.8	1.3	2.3	3.0
Grants	1.1	1.7	2.0	1.8	1.3
Expenditure	15.5	17.6	18.4	18.5	18.0
Overall balance (including grants)	-3.3	-4.5	-3.8	-2.7	-1.7
Domestic financing	-0.3	0.2	-1.1	-1.1	-1.1
External financing	3.6	4.3	4.9	3.9	2.7
Money and credit (annual percent change)					
Reserve money	12.9	18.0	37.2	58.8	31.4
Broad money	22.8	7.7	30.1	38.7	38.9
Bank credit to the economy 3/	9.0	7.6	-9.1	21.0	50.5
Interest rates (end-of-period)					
On three-month kip deposits 4/	7.5	5.5	5.5	5.5	5.5
On short-term kip loans 4/	16.0	17.8	14.0	11.5	11.5
Balance of payments					
Exports f.o.b. (in millions of U.S. dollars)	536	684	1,143	1,203	1,516
In percent change	28.2	27.6	67.1	5.2	26.1
Imports c.i.f. (in millions of U.S. dollars)	1,056	1,270	1,589	2,114	2,660
In percent change	34.3	20.3	25.1	33.0	25.9
Current account balance (in millions of U.S. dollars)	-423	-511	-368	-716	-936
In percent of GDP	-16.9	-17.8	-10.5	-17.4	-17.8
Gross official reserves (in millions of U.S. dollars)	226	238	335	539	789
In months of prospective goods and services imports 5/	2.7	2.4	3.0	3.7	4.9
External public debt (in millions of U.S. dollars)	2,105	2,203	2,308	2,446	2,589
In percent of GDP	83.9	76.9	66.0	59.5	49.3
Exchange rate					
Official exchange rate (kip per U.S. dollar; end-of-period) 6/	10,357	10,767	9,655	9,341	8,662
Nominal effective exchange rate (2000=100)	67.7	67.3	68.2	67.0	…
Real effective exchange rate (2000=100)	95.9	103.0	105.5	102.7	…
Memorandum items:					
GDP at current market prices (in billions of kip)	26,549	30,481	35,193	39,285	47,278
In millions of U.S. dollars	2,509	2,866	3,498	4,108	...

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.
1/ Fiscal year basis (October to September).
2/ Royalties and taxes from mining and hydropower (resource) projects.
3/ Excludes debt write-offs.
4/ Figure for 2008 is as of April 2008.
5/ Excludes imports associated with large resource projects.
6/ Figure for 2008 is as of July 3, 2008.

Table 2. Lao P.D.R.: Balance of Payments, 2004–09

	2004	2005	2006	2007	2008	2009
				Est.	Proj.	
	(In millions of U.S. dollars, unless otherwise indicated)					
Current account	-423	-511	-368	-716	-936	-1,214
Excluding official transfers	-459	-545	-453	-769	-1,004	-1,286
Merchandise trade balance	-520	-586	-446	-911	-1,144	-1,497
Exports, f.o.b.	536	684	1,143	1,203	1,516	1,699
Mining and hydropower	176	329	660	663	889	1,023
Other exports	360	355	483	540	628	677
Imports, c.i.f.	1,056	1,270	1,589	2,114	2,660	3,197
Mining and hydropower	285	337	485	844	1,004	1,325
Petroleum imports	117	160	206	311	504	605
Other imports	653	774	899	959	1,152	1,266
Services (net)	132	158	153	256	314	356
Of which: Tourism	119	147	149	233	280	308
Income (net)	-97	-145	-218	-165	-238	-221
Interest payments	-77	-86	-74	-93	-97	-91
Of which: Public	-21	-23	-17	-25	-47	-47
Mining and hydropower	-29	-32	-28	-36	-39	-33
Dividends and profit repatriation	-44	-88	-243	-228	-350	-354
Of which: Mining and hydropower	-19	-62	-219	-181	-295	-289
Other	24	30	99	156	209	224
Transfers (net)	62	62	144	104	132	148
Private	26	28	59	51	64	77
Official	36	34	85	53	69	72
Capital account	442	528	468	923	1,190	1,472
Public sector	89	125	130	149	144	243
Disbursements	114	153	162	186	218	324
Amortization	-25	-28	-32	-36	-75	-81
Banking sector (net)	-39	22	-93	-135	-200	-258
Private sector	391	381	432	909	1,246	1,487
Foreign direct investment (net) 1/	315	247	335	710	972	1,287
Of which: Mining and hydropower projects	227	202	239	588	829	1,134
Other private flows and errors and omissions	76	134	96	200	274	200
Overall balance	19	17	100	207	254	258
Financing	-19	-17	-100	-207	-254	-258
Central bank net foreign assets	-19	-17	-100	-207	-254	-258
Assets (increase -)	-12	-11	-97	-204	-250	-253
Liabilities (reduction -)	-6	-6	-3	-3	-4	-6
Memorandum items:						
Current account balance (in percent of GDP)	-16.9	-17.8	-10.5	-17.4	-17.8	-19.2
Excluding official transfers	-18.3	-19.0	-12.9	-18.7	-19.1	-20.3
Resource current account balance (in percent of GDP) 2/	-6.3	-3.6	-2.3	-9.9	-8.7	-9.8
Nonresource current account balance (in percent of GDP)	-10.6	-14.2	-8.2	-7.5	-9.1	-9.4
Exports (annual percent change)	28.2	27.6	67.1	5.2	26.1	12.1
Imports (annual percent change)	34.3	20.3	25.1	33.0	25.9	20.2
Gross official reserves (in millions of U.S. dollars)	226	238	335	539	789	1,042
In months of propective imports of goods and non-factor services	2.0	1.7	1.8	2.4	2.9	3.6
(Excluding imports associated with large resource projects)	2.7	2.4	3.0	3.7	4.9	5.8

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

1/ Includes repayment of private debt.
2/ Pertains to large mining and hydropower (resource) projects.

Table 3. Lao P.D.R.: Monetary Survey, 2004–08
(In billions of kip, unless otherwise indicated)

	2004	2005	2006	2007				2008		
	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Apr.	Dec. Proj.
Bank of Lao (BoL)										
Net foreign assets	1,989	2,250	2,984	3,562	4,188	4,461	4,833	5,846	6,020	6,663
In millions of U.S. dollars	190	208	308	370	437	463	513	665	689	763
Net domestic assets	-444	-426	-482	-825	-1,261	-1,198	-860	-1,814	-1,907	-1,444
Government (net)	-451	-433	-282	-643	-1,043	-911	-456	-1,638	-1,812	-1,361
Economy	729	355	247	233	235	226	161	142	169	155
Banks	131	222	143	159	166	170	192	315	349	395
Other items (net)	-853	-571	-590	-573	-619	-683	-757	-633	-613	-633
Reserve money	1,545	1,823	2,502	2,737	2,927	3,263	3,974	4,032	4,112	5,219
Currency in circulation	511	805	1,231	1,389	1,423	1,522	1,838	1,884	1,803	2,120
Bank reserves (kip)	213	217	421	384	466	644	964	883	856	1,578
Bank reserves (foreign currency)	821	802	851	964	1,038	1,098	1,172	1,265	1,453	1,522
Monetary survey										
Net foreign assets	3,322	3,389	4,912	5,829	6,748	7,235	7,810	9,086	9,196	10,803
In millions of U.S. dollars	317	314	507	606	704	752	829	1,033	1,053	1,237
Net domestic assets	1,707	2,027	2,134	2,131	1,395	1,632	1,964	2,095	1,148	2,769
Government (net)	-210	-191	-89	-316	-653	-409	-275	-1,311	-1,543	-904
Budget	-456	-438	-535	-762	-1,099	-1,103	-969	-2,005	-2,237	-1,748
Other	246	246	446	446	446	694	694	694	694	844
Credit to the economy	2,676	2,880	2,617	2,420	2,557	2,925	3,166	3,647	3,615	4,765
Of which: SOCBs	1,035	1,526	1,184	1,001	1,114	1,440	1,672	1,983	2,062	…
In kip	404	558	709	702	776	949	1,115	1,376	1,445	2,168
In foreign currencies	2,272	2,322	1,908	1,717	1,781	1,976	2,052	2,271	2,170	2,597
Other items (net)	-759	-662	-394	27	-509	-884	-927	-241	-925	-1,092
Broad money	5,029	5,416	7,046	7,960	8,144	8,867	9,774	11,181	10,344	13,572
Currency outside banks	511	805	1,231	1,389	1,423	1,522	1,838	1,884	1,803	2,120
Kip deposits	1,435	1,453	1,712	1,870	1,965	2,281	2,612	2,899	2,860	4,265
Foreign currency deposits (FCDs)	3,083	3,159	4,103	4,702	4,756	5,065	5,324	6,398	5,681	7,188
	(Annual percent change)									
Reserve money	12.9	18.0	37.2	47.1	51.6	51.6	58.8	47.3	46.9	31.4
Kip reserve money	24.6	41.1	61.7	62.3	71.8	69.3	69.7	56.1	47.8	32.0
Broad money	22.8	7.7	30.1	43.1	44.7	45.4	38.7	40.5	31.9	38.9
Kip broad money	33.2	16.0	30.4	41.4	49.1	58.6	51.2	46.8	45.1	43.5
Credit to the economy	9.0	7.6	-9.1	-15.6	-15.5	-1.3	21.0	50.7	48.3	50.5
Of which: SOCBs	8.8	47.5	-22.4	-32.8	-32.9	-8.7	41.2	98.2	95.7	…
Kip loans	8.6	38.3	27.0	11.0	16.3	40.9	57.2	95.9	100.3	94.5
Memorandum items:										
Money multiplier (at current exchange rates)	3.3	3.0	2.8	2.9	2.8	2.7	2.5	2.8	2.5	2.6
Loan/deposit (in percent)	43.1	54.8	40.8	33.3	34.5	36.7	37.9	37.7	40.4	40.3
In kip (in percent)	28.1	38.4	41.4	37.6	39.5	41.6	42.7	47.5	50.5	50.8
Net international reserves (in millions of U.S. dollars) 1/	112	134	220	270	329	349	389	521	523	589
Issue of debt clearance/bank recapitalization bonds 2/	246	246	446	446	446	694	694	694	694	844
Exchange rate, end-of-period (kip per U.S. dollar)	10,465	10,805	9,696	9,615	9,583	9,626	9,423	8,797	8,731	8,730
Dollarization rate (FCDs/broad money; in percent)	61.3	58.3	58.2	59.1	58.4	57.1	54.5	57.2	54.9	53.0

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

1/ Defined as gross official reserves minus BoL foreign liabilities and the foreign exchange component of reserve money.

2/ Cumulative since end-June 2003.

Table 4. Lao P.D.R.: General Government Operations, 2003/04–2008/09

	2003/04	2004/05	2005/06	2006/07	2007/08		2008/09	
	Staff Estimates				Budget	Staff Proj.	Prel. Budget	Staff Proj.
	(In percent of GDP)							
Revenue and grants	12.1	13.2	14.6	15.7	14.6	16.3	16.0	16.6
Revenue	11.0	11.5	12.5	14.0	13.3	15.1	14.4	15.4
Of which: Resource revenue 1/	0.3	0.8	1.3	2.3	3.0	3.0	…	3.2
Non-resource revenue	10.8	11.2	11.3	11.7	10.3	12.1	…	12.2
Tax revenue	9.1	9.5	10.7	12.3	11.5	13.3	12.7	13.5
Income and profit taxes	1.6	1.8	2.0	3.1	3.2	3.7	…	3.9
Turnover tax	2.3	2.3	2.6	2.7	2.5	2.9	…	3.1
Excise duties	1.9	1.8	2.4	2.6	2.7	3.0	…	3.0
Import duties	1.4	1.5	1.5	1.5	1.2	1.4	…	1.3
Royalties 2/	0.3	0.5	0.8	0.8	0.7	0.9	…	0.9
Other taxes	1.7	1.7	1.4	1.6	1.1	1.5	…	1.4
Nontax	1.9	2.0	1.8	1.6	1.8	1.8	1.8	1.9
Grants	1.1	1.7	2.0	1.8	1.3	1.3	1.5	1.2
Expenditure	15.5	17.6	18.4	18.5	18.4	18.0	18.1	18.0
Current expenditure	7.2	8.5	9.2	9.2	10.5	10.4	10.7	10.7
Wages, salaries, and benefits	3.5	3.6	3.7	4.2	4.8	4.6	4.6	4.6
Transfers	1.2	1.7	2.0	1.9	2.6	2.5	3.0	2.8
Interest payments	0.9	1.1	0.8	0.5	0.8	0.8	0.8	0.7
Of which: External	0.8	0.9	0.7	0.4	0.7	0.6	0.7	0.5
Other recurrent	1.5	2.1	2.7	2.7	2.4	2.6	2.3	2.6
Capital expenditure and onlending	6.4	7.7	7.4	7.5	6.5	6.3	6.4	6.4
Domestically financed	2.3	1.6	1.2	1.4	1.7	1.9	2.2	2.3
Externally financed and on-lending 3/	4.1	6.1	6.2	6.0	4.8	4.4	4.2	4.0
Of which: Nam Thuen 2	-	2.3	1.1	0.2	-	-	-	-
Others and contingencies 4/	0.9	1.2	1.0	1.5	1.4	1.3	1.0	0.9
Discrepancy including unidentified expenditure	0.9	0.3	0.8	0.3	0.0	0.0	0.0	0.0
Overall balance	-3.3	-4.5	-3.8	-2.7	-3.8	-1.7	-2.2	-1.4
Non-resource balance 5/	-3.6	-5.3	-5.1	-5.0	-6.8	-4.7	0.0	-4.6
Financing	3.3	4.5	3.8	2.7	3.8	1.7	2.2	1.4
Domestic financing (net) 6/	-0.3	0.2	-1.1	-1.1	0.6	-1.1	-0.2	-1.0
Bank financing	-0.3	0.2	-1.1	-1.0	0.5	-1.2	-0.3	-1.0
Of which: State Accumulation Fund	--	--	-0.1	-0.1	-0.5	-0.5	-0.1	-0.1
Nonbank financing	0.0	0.0	0.0	-0.2	0.1	0.1	0.1	0.0
Foreign financing (net)	3.6	4.3	4.9	3.9	3.1	2.7	2.4	2.5
Disbursements	4.5	5.3	5.8	4.8	4.1	3.9	3.3	3.5
Amortization	-0.9	-1.0	-0.9	-0.9	-0.9	-1.1	-0.9	-1.1
Memorandum items:								
GDP (in billions of kip)	25,561	29,498	34,015	38,262	43,288	45,280	48,583	53,696
Total aid (in millions of U.S. dollar)	151	194	260	263	233	242	277	279
Loan	124	147	192	193	177	183	189	209
Grant	27	47	68	70	57	60	88	70

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/ Includes the natural resource tax (on mining) and hydropower royalties.

3/ On-lending includes gross repayments of funds.

4/ Includes payments on liabilities carried over from the previous budget years and for arrears clearance.

5/ Overall balance net of resource revenue.

6/ Excludes bank restructuring bonds.

Table 5. Lao P.D.R.: Medium-Term Macroeconomic Framework, 2006–13

	2006	2007	2008	2009	2010	2011	2012	2013
		Est.	Proj.					
Output and prices (percent change, unless otherwise indicated)								
GDP at constant prices	8.1	7.9	7.5	7.5	7.5	8.0	8.0	7.1
Excluding resource projects	5.4	6.5	4.6	5.5	5.8	5.9	6.1	6.1
Consumer prices (end-year)	4.7	5.6	13.1	7.6	5.5	4.5	4.5	4.5
Annual average	6.8	4.5	10.8	9.9	7.0	5.5	4.5	4.5
GDP per capita (in millions of U.S. dollars)	581	669	840	993	1,090	1,191	1,289	1,383
Saving and investment balance (in percent of GDP) 1/								
Gross national saving	20.1	21.6	18.3	17.9	20.5	19.2	19.8	19.6
Foreign saving (including official transfers)	11.0	18.1	18.8	20.0	18.3	16.1	13.9	8.6
Gross fixed investment	31.1	39.7	37.1	37.9	38.8	35.3	33.8	28.3
Private	24.4	32.4	31.3	32.8	32.8	29.7	28.2	22.8
Government 2/	6.7	7.4	5.8	5.2	6.0	5.6	5.5	5.5
Public finances (in percent of GDP) 3/								
Revenue	12.5	14.0	15.1	15.4	16.0	15.6	15.8	15.9
Grants	2.0	1.8	1.3	1.2	1.2	1.2	1.2	1.2
Expenditure	18.4	18.5	18.0	18.0	18.2	18.1	18.2	18.2
Current	9.2	9.2	10.4	10.7	11.0	11.3	11.5	11.7
Capital and onlending	7.4	7.5	6.3	6.4	6.3	6.1	6.2	6.2
Overall balance	-3.8	-2.7	-1.7	-1.4	-1.0	-1.4	-1.2	-1.1
Nonresource balance	-5.1	-5.0	-4.7	-4.6	-4.4	-4.1	-4.1	-3.8
Domestic financing	-1.1	-1.1	-1.1	-1.0	-1.1	-0.5	-0.6	-0.6
Foreign financing	4.9	3.9	2.7	2.5	2.1	1.9	1.8	1.7
Balance of payments (in millions of U.S. dollars; unless otherwise indicated)								
Current account balance	-368	-716	-936	-1,214	-1,265	-1,237	-1,182	-804
In percent of GDP	-10.5	-17.4	-17.8	-19.2	-17.9	-15.7	-13.6	-8.5
Exports	1,143	1,203	1,516	1,699	1,822	1,999	2,303	2,463
Of which: Resources	660	663	889	1,023	1,084	1,193	1,422	1,499
Imports	1,589	2,114	2,660	3,197	3,390	3,544	3,792	3,576
Services and income (net)	-66	91	76	135	132	120	102	86
Transfers	144	104	132	148	171	188	205	223
Exports of goods and services	1,384	1,478	1,908	2,142	2,312	2,539	2,890	3,101
Imports of goods and services	1,659	2,192	2,738	3,283	3,486	3,650	3,911	3,708
Capital account balance	468	923	1,190	1,472	1,358	1,339	1,284	867
External public debt and debt service								
External public debt (in millions of U.S. dollars)	2,308	2,446	2,589	2,832	3,046	3,391	3,730	4,018
In percent of GDP	66.0	59.5	49.3	44.7	43.0	43.0	42.9	42.3
External public debt service (in percent of exports)	3.5	5.1	6.4	6.0	6.0	6.0	6.0	6.4
Gross official reserves								
In millions of U.S. dollars	335	539	789	1,042	1,129	1,227	1,325	1,384
In months of imports of goods and non-factor services	1.8	2.4	2.9	3.6	3.7	3.8	4.3	4.4
In months of imports (excluding resource projects)	3.0	3.7	4.9	5.8	5.8	5.7	5.7	5.5
Memorandum items:								
GDP at current market prices (in billions of kip)	35,193	39,285	47,278	55,835	64,209	73,174	82,569	92,420
In millions of U.S. dollars	3,498	4,108	5,257	6,334	7,082	7,886	8,694	9,506

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

1/ Estimated using data for public finances and balance of payments.

2/ Excludes investment financed by on-lending from the government.

3/ Fiscal year basis (October to September).

INTERNATIONAL MONETARY FUND AND
INTERNATIONAL DEVELOPMENT ASSOCIATION

LAO PEOPLE'S DEMOCRATIC REPUBLIC

Joint IMF/World Bank Debt Sustainability Analysis 2008[1]

Prepared by the staffs of the International Monetary Fund and
the International Development Association

Approved by Daniel Citrin and Adnan Mazarei (IMF)
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July 7, 2008

This document presents the joint IMF-World Bank debt sustainability analysis (DSA) for Lao P.D.R. using the Debt Sustainability Framework for Low-Income Countries (LIC).[2] *Lao P.D.R. is currently rated a weak performer with regard to its policies and institutions.*[3] *This DSA assesses the impact of various exogenous shocks on the sustainability of external and public sector debt under the baseline scenario.*

I. Introduction

1. **The LIC DSA for Lao P.D.R. indicates that the country continues to face a high risk of external debt distress.** The public external debt service ratios are expected to remain relatively low, owing to the concessionality of most of Lao P.D.R.'s official external borrowing. However, the public external debt stock indicators are still well above the policy-dependant indicative thresholds, and could increase further depending on the macroeconomic performance and the concessionality of external borrowing.

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[1] This DSA was prepared jointly by the IMF and World Bank. The staffs also consulted with the Asian Development Bank's office in Lao P.D.R. The debt data underlying this exercise were provided by the Lao P.D.R. authorities.

[2] See "Debt Sustainability in Low-Income Countries: Proposal for an Operational Framework and Policy Implications" (http://www.imf.org/external/np/pdr/sustain/2004/020304.htm and IDA/SECM2004/0035, 2/3/04) and "Debt Sustainability in Low-Income Countries: Further Considerations on an Operational Framework, Policy Implications" (http://www.imf.org/external/np/pdr/sustain/2004/091004.htm and IDA/SECM2004/0629, 9/10/04) and "Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief," (www.imf.org/external/np/pp/eng/2006/110606.pdf and IDA/SecM2006-0564, 8/11/06).

[3] In the LIC-DSA framework, 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.

II. Background and Assumptions

2. **Lao P.D.R.'s external public and publicly-guaranteed (PPG) debt stock remains at elevated levels, but debt indicators have become more favorable in recent years**, supported by strong economic growth, a more stable macroeconomic environment, and favorable external conditions. The total stock of external PPG debt in nominal terms was US$2.4 billion at end-2007, or 60 percent of GDP, down from 77 percent at end-2005 and 66 percent at end-2006. It also declined as share of exports of goods and nonfactor services, from an estimated 244 percent at end-2005 to 165 percent at end-2007. At these levels, Lao P.D.R.'s debt stock indicators are still significantly above the policy-based indicative thresholds (Figure 1). However, debt service ratios remain below the indicative thresholds, reflecting the high degree of concessionality (see table below).

3. **Around 70 percent of PPG debt in Lao P.D.R. is held by multilateral creditors** (see table below), mainly the Asian Development Bank (AsDB) and International Development Association (IDA). Slightly more than 25 percent is held by bilateral creditors—mainly Russia, China, and Japan. New emerging market creditors are increasing their presence in Lao P.D.R., necessitating the government ensure appropriate concessionality from these lenders, given its current indebtedness. The remaining 5 percent is estimated to be external debt incurred by public entities on nonconcessional terms and guaranteed by the government, mainly for hydropower development and electricity generation, including to finance equity stakes. In addition, some of this debt reflects financing provided by multilateral and bilateral creditors to the government on concessional terms and on-lent to state enterprises on nonconcessional terms.

Lao P.D.R.: Stock of Public and Publicly-Guaranteed External Debt at End-2007

	In billions of U.S. Dollars	As a Share of Total External Debt	In percent of GDP
Total	2.45	100.0	59.5
Multilateral	1.70	69.7	41.5
Bilateral	0.63	25.6	15.2
Commercial 1/	0.12	4.7	2.8

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

1/ Includes direct borrowing by or on-lent funds to state-owned enterprises on nonconcessional terms.

4. **The size of domestic public debt is comparatively small.** At end-fiscal year 2006/07, the stock of domestic public debt amounted to 1.8 percent of GDP. Total public debt, including both domestic and external, was at 62.6 percent of GDP.

5. **Under the baseline scenario, the main underlying assumptions reflect the continued pursuit in Lao P.D.R. of sound macroeconomic and financial policies and structural reforms in support of growth and poverty reduction, and reduced external vulnerability** (Box 1).

Box 1: Main Assumptions for the Baseline Scenario (2008–28)

- **Real GDP growth** is projected to average 7½ percent a year during 2008–13, with a modest pick-up in nonresource sector growth (mainly from agriculture, light manufactures, and tourism and other services) and continued strong resource sector growth. Over the longer term, growth is projected at 7 percent a year, given an expected leveling off in resource sector growth, but a further rise in nonresource sector growth, including from a broader export base. Growth prospects are predicated on the maintenance of macroeconomic stability; implementation of envisaged financial, trade, and regulatory reforms; and improvements to public infrastructure and services, helping to raise productivity. Prices of key commodities are broadly in line with the current WEO assumptions.[1]

- **The external current account deficit** is projected to decline from 18–19 percent of GDP a year during 2008–10 to 8½ percent by 2013 and further to 1 percent by 2025. Over the medium term, resource project-related imports moderate, world oil prices stabilize, and new hydropower projects (with large exports) come on stream. In the long run, nonresource export and services growth also picks up, although staffs assume after reaching around 30 percent of GDP in 2015, total exports would decline to around 25 percent by 2025, then begin to rise again, based on a conservative forecast of mining output. However, nonresource export growth requires strengthened competitiveness and regional integration, through improving the investment climate, streamlining business regulation, and meeting trade commitments. **The overall external position** is expected to stay reasonably strong reflecting private capital and official inflows. However, foreign direct investment declines significantly starting in 2013, given fewer new mining and hydropower projects, but picks up again in the outer years as foreign investment in the nonresource sector overtakes that in the resource sector.

- **External financing** is assumed to be largely on concessional terms.

  - *Multilateral creditors*: For 2008–09, projected loan disbursements (including existing loans) average around US$80 million. Thereafter, they are assumed to grow (in U.S. dollar terms) at 5 percent a year.

  - *Bilateral creditors*: For 2008–09, projected loan disbursements average around US$125 million a year. During 2010–14, they increase to an average of US$145 million in part to reflect new financing expected for electricity development (see below), but thereafter fall back slightly to an average of US$135 million.

  - *Commercial creditors*: Staffs assume that two-thirds of planned investment in Electricité du Laos's (EDL) *Power Development Plan 2007–2016* will be executed. One-half of the external financing requirement is assumed to be met through government on-lending to EDL's of funds received from bilateral and multilateral creditors. The rest is assumed to be borrowed directly by EDL on nonconcessional terms, but guaranteed by the government. Finally, a small amount of nonconcessional borrowing is assumed for non-EDL related energy sector projects, as well as by non-energy related state enterprises.

- **Macroeconomic stability** is underpinned by a moderate fiscal stance. **The overall deficit** is expected to stay in the range of 1–1½ percent of GDP over the medium term, mostly financed externally (on concessional terms). **Revenue** would rise by about ¾–1 percentage point to around 16 percent of GDP by fiscal year 2012/13 (October–September) on increased tax buoyancy and a broadening of the tax base. Resource revenue is projected to come down slightly and level off at around 3 percent of GDP by 2010/11, but driven increasingly by electricity output and exports. **Grants** would stabilize around 1.2–1.3 percent a years from 2008/09, based on the latest government projections. **Expenditure** would rise slightly over the medium term to around 18¼ percent of GDP—with about one-third as capital outlays.

[1] Copper prices for 2010–13 are assumed to be higher than the current WEO assumptions, based on discussions with mine operators in Lao P.D.R. From 2010, the price per metric ton is kept constant at US$5,000.

III. External Debt Sustainability

6. **Under the baseline scenario, external debt stock indicators will remain at elevated levels over the medium term, but are expected to decline below the relevant indicative thresholds within the projection period** (Figure 1 and Table 1). The net present value (NPV) of public external debt is expected to decrease from 46 percent of GDP at end-2007 to 34 percent at end-2013, and to 14 percent of GDP by 2028, crossing the 30 percent indicative threshold by 2016. The debt service ratios (both as a share of exports and government revenues) are expected to remain well below the indicative thresholds for the entire projection period.

Lao P.D.R.: External Public Debt Indicators at End-2007

	Indicative Thresholds	End-2007
NPV of debt, as a percent of:		
GDP	30	46
Exports	100	129
Revenue	200	318
Debt service, as a percent of:		
Exports	15	5
Revenue	25	13

Source: IMF staff estimates.

7. **External debt sustainability is most vulnerable to real exchange rate and export price shocks** (Tables 2a and 2b). In particular, real exchange rate shocks (including from shocks to the GDP deflator or the nominal exchange rate) have the largest impact on the NPV of debt-to-GDP as well as the NPV of debt-to-revenues ratios.[4] Compared to 2008, a one-time 30 percent nominal depreciation of the kip exchange rate relative to the baseline would raise the NPV of public external debt-to-GDP by 10 percentage points over the medium term, and it would only fall below the 30 percent threshold in 2021. Similarly, a decline in export value growth (including from commodity price shocks) in 2009–10, by one standard deviation below its historical average, would raise the NPV of external debt-to-exports by about 60 percentage points over the medium term before falling back below the threshold in 2021.

8. **Under an alternative scenario, Lao P.D.R.'s external debt situation could deteriorate if expected returns to large resource project-related investments (mainly hydropower) do not fully materialize (Figure 1 and Table 3), especially given the nonconcessional nature of borrowing for this purpose**. Assuming the volume of mining and hydropower exports is 25 percent below the baseline and the value of nonresource exports 10 percent below from 2009 onward, the NPV of public external debt-to-GDP ratio would only

[4] The most extreme stress test is defined as the bound test resulting in the most extreme deterioration of the debt burden indicator after 10 years.

cross the 30 percent indicative threshold by 2019.[5] The achievement of other thresholds would be similarly delayed.

IV. Public Sector Debt Sustainability[6]

9. **The trajectory of public debt is expected to follow closely that of external debt, as much of public debt is from external creditors** (Figure 2 and Table 4). The NPV of public debt-to-GDP ratio is expected to decrease from 50 percent at end-fiscal year 2006/07 to 39 percent at end-2012/13, and to 16 percent by end-2027/28.

10. **Public debt ratios are particularly sensitive to a real kip depreciation** (Figure 2 and Table 5). Compared to 2007/08, a one-time 30 percent real depreciation of the kip exchange rate would raise the NPV of public debt-to-GDP and the NPV of public debt-to-revenue ratios by around 6 and 25 percentage points by 2012/13, respectively. A 10 percent of GDP increase in other debt-creating flows would result in a sustained increase in the NPV of public debt-to-GDP ratio by about 4 percentage points over the medium term.

V. Conclusion

11. **While Lao P.D.R. has made significant progress in reducing its external and public debt burden, it still faces a high risk of debt distress.** This reflects current and planned large-scale investments in hydropower and mining projects that will only deliver returns over the medium term. The outlook is particularly sensitive to changes in export and real GDP growth, highlighting the vulnerability of debt dynamics in Lao P.D.R. to potential shocks and the continued need to maintain macroeconomic stability and deepen structural reforms. Lao P.D.R. could also further guard against these vulnerabilities by ensuring that any external borrowing is obtained on concessional terms and by carefully managing fiscal and quasi-fiscal liabilities.

12. **Continued prudent debt management as well as cautious assessment and monitoring of large-scale projects will be required to mitigate the risks posed to external and public debt sustainability.** Fiscal risk could arise if these projects fail to generate the expected returns, including to the government's own equity stake. Better disclosure of the government's medium-term borrowing plans, including for resource sector activity, would greatly enhance the assessment of debt sustainability.

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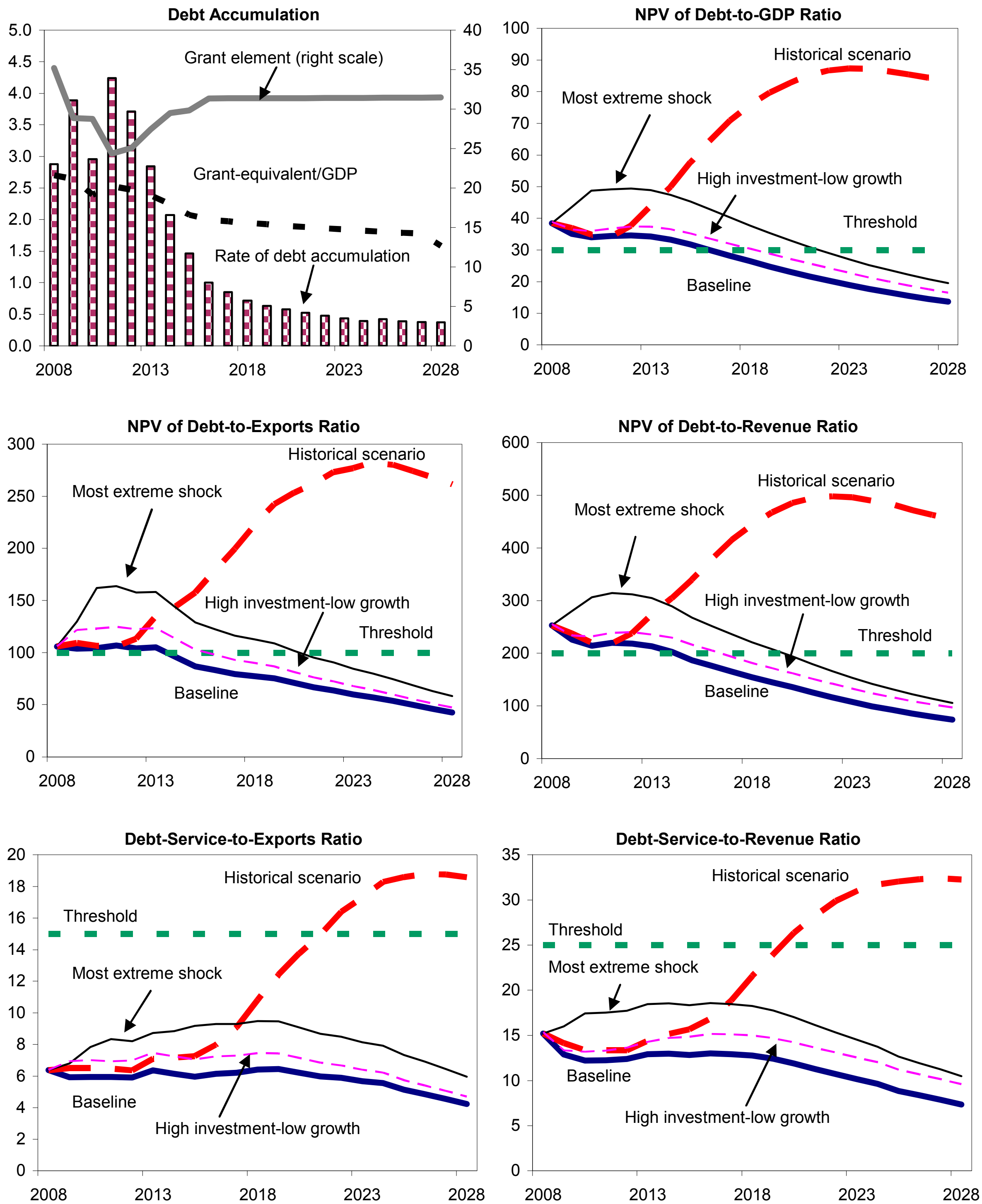
[5] Nonresource exports are presumed to be affected by similar factors to those that might lower growth in resource exports—lower-than-projected demand for final output; higher-than-expected costs for new projects, reducing their scale and efficiency; fewer improvements to supporting infrastructure; etc.

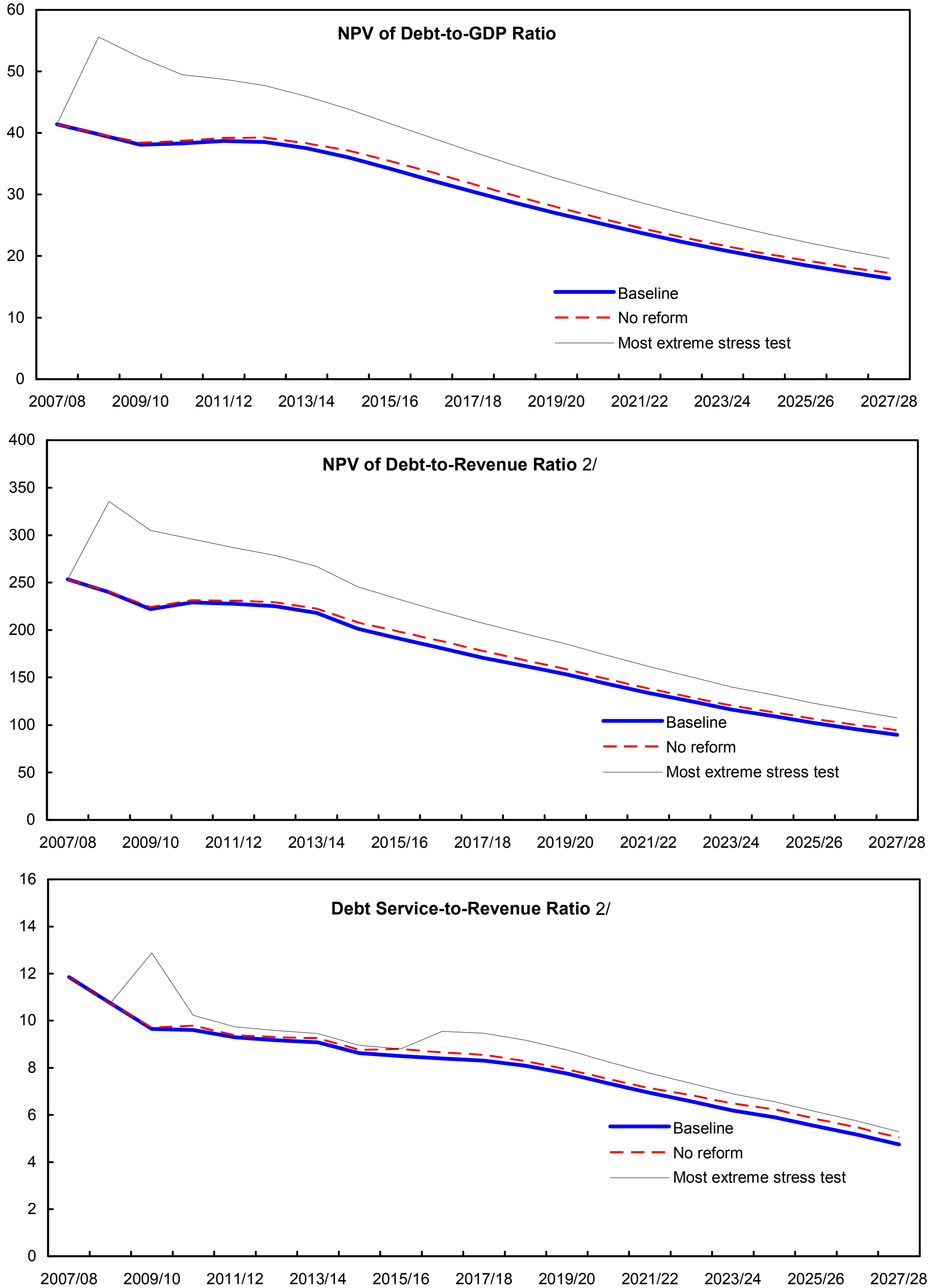
[6] In this section, ratios are stated on the basis of the fiscal year (ending September 30).

Figure 1. Lao P.D.R.: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, Baseline Scenario, 2008–28



Source: Staff projections and simulations.

Figure 2. Lao P.D.R.: Indicators of Public Debt Under Alternative Scenarios, Baseline Scenario, 2007/08–2027/28 1/



Source: Staff projections and simulations.
1/ Most extreme stress test is test that yields highest ratio in 2017/18.
2/ Revenue including grants.

Table 1. Lao P.D.R.: External Debt Sustainability Framework, Baseline Scenario, 2008–28 1/

(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections									
	2005	2006	2007			2008	2009	2010	2011	2012	2013	2008–13 Average	2018	2028	2014–28 Average
External debt (nominal) 1/	**105.7**	**97.1**	**104.5**			**96.6**	**97.8**	**101.3**	**104.9**	**103.8**	**98.0**		**53.8**	**17.2**	
Of which: Public and publicly guaranteed (PPG)	76.9	66.0	59.5			49.3	44.7	43.0	43.0	42.9	42.3		32.2	17.0	
Change in external debt	0.1	-8.5	7.4			-7.9	1.2	3.5	3.6	-1.1	-5.8		-8.3	-1.2	
Identified net debt-creating flows	4.9	-11.4	2.4			3.3	4.1	4.8	3.8	-1.7	-5.2		-5.8	-1.4	
Non-interest current account deficit	**16.7**	**9.7**	**16.5**	**10.8**	**5.0**	**16.1**	**17.8**	**15.7**	**13.5**	**11.0**	**5.5**		**-1.6**	**0.6**	-0.5
Deficit in balance of goods and services	14.9	7.9	17.4			15.8	18.0	16.6	14.1	11.7	6.4		-3.7	1.3	
Exports	31.5	39.6	36.0			36.3	33.8	32.6	32.2	33.2	32.6		34.1	31.9	
Imports	46.4	47.4	53.3			52.1	51.8	49.2	46.3	45.0	39.0		30.4	33.2	
Net current transfers (negative = inflow)	-2.2	-4.1	-2.5	-4.7	2.5	-2.5	-2.3	-2.4	-2.4	-2.4	-2.3		-2.3	-2.5	-2.4
o/w official	-1.2	-2.4	-1.3			-1.3	-1.1	-1.2	-1.2	-1.1	-1.1		-1.0	-1.1	
Other current account flows (negative = net inflow)	3.9	6.0	1.7			2.8	2.2	1.5	1.8	1.6	1.5		4.4	1.8	
Net FDI (negative = inflow)	**0.2**	**-2.8**	**-0.6**	**-2.0**	**1.5**	**-8.3**	**-9.0**	**-6.5**	**-4.6**	**-7.7**	**-6.9**		**-2.7**	**-1.3**	-2.2
Endogenous debt dynamics 2/	**-12.0**	**-18.3**	**-13.5**			**-4.4**	**-4.7**	**-4.4**	**-5.1**	**-4.9**	**-3.8**		**-1.5**	**-0.8**	
Contribution from nominal interest rate	1.1	0.8	0.9			1.7	1.3	2.2	2.2	2.6	2.9		2.5	0.4	
Contribution from real GDP growth	-6.6	-7.0	-6.6			-6.2	-6.0	-6.5	-7.3	-7.6	-6.8		-4.0	-1.2	
Contribution from price and exchange rate changes	-6.6	-12.1	-7.9			…	…	…	…	…	…		…	…	
Residual (3–4) 3/	**-4.7**	**2.8**	**4.9**			**-11.2**	**-2.9**	**-1.3**	**-0.2**	**0.6**	**-0.6**		**-2.4**	**0.2**	
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	
NPV of external debt 4/	...	...	91.3			85.8	88.2	92.3	96.3	95.5	89.9		48.0	13.9	
In percent of exports	...	...	253.6			236.3	260.8	282.8	299.0	287.2	275.6		140.9	43.5	
NPV of PPG external debt	**...**	**...**	**46.3**			**38.4**	**35.1**	**34.1**	**34.4**	**34.6**	**34.2**		**26.4**	**13.6**	
In percent of exports	**...**	**...**	**128.6**			**105.8**	**103.8**	**104.3**	**106.8**	**104.0**	**104.9**		**77.4**	**42.7**	
In percent of government revenues	**...**	**...**	**318.4**			**252.8**	**225.8**	**214.4**	**220.0**	**218.2**	**213.3**		**154.6**	**74.1**	
Debt service-to-exports ratio (in percent)	**8.1**	**9.3**	**9.2**			**13.3**	**12.3**	**18.8**	**17.9**	**20.4**	**23.5**		**23.2**	**4.7**	
PPG debt service-to-exports ratio (in percent)	**...**	**...**	**...**			**6.4**	**5.9**	**5.9**	**5.9**	**5.9**	**6.4**		**6.4**	**4.2**	
PPG debt service-to-revenue ratio (in percent)	**...**	**...**	**...**			**15.2**	**12.9**	**12.2**	**12.2**	**12.4**	**12.9**		**12.8**	**7.3**	
Total gross financing need (billions of U.S. dollars)	556.1	371.5	791.1			661.2	819.7	1,082.8	1,160.1	876.5	597.2		536.3	323.4	
Non-interest current account deficit that stabilizes debt ratio	16.6	18.2	9.2			23.9	16.7	12.2	9.9	12.0	11.4		6.6	1.8	
Key macroeconomic assumptions															
Real GDP growth (in percent)	7.1	8.1	7.9	6.4	1.2	7.5	7.5	7.5	8.0	8.0	7.1	7.6	7.1	7.1	7.1
GDP deflator in US dollar terms (change in percent)	6.6	12.9	8.8	3.1	12.8	19.0	12.1	4.0	3.1	2.1	2.1	7.1	2.1	2.1	2.1
Effective interest rate (percent) 5/	1.2	0.9	1.1	1.1	0.3	2.1	1.7	2.5	2.4	2.8	3.1	2.4	4.4	2.3	3.5
Growth of exports of G&S (U.S. dollar terms, in percent)	24.9	53.3	6.8	14.5	16.6	29.1	12.2	7.9	9.8	13.8	7.3	13.4	5.0	10.7	9.2
Growth of imports of G&S (U.S. dollar terms, in percent)	19.8	24.7	32.1	13.2	18.2	24.9	19.9	6.2	4.7	7.1	-5.2	9.6	10.3	10.2	8.4
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	35.2	28.8	28.8	24.4	25.1	27.4	28.3	31.4	31.5	31.2
Aid flows (in millions of U.S. dollars) 7/	51.5	68.7	67.8			65.1	74.3	83.1	93.0	105.2	115.5		184.0	401.7	
Of which: Grants	51.5	68.7	67.8			65.1	74.3	83.1	93.0	105.2	115.5		184.0	401.5	
Of which: Concessional loans	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.2	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			2.7	2.6	2.4	2.5	2.5	2.4		1.9	1.6	1.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			50.1	42.1	44.2	37.7	39.6	43.5		55.7	60.6	57.2
Memorandum items:															
Nominal GDP (millions of US dollars)	2,865.9	3,498.1	4,108.0			5,256.6	6,334.1	7,081.9	7,886.0	8,693.9	9,505.5		14,840.7	36,175.0	
(NPVt-NPVt-1)/GDPt-1 (in percent)						2.9	3.9	3.0	4.2	3.7	2.8	3.4	0.7	0.4	0.7

Source: Staff simulations.

1/ Includes both public and private sector external debt.

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

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

4/ Assumes that NPV 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 NPV of new debt).

Table 2a. Lao P.D.R.: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, Baseline Scenario, 2008–28
(In percent)

	Projections							
	2008	2009	2010	2011	2012	2013	**2018**	2028
NPV of debt-to-GDP ratio								
Baseline	38	35	34	34	35	34	**26**	14
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009–28 1/	38	37	35	34	38	44	**76**	83
A2. New public sector loans on less favorable terms in 2009–28 2/	38	36	36	37	38	39	**33**	21
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009–10	38	36	36	36	36	36	**28**	14
B2. Export value growth at historical average minus one standard deviation in 2009–10 3/	38	38	42	42	41	41	**30**	15
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009–10	38	44	49	49	49	49	**38**	19
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009–10 4/	38	41	44	44	44	43	**32**	15
B5. Combination of B1-B4 using one-half standard deviation shocks	38	42	47	47	47	46	**35**	18
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	38	48	47	47	47	47	**36**	19
NPV of debt-to-exports ratio								
Baseline	106	104	104	107	104	105	**77**	43
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-28 1/	106	109	107	106	113	135	**222**	261
A2. New public sector loans on less favorable terms in 2009-28 2/	106	107	110	116	115	119	**96**	65
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009–10	106	104	104	107	104	105	**77**	43
B2. Export value growth at historical average minus one standard deviation in 2009–10 3/	106	130	162	164	158	158	**113**	58
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009–10	106	104	104	107	104	105	**77**	43
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009–10 4/	106	122	136	136	131	131	**93**	47
B5. Combination of B1-B4 using one-half standard deviation shocks	106	113	120	122	118	119	**87**	47
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	106	104	104	107	104	105	**77**	43
NPV of debt-to-revenue ratio								
Baseline	253	226	214	220	218	213	**155**	74
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009–28 1/	253	238	219	219	238	274	**444**	454
A2. New public sector loans on less favorable terms in 2009–28 2/	253	233	226	238	242	241	**191**	112
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009–10	253	231	224	230	228	223	**161**	77
B2. Export value growth at historical average minus one standard deviation in 2009–10 3/	253	246	263	266	262	254	**178**	80
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009–10	253	280	306	314	312	305	**221**	106
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009–10 4/	253	266	279	281	275	267	**185**	81
B5. Combination of B1-B4 using one-half standard deviation shocks	253	273	294	300	297	289	**207**	97
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	253	308	293	300	298	291	**211**	101

Table 2b. Lao P.D.R.: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, Baseline Scenario, 2008–28 (continued)
(In percent)

		Projections						
	2008	2009	2010	2011	2012	2013	**2018**	2028
				Debt service-to-exports ratio				
Baseline	6	6	6	6	6	6	**6**	4
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009–28 1/	6	7	7	6	6	7	**11**	19
A2. New public sector loans on less favorable terms in 2009–28 2/	6	6	6	6	6	7	**8**	6
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009–10	6	6	6	6	6	6	**6**	4
B2. Export value growth at historical average minus one standard deviation in 2009–10 3/	6	7	8	8	8	9	**9**	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009–10	6	6	6	6	6	6	**6**	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009–10 4/	6	6	6	7	7	7	**8**	5
B5. Combination of B1-B4 using one-half standard deviation shocks	6	6	6	7	7	7	**7**	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	6	6	6	6	6	6	**6**	4
				Debt service-to-revenue ratio				
Baseline	15	13	12	12	12	13	**13**	7
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009–28 1/	15	14	13	13	13	14	**22**	32
A2. New public sector loans on less favorable terms in 2009–28 2/	15	13	12	13	14	14	**15**	10
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009–10	15	13	13	13	13	13	**13**	8
B2. Export value growth at historical average minus one standard deviation in 2009–10 3/	15	13	13	14	14	14	**15**	8
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009–10	15	16	17	18	18	18	**18**	10
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009–10 4/	15	13	13	14	14	14	**16**	8
B5. Combination of B1-B4 using one-half standard deviation shocks	15	15	16	16	16	17	**17**	10
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	15	18	17	17	17	18	**17**	10
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	29	29	29	29	29	29	**29**	29

Source: Staff projections and simulations.

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 3. Lao P.D.R.: External Debt Sustainability Framework, Alternative (High Investment–Low Growth) Scenario, 2008–28 1/

(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections									
	2005	2006	2007			2008	2009	2010	2011	2012	2013	2008–13 Average	2018	2028	2014–28 Average
External debt (nominal) 1/	**105.7**	**97.1**	**104.5**			**97.6**	**101.6**	**107.1**	**112.2**	**112.5**	**107.0**		**61.9**	**20.9**	
Of which: Public and publicly guaranteed (PPG)	76.9	66.0	59.5			49.8	46.5	45.5	46.0	46.5	46.2		37.0	20.6	
Change in external debt	0.1	-8.5	7.4			-6.9	4.0	5.4	5.1	0.3	-5.5		-8.5	-1.4	
Identified net debt-creating flows	4.9	-11.4	2.4			4.2	10.2	10.4	8.9	3.1	-1.5		-2.3	2.2	
Non-interest current account deficit	**16.7**	**9.7**	**16.5**	**10.8**	**5.0**	**16.2**	**22.0**	**20.4**	**17.6**	**16.0**	**10.2**		**2.4**	**4.9**	3.6
Deficit in balance of goods and services	14.9	7.9	17.4			16.0	22.9	21.8	19.2	17.1	11.3		1.3	5.4	
Exports	31.5	39.6	36.0			36.7	30.0	29.2	29.5	30.6	30.3		33.7	34.9	
Imports	46.4	47.4	53.3			52.6	52.9	51.0	48.7	47.7	41.6		35.0	40.2	
Net current transfers (negative = inflow)	-2.2	-4.1	-2.5	-4.7	2.5	-2.5	-2.4	-2.6	-2.6	-2.6	-2.6		-2.7	-3.0	-2.8
o/w official	-1.2	-2.4	-1.3			-1.3	-1.2	-1.2	-1.2	-1.2	-1.2		-1.2	-1.3	
Other current account flows (negative = net inflow)	3.9	6.0	1.7			2.8	1.6	1.1	1.0	1.4	1.4		3.7	2.5	
Net FDI (negative = inflow)	**0.2**	**-2.8**	**-0.6**	**-2.0**	**1.5**	**-8.4**	**-9.5**	**-7.0**	**-4.4**	**-9.0**	**-8.4**		**-3.9**	**-1.7**	-3.1
Endogenous debt dynamics 2/	**-12.0**	**-18.3**	**-13.5**			**-3.6**	**-2.4**	**-2.9**	**-4.3**	**-4.0**	**-3.3**		**-0.8**	**-1.0**	
Contribution from nominal interest rate	1.1	0.8	0.9			1.8	1.4	2.3	2.3	2.9	3.2		2.9	0.5	
Contribution from real GDP growth	-6.6	-7.0	-6.6			-5.3	-3.8	-5.2	-6.6	-6.8	-6.5		-3.7	-1.5	
Contribution from price and exchange rate changes	-6.6	-12.1	-7.9			…	…	…	…	…	…		…	…	
Residual (3–4) 3/	**-4.7**	**2.8**	**4.9**			**-11.1**	**-6.1**	**-5.0**	**-3.7**	**-2.8**	**-4.0**		**-6.2**	**-3.6**	
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	
NPV of external debt 4/	...	...	91.3			86.7	91.7	97.6	103.0	103.4	98.2		55.3	16.8	
In percent of exports	...	...	253.6			236.3	305.8	333.9	349.1	338.4	324.2		163.9	48.3	
NPV of PPG external debt	**...**	**...**	**46.3**			**38.8**	**36.5**	**36.0**	**36.8**	**37.4**	**37.4**		**30.4**	**16.5**	
In percent of exports	**...**	**...**	**128.6**			**105.8**	**121.7**	**123.2**	**124.7**	**122.5**	**123.4**		**90.1**	**47.4**	
In percent of government revenues	**...**	**...**	**318.8**			**255.0**	**233.8**	**231.9**	**239.2**	**240.0**	**235.9**		**181.5**	**97.0**	
Debt service-to-exports ratio (in percent)	**8.1**	**9.3**	**9.2**			**13.3**	**14.4**	**22.2**	**20.9**	**24.1**	**27.7**		**26.9**	**5.2**	
PPG debt service-to-exports ratio (in percent)	**...**	**...**	**...**			**6.4**	**6.9**	**7.0**	**6.9**	**7.0**	**7.5**		**7.5**	**4.7**	
PPG debt service-to-revenue ratio (in percent)	**...**	**...**	**...**			**15.4**	**13.3**	**13.2**	**13.3**	**13.6**	**14.3**		**15.0**	**9.6**	
Total gross financing need (billions of U.S. dollars)	556.1	371.5	791.1			661.4	1,027.2	1,327.5	1,424.1	1,155.4	887.7		979.0	1,485.7	
Non-interest current account deficit that stabilizes debt ratio	16.6	18.2	9.2			23.1	18.0	14.9	12.4	15.7	15.7		10.9	6.3	
Key macroeconomic assumptions															
Real GDP growth (in percent)	7.1	8.1	7.9	6.4	1.2	6.5	4.5	5.6	6.8	6.6	6.3	6.0	5.7	7.2	6.4
GDP deflator in US dollar terms (change in percent)	6.6	12.9	8.8	3.1	12.8	19.0	12.1	4.0	3.1	2.1	2.1	7.1	2.1	2.1	2.1
Effective interest rate (percent) 5/	1.2	0.9	1.1	1.1	0.3	2.1	1.7	2.5	2.4	2.8	3.1	2.4	4.4	2.3	3.5
Growth of exports of G&S (U.S. dollar terms, in percent)	24.9	53.3	6.8	14.5	16.6	29.1	-4.3	7.2	11.1	12.8	7.5	10.6	5.9	10.9	9.6
Growth of imports of G&S (U.S. dollar terms, in percent)	19.8	24.7	32.1	13.2	18.2	25.0	17.7	6.1	4.9	6.7	-5.3	9.2	10.3	10.2	8.5
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	35.2	28.8	28.8	24.4	25.1	27.4	28.3	31.4	31.5	31.2
Aid flows (in millions of U.S. dollars) 7/	51.5	68.7	67.8			65.1	74.3	83.1	93.0	104.8	113.8		168.5	346.1	
Of which: Grants	51.5	68.7	67.8			65.1	74.3	83.1	93.0	104.8	113.8		168.5	345.9	
Of which: Concessional loans	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.2	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			2.7	2.8	2.5	2.7	2.7	2.6		2.1	1.7	2.1
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			50.1	42.1	44.2	37.7	39.5	43.3		54.3	58.1	55.4
Memorandum items:															
Nominal GDP (millions of US dollars)	2,865.9	3,498.1	4,108.0			5,204.2	6,095.6	6,699.4	7,372.4	8,026.7	8,705.9		12,896.0	29,839.7	
(NPVt-NPVt-1)/GDPt-1 (in percent)						2.9	3.9	3.1	4.5	4.0	3.1	3.6	0.8	0.5	0.8

Source: Staff simulations.

1/ Includes both public and private sector external debt.
2/ Derived as [r - g - r(1+g)]/(1+g+r+gr) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and r = growth rate of GDP deflator in U.S. dollar terms.
3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.
4/ Assumes that NPV 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 NPV of new debt).

Table 4. Lao PDR: Public Sector Debt Sustainability Framework, Baseline Scenario, 2004/05–2027/28

(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 5/	Standard Deviation 5/	Estimate	Projections								
	2004/05	2005/06	2006/07			2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2007/08–2012/13 Average	2017/18	2027/28	2014/15–2027/28 Average
Public sector debt 1/	79.7	70.8	62.6			53.3	47.6	45.0	48.5	48.5	48.1		37.5	20.5	
Of which: Foreign-currency denominated	78.1	69.2	60.8			51.5	45.7	43.4	47.1	47.3	46.9		36.9	20.3	
Change in public sector debt	-8.4	-8.9	-8.2			-9.3	-5.7	-2.6	3.5	0.0	-0.5		-2.3	-1.2	
Identified debt-creating flows	-7.3	-12.1	-7.6			-12.2	-6.7	-4.4	-3.3	-3.4	-3.3		-2.3	-1.1	
Primary deficit	3.4	3.0	2.2	3.2	1.2	0.9	0.7	0.4	0.7	0.6	0.5	0.6	0.9	0.6	0.7
Revenue and grants	13.2	14.6	15.7			16.3	16.6	17.1	16.7	17.0	17.1		17.8	18.2	
Of which: Grants	1.7	2.0	1.8			1.3	1.2	1.2	1.2	1.2	1.2		1.2	1.2	
Primary (noninterest) expenditure	16.6	17.6	17.9			17.2	17.3	17.5	17.5	17.6	17.6		18.7	18.9	
Automatic debt dynamics	-10.7	-15.1	-9.8			-13.0	-7.4	-4.8	-4.1	-4.0	-3.8		-3.1	-1.8	
Contribution from interest rate/growth differential	-7.3	-7.3	-6.4			-4.8	-4.0	-3.5	-3.6	-3.8	-3.7		-3.1	-1.8	
Of which: Contribution from average real interest rate	-1.5	-1.5	-1.2			-0.4	-0.3	-0.2	-0.3	-0.2	-0.3		-0.3	-0.2	
Of which: Contribution from real GDP growth	-5.7	-5.8	-5.2			-4.4	-3.7	-3.3	-3.3	-3.6	-3.4		-2.8	-1.5	
Contribution from real exchange rate depreciation	-3.5	-7.8	-3.4			-8.2	-3.4	-1.2	-0.5	-0.2	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	-1.1	3.2	-0.6			2.9	1.0	1.8	6.8	3.4	2.8		-0.1	-0.1	
NPV of public sector debt	...	...	49.5			41.4	39.8	38.1	38.3	38.7	38.5		30.5	16.4	
Of which: Foreign-currency denominated	...	...	47.7			39.6	37.9	36.5	36.9	37.4	37.4		29.8	16.2	
Of which: External	...	...	47.7			39.6	37.9	36.5	36.9	37.4	37.4		29.8	16.2	
NPV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	7.2	6.1	4.7			3.8	3.3	2.7	2.9	2.7	2.5		2.6	1.6	
NPV of public sector debt-to-revenue and grants ratio (in percent)	...	...	315.0			253.5	239.9	222.2	229.2	227.8	225.2		171.0	89.7	
NPV of public sector debt-to-revenue ratio (in percent)	...	...	354.8			274.7	258.2	238.5	246.4	245.2	242.3		183.5	96.1	
Of which: External 3/	...	...	342.0			262.8	245.9	228.3	237.2	237.2	235.2		179.7	94.9	
Debt service-to-revenue and grants ratio (in percent) 4/	15.8	11.9	9.1			11.8	10.7	9.7	9.6	9.3	9.2		8.3	4.7	
Debt service-to-revenue ratio (in percent) 4/	18.1	13.8	10.3			12.8	11.6	10.4	10.3	10.0	9.9		8.9	5.1	
Primary deficit that stabilizes the debt-to-GDP ratio	11.8	11.9	10.5			10.1	6.4	3.0	-2.8	0.6	0.9		3.2	1.8	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	6.9	7.9	8.0	6.8	0.9	7.6	7.5	7.5	7.9	8.0	7.6	7.7	7.5	7.5	7.5
Average nominal interest rate on forex debt (in percent)	1.2	1.1	0.7	0.9	0.2	1.3	1.2	1.2	1.3	1.2	1.2	1.2	1.0	0.8	0.9
Average real interest rate on domestic currency debt (in percent)	2.2	0.0	2.2	7.7	16.8	0.4	0.5	1.7	3.4	4.5	4.8	2.6	4.8	4.8	4.8
Real exchange rate depreciation (in percent, + indicates depreciation)	-4.4	-11.0	-5.4	-5.6	6.6	-14.6	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	7.9	6.9	4.2	9.2	3.7	10.0	10.3	7.6	5.8	4.7	4.5	7.2	4.5	4.5	4.5
Growth of real primary spending (deflated by GDP deflator, in percent)	21.7	14.7	10.1	5.3	15.0	3.2	8.1	8.7	7.6	8.8	7.6	7.3	8.6	7.6	8.0
Grant element of new external borrowing (in percent)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Sources: Lao P.D.R. authorities; and staff estimates and projections.

1/ Gross general government debt.

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 5. Lao PDR: Sensitivity Analysis for Key Indicators of Public Debt, Baseline Scenario, 2007/08–2027/28

	Projections							
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2017/18	2027/28
NPV of Debt-to-GDP Ratio								
Baseline	41	40	38	38	39	39	30	16
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	41	41	41	43	45	46	44	34
A2. Primary balance is unchanged from 2007/08	41	40	38	39	39	39	32	17
A3. Permanently lower GDP growth 1/	41	40	38	39	39	39	32	19
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008/09–2009/10	41	40	40	40	41	41	33	20
B2. Primary balance is at historical average minus one standard deviations in 2008/09–2009/10	41	42	42	42	42	42	33	17
B3. Combination of B1-B2 using one half standard deviation shocks	41	42	42	42	42	42	33	17
B4. One-time 30 percent real depreciation in 2008/09	41	56	52	49	49	48	37	20
B5. 10 percent of GDP increase in other debt-creating flows in 2008/09	41	45	43	43	43	42	33	18
NPV of Debt-to-Revenue Ratio 2/								
Baseline	253	240	222	229	228	225	171	90
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	253	249	240	256	264	269	243	185
A2. Primary balance is unchanged from 2007/08	253	240	224	231	231	229	178	95
A3. Permanently lower GDP growth 1/	253	240	223	231	230	228	178	107
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008/09–2009/10	253	244	230	239	239	237	186	108
B2. Primary balance is at historical average minus one standard deviations in 2008/09–2009/10	253	252	244	250	247	243	184	96
B3. Combination of B1-B2 using one half standard deviation shocks	253	252	245	251	248	245	185	95
B4. One-time 30 percent real depreciation in 2008/09	253	335	305	296	287	279	207	108
B5. 10 percent of GDP increase in other debt-creating flows in 2008/09	253	272	250	255	252	248	187	97
Debt Service-to-Revenue Ratio 2/								
Baseline	12	11	10	10	9	9	8	5
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	12	11	11	11	11	11	11	10
A2. Primary balance is unchanged from 2007/08	12	11	10	10	9	9	9	5
A3. Permanently lower GDP growth 1/	12	11	10	10	9	9	9	5
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008/09–2009/10	12	11	10	10	10	10	9	6
B2. Primary balance is at historical average minus one standard deviations in 2008/09–2009/10	12	11	11	11	10	10	9	5
B3. Combination of B1-B2 using one half standard deviation shocks	12	11	11	11	10	10	9	5
B4. One-time 30 percent real depreciation in 2008/09	12	11	11	11	11	11	9	5
B5. 10 percent of GDP increase in other debt-creating flows in 2008/09	12	11	13	10	10	10	9	5

Sources: Lao P.D.R. 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 20 (i.e., 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 2008 Article IV Consultation—Informational Annexes

Prepared by the Asia and Pacific Department
(In Consultation with Other Departments)

July 7, 2008

Contents | Page

ANNEX I. LAO P.D.R.: FUND RELATIONS
(As of May 31, 2008)

I. **Membership Status:** Joined 7/05/61; Article XIV

II. **General Resources Account:**

	SDR million	Percent Quota
Quota	52.90	100.00
Fund holdings of currency	52.90	100.00

III. **SDR Department:**

	SDR million	Percent Allocation
Net cumulative allocation	9.41	100.00
Holdings	9.80	104.11

IV. **Outstanding Purchases and Loans:**

	SDR million	Percent Quota
ESAF/PRGF arrangements	14.95	28.26

V. **Latest Financial Arrangements:**

Type	Approval Date	Expiration Date	Amount Approved (SDR million)	Amount Drawn (SDR million)
PRGF	4/25/01	4/24/05	31.70	18.12
PRGF	6/04/93	5/07/97	35.19	35.19
SAF	9/18/89	9/17/92	20.51	20.51

VI. **Projected Obligations to Fund** (SDR million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2008	**2009**	**2010**	**2011**	**2012**
Principal	1.36	3.62	3.62	3.17	2.27
Charges/interest	0.07	0.06	0.04	0.02	0.01
Total	1.43	3.68	3.66	3.19	2.27

VII. **Implementation of Heavily Indebted Poor Countries Initiative (HIPC)**

Lao P.D.R. is eligible for assistance under the HIPC Initiative. However, to date the authorities have indicated that they do not want to avail themselves of this facility.

VIII. Safeguards Assessments

A safeguards assessment of the Bank of Lao P.D.R. (BoL) was completed in April 2003 with respect to the PRGF arrangement approved in 2001. The main findings, recommendations, and progress thereon were reported in EBS/03/127 and SM/04/391. Progress on safeguards recommendations has been slow. The authorities indicated that they were not in a position to implement an earlier agreement to undertake a joint audit of the BoL's 2003 and 2004 accounts by the state auditor and an international audit firm. These audits have subsequently been completed by the state auditor, but the joint audit issue remains unresolved.

IX. Exchange Rate Arrangement

In September 1995, Lao P.D.R. adopted a managed floating exchange rate system. The BoL sets a daily official reference rate, based on the weighted average of the previous day's commercial bank and interbank rates. Effective September 2007, banks are allowed to adjust their buying and selling rates within ± 0.25 percent of the BoL's daily reference rate for the U.S. dollar (previously ± 0.30 percent). Adjustment to other exchange rates are correspondingly limited by adjustments to the U.S. dollar. Under the IMF's current classification scheme, the exchange rate arrangement is now a managed float with no pre-determined path, with occasional interventions by the central bank.

X. Exchange and Payments System

Lao P.D.R. no longer maintains restrictions on the making of payments and transfers for current international transactions under the transitional arrangements of Article XIV, Section 2, but maintains restrictions imposed for the preservation of national or international security, which have been notified pursuant to Decision No. 144-(52/51), and a restriction subject to IMF approval under Article VIII (tax payment certificates are required for some transactions). A joint LEG/MCM mission in August 2004 conducted a review of the exchange system to establish the remaining measures that would facilitate Lao P.D.R.'s acceptance of the obligations under Article VIII, including the elimination of an exchange restriction on the making of payments and transfers for current international transactions.

XI. Last Article IV Consultation Discussions

The last Article IV consultation discussions were held in Vientiane during April 25–May 7, 2007. The staff report (SM/07/271) was discussed by the Executive Board on August 3, 2007 and was published on November 7, 2007.

XII. Resident Representative

Mr. Benedict Bingham assumed the Senior Resident Representative post for Vietnam and Lao P.D.R., based in Hanoi, on October 17, 2007.

XIII. Technical Assistance (since 2004)

Department		I. Purpose	A. Date
STA	-	Government finance statistics	April–May 2004
	-	Money and banking statistics	April–May 2004
	-	National accounts statistics	November–December 2006
FAD	-	Expert on customs administration	January and June 2004, February 2005
	-	Expert on tax administration	March–April and November 2004
	-	Mission on public expenditure management	June–July 2004 and October 2004
	-	Missions on tax policy and administration	October 2004
	-	Expert on public expenditure management	November 2004, March–April 2005
	-	Expert on customs law	January and March 2008
MCM	-	Expert on banking supervision	January–February, May–July, and September–October 2004; January–March, April–June, and September–December 2005
	-	Expert on foreign exchange regulations	July–August 2004
	-	Mission of Article VIII (jointly with LEG)	August 2004
	-	Mission on central bank audit	May 2005

Annex II. Lao P.D.R.: Relations with the World Bank Group[1]

IMF-World Bank Collaboration

The IMF takes the lead in advising the government of Lao P.D.R. on macroeconomic policy. The support covers tax, fiscal, monetary, and exchange rate policies, and economic statistical issues. The World Bank takes the lead in supporting the government in formulating a growth and poverty reduction strategy and implementing structural reforms, such as in public finance management; state-owned enterprise (SOE) restructuring; private sector development; trade, legal, and judicial development; and natural resource management. The Bank and Fund coordinate their work on some structural issues that have important implications on macroeconomic performance, namely financial sector reform, public expenditure management, trade policy, and poverty reduction strategy.

IMF and Bank Joint Role in Policy Dialogue

Poverty Reduction Strategy. The Bank and the IMF, together with the United Nations Development Programme, have provided assistance to the government's process of formulating its medium-term poverty reduction strategy. In 2003, the government prepared the first full Poverty Reduction Strategy Paper, the *National Growth and Poverty Eradication Strategy* (NGPES). The Bank and the Fund's Joint Staff Advisory Note (JSAN) of the strategy was presented before IDA and IMF Boards in November 2004. In 2006, the government prepared the *Sixth National Socio Economic Development Plan (2006–2010)* (NSEDP) with a strong poverty focus and through wide consultations with key domestic stakeholders in Vientiane and provinces, as well as the Bank, IMF, and donors. The NSEDP was presented by the government to its development partners at the 9th Round Table Meeting in November 2006 and an annual progress report was provided at a Round Table Implementation Meeting in November 2007.

The Bank is supporting the implementation of NGPES and NSEDP through the Poverty Reduction Support Operations (PRSOs). The focus of PRSOs includes public finance management reform, including in social sectors, and regional integration and private sector development. PRSO-1 ($10 million) was approved in March 2005, followed by PRSO-2 ($8 million) in April 2006 and PRSO-3 ($10 million) in June 2007. The next cycle of PRSOs was approved by the Bank Board in June 2008.

Public Expenditure Management. The Bank has provided extensive technical assistance in developing and implementing the government's multi-year Public Expenditure Management Strengthening Program (PEMSP). The Bank completed a Public Expenditure Review jointly with the IMF, other donors, and government, and a Public Expenditure Tracking Survey

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[1] Prepared by the staff of the World Bank. Contact person: Ms. Ekaterina Vostroknutova, Senior Economist, Poverty Reduction and Economic Management Department, East Asia and Pacific Region, email: evostroknutova@worldbank.org.

(PETS) for education and health sectors in 2006. The Bank is also assisting the government in the preparation and implementation of a *Government Finance Statistics Manual*-compatible Chart of Accounts and the new Budget Law, focusing on improving inter-governmental fiscal relations.

Financial Sector Reforms. The Bank and the IMF have worked closely to support the government in developing and implementing a banking reform program. The Bank has supported restructuring of state-owned commercial banks (SOCBs) and drafting of banking sector legislation, and is supporting the drafting of the Financial Sector Strategy.

Trade Policy. The Bank led preparation of the Diagnostic Trade Integration Study (DTIS), jointly with the government, and other Integrated Framework donors. A Multi-Donor Trust Fund (to be administered by the Bank) is currently being set up to support the action matrix in the DTIS, and a Customs and Trade Facilitation Project is being designed in close collaboration with the IMF to support customs modernization through implementation of an automated customs system.

The Bank's Key Roles in Policy Dialogue

State-Owned Enterprises. The Bank has supported the government's SOE reform and restructuring program, aimed at improving transparency by institutionalizing the reporting and recording of annual performance of all SOEs and through international standard audits of large SOEs, restructuring them to reduce losses or raise profits for public utility SOEs and reforming their pricing policies in water, power, and telecoms. The SOEs are indebted to SOCBs and a source of non-performing loans.

Private Sector Development. The Bank supports the development of the private sector, both economy-wide and in the sectors, based on a joint AsDB-World Bank Investment Climate Assessment of manufacturing and tourism firms, a review of key regulatory procedures and business laws, and local government initiatives on private sector promotion. The Bank is also a lead coordinator of a donor working group on macroeconomic and private sector development issues, through which it conducts policy dialogue to improve the climate for private investment, both domestic and foreign.

Forestry Development. The government is involved in a continuing process of reforming its forestry sector and improving the implementation of forestry programs and projects. The Bank is trying to ensure that the government's strategy and objectives for forestry are consistent with the NGPES, Rural Development Program, and Agriculture Development Strategy.

The Nam Theun 2 Hydropower Project. The Bank has supported the project through an International Development Association (IDA) partial risk guarantee, an IDA grant for environmental and social mitigation, and a Multilateral Investment Guarantee Agency (MIGA) guarantee, all done in March 2005. The World Bank decision to support the project was based on a "decision framework" with the following three pillars: (i) Lao P.D.R. establish and implement a viable development policy framework, characterized by concrete performance, and national programs for poverty reduction and social and environmental protection; (ii) the technical, financial, economic, and implementation aspects of the project, as well as the design and implementation of sound safeguards policies; and (iii) wider understanding and broader support from the international donor community, and global and local civil society for Lao P.D.R.'s development framework and the project. The Bank is supporting and monitoring the implementation of NT2, and its progress remains good; it is expected to be operational in early 2010.

Bank Strategy and Lending Operations

Country Assistance Strategy (CAS). The full CAS was presented to the Bank's Board in March 2005, and the CAS update (and extension through 2011) in May 2007. The CAS selectively targets key NGPES priorities, including: (i) sustaining growth through linking to and capitalizing on regional opportunities and better natural resource management; (ii) improving social outcomes through strengthening financial management and service delivery capacity; (iii) strengthening management capacities, partnerships, and monitoring for NGPES implementation; and (iv) implementing the NT2 program as a model for supporting sustainable growth, improving social outcomes, and building key development capacities. The updated CAS consists of a lending and non-lending program, with a notional amount of about US$170 million in new commitments (credits and grants) during July 1, 2005 to June 30, 2011 (subject to the IDA Performance Based Allocation system).

Lending Operations

As of January 1, 2008, a total amount of US$863.9 million equivalent of IDA credits and grants had been approved. This included support for adjustment operations, rural development, forestry, transport, energy, telecommunications, education, health, industry, capacity building, and risk guarantees. In the last three years, IDA support has focused on the CAS objectives, with an average disbursement of US$41.9 million per year.

IDA: Commitments and Disbursements to Lao P.D.R., 1977–2007

(In millions of U.S. dollars; as of January 1, 2008)

Fiscal Year (to June 30)	Committed	Disbursed	Repayments*
1977–93	335.2	180.7	1.5
1994	48.4	45.1	0.6
1995	19.2	31.4	0.6
1996	60.7	28.6	0.6
1997	48.0	65.2	0.6
1998	34.7	26.5	1.3
1999	29.8	27.8	1.5
2000	0.0	18.1	3.0
2001	41.7	29.9	3.6
2002	44.8	30.5	4.9
2003	24.7	41.2	6.1
2004	35.7	46.7	7.3
2005	76.0	36.0	8.4
2006	37.0	36.3	8.7
2007	28.0	53.4	9.6
Total	863.9	697.4	58.3

*Note: repayments include principal repayments and do not include commitment or service charges.

The World Bank's Main Non-Lending Work

(Recently Completed and Ongoing)

Completed FY05–FY07	Ongoing and Proposed for FY08–FY11
Regional Integration/Private Sector Development	
Financial Sector Note	Economic Monitors (two issues each year)
Economic Monitors (two issues each year)	Financial Sector Strategy
Country Economic Memorandum (CEM) – Sources of Growth	Financial Sector Assessment
Investment Climate Assessment	Investment Climate Assessment 2
Diagnostic Trade Integration Study	Country Economic Memorandum 2008
Integrated Public Expenditure Review and Integrated Fiduciary Assessment	Information and Communication Technologies Strategy
	Poverty Reduction Strategy Paper – Joint Staff Assessment Note
	Study on Trade in Services
Natural Resources Management, Environment and Rural Development	
Environment Monitor	Upland Livelihood Typology
Rural Sector Strategy	Flagship on Natural Resources Management (CEM)
Khammouane Provincial Development Study	Environment Monitor
Poverty Environment Nexus Study	Land Allocation, Planning and Management
Uplands Livelihood Typology	Forestry Sector Strategy Note
	Water Sector Review
Public Sector and Financial Management	
	NT2 Revenue Management
Peer Review of State Audit Organization	Intergovernmental Fiscal Relations and Decentralization
Contract Value Norms Study	Public Expenditure Tracking Survey
	Civil Service Study
	Integrated Public Expenditure Review/Integrated Fiduciary Assessment/Country Financial Accountability Assessment
	Strengthening Anti-corruption Measures
	Assessment of Government Strategic Plan for Governance
	PEMSP FY08
	World Trade Organization Accession
	Upland Livelihood Typology and Investment Climate Assessment
Service Delivery and Vulnerability	
Poverty Assessment	Teachers' Study
Decentralization Study	Review of Poverty Reduction Fund
Public Expenditure Tracking Survey	Public Expenditure Tracking Survey
	Civil Service Reform Study
	Health Sector Financing Strategy
	Education for All Assessment
	Poverty Assessment
	Social Monitor (Youth Opportunities)
	Technical Support to Education For All Assessment
Other/Infrastructure	
Mining Sector Review	Rural Water and Sanitation Strategy
	Cross-border Cooperation in Sustainable Hydropower Development
	Infrastructure Sector Study
	Dialog and Regulatory Reform

ANNEX III. LAO P.D.R.: RELATIONS WITH THE ASIAN DEVELOPMENT BANK[2]

The Asian Development Bank (AsDB) has extended development assistance to Lao P.D.R. since 1968. In the 1970s and 1980s, AsDB assistance was focused mainly on economic growth projects involving infrastructure development in the transport and energy sectors, as well as agriculture. AsDB has been active in the development of the financial sector since the latter part of the 1980s, and broadened its assistance to Lao P.D.R. to include rural development, social development, and environment in the 1990s. AsDB has focused its activities on poverty reduction since the late 1990s.

AsDB's new Country Strategy and Program (CSP) for Lao P.D.R. for 2007–11 is anchored in and closely aligned to the Lao P.D.R.'s *Sixth National Socio Economic Development Plan, 2006–2010* (NSEDP). A results-based strategy, the CSP focuses on promoting sustainable pro-poor sustainable growth, strengthening governance, developing government's capacity, improving social inclusiveness and gender, enhancing regional cooperation and integration, managing the environment, and supporting private sector (including banking) developments. These strategic foci are shaped by the country's specific requirements and capabilities after extensive stakeholder consultations. The CSP is designed to achieve high impact and sustainable development results, and to contribute to the government's Millennium Development Goals and sector-specific commitments as set out in NSEDP, with specific goals, targets, and progress indicators for AsDB interventions.

Lao P.D.R. is a key actor in the Greater Mekong Sub-Region (GMS) program as a land-link among the other GMS member countries. The AsDB will aim to explore various options to maximize the benefits to Lao P.D.R. from sub-regional cooperation. To enhance the development impact of projects and ensure their close monitoring, AsDB's interventions will focus primarily on the poor northern regional provinces and along the East-West economic corridor that links Thailand to Savannakhet in Lao P.D.R. and to Vietnam.

Since 1970, the AsDB has approved 73 loan and grant financed projects for a total of $1.18 billion—of which 25 projects were currently active—and 228 technical assistance projects for a total of $116.1 million (as of end-December 2007).

In 2007, AsDB program operations shifted to 100 percent grant. Three new grants were approved in 2007 comprising of the health systems program grant, the private sector and SME development program grant, and the Greater Mekong Subregion transport network improvement program (co-financing with $10 million from the Organization of the Petroleum Exporting Countries fund, $14 million (grant) from Australia, and $23 million from the Republic of Korea). In addition, four technical assistance projects amounting to $3.1 million were approved.

Lao P.D.R.: Asian Development Bank Commitments and Disbursements, 2001–07

(In millions of U.S. dollars)

	2001	2002	2003	2004	2005	2006	2007 1/
Commitments	65.0	43.2	34.9	54.8	87.0	60.8	56.0
Disbursements	44.7	48.6	54.7	48.5	78.7	78.5	76.6

Source: Data provided by the Asian Development Bank.
1/ Planned figures.

[2] Prepared by the Asian Development Bank.

ANNEX IV. LAO P.D.R.: STATISTICAL ISSUES

Macroeconomic and financial data provided to the Fund have serious shortcomings that significantly hamper surveillance. Priority should be placed on strengthening balance of payments statistics and national accounts, as well as external public debt and subnational fiscal accounts. Greater coordination between the various agencies responsible for compiling macroeconomic statistics is needed. While a General Data Dissemination System (GDDS) coordinator has been appointed, the authorities have yet to finalize the GDDS metadata and a strategy for statistical improvement. Macroeconomic and financial data are published in periodic reports by the National Statistical Center (NSC) and the Bank of Lao P.D.R. (BoL).

National Accounts

National accounts comprise annual estimates of GDP by activity at current and constant 1990 prices, broadly following the *System of National Accounts 1968*. The lack of regular surveys and use of inadequate methods to collect and compile comprehensive data on current economic activities limit the coverage and reliability of the GDP estimates. The estimates rely heavily on production and volume indicators collected by line ministries. With support from the Swedish International Development Agency, the Lao Expenditure and Consumption Survey 2002–03 (LECS) was finalized and released in 2005. In recent years, the NSC has made some progress in improving the quality of source data, including the implementation of annual enterprise and household surveys. In late 2006, a Statistics Department (STA) regional advisor identified data gaps in the source data and issues on data quality, which need to be addressed as well as in estimates of deflators and expenditures.

Prices

The NSC compiles a monthly CPI, with the latest basket introduced in January 2006 using the results of the 2002/03 LECS. Similar to earlier CPI series, the consumption basket only includes goods and services purchased in the market (i.e., excludes own consumption).

Government Finance

The Ministry of Finance's (MOF) Budget Department produces monthly, quarterly, and annual revenue and expenditure statistics. Most data are recorded on a cash basis. Data on external and domestic debt are compiled by its External Financial Relations Department and Budget Departments. Debt data are comprehensive and available by type of debt holder and instrument. Efforts are being made to further improve coverage, particularly relating to state-owned enterprises' debt.

Overall, government finance statistics remain weak, with significant scope to improve their accuracy, coverage, and timeliness. Annual budget and outturn data are also not disseminated according to international standards. Greater decentralization in 2000/01 further complicated the timely reporting of fiscal data, as province monitoring systems are weak and skilled staff limited. The social security fund and off-budget activities are also not included in fiscal data.

In 2004, an STA mission recommended improvements to the quality of fiscal statistics and developed a roadmap for eventual migration to *Government Finance Statistics Manual 2001*. Currently, no fiscal data are reported for publication in the *Government Finance Statistics Yearbook* or *International Financial Statistics*.

Monetary Statistics

The monetary and financial statistics mission in 2004 identified a number of problems in the compilation of monetary statistics and made further recommendations on sectorization, classification, and valuation. It also proposed improvement in the chart of accounts for BoL and commercial banks, and reconciliation of monetary and government finance statistics. Many of the recommendations of the mission have yet to be implemented, including those related to sectorization of the commercial bank balance sheet. In addition, the authorities have not submitted test data in the format of Standardized Report Forms that embody the methodology of the *Monetary and Financial Statistics Manual*.

Balance of Payments

Balance of payments (BOP) statistics are compiled on a quarterly and annual basis by the BoL, with inputs from the NSC, MOF, and Ministry of Planning and Investment, as well as commercial banks. Currently, certain major activities are unreported, with improvements needed in all major categories of the current account, as well as foreign direct investment and private capital flows. Data reconciliation as reported in the fiscal accounts and BOP on external loans and grants also needs to be strengthened.

New customs procedures adopted in 2000 by the MOF's Customs Department (with Fiscal Affairs Department technical assistance) have yet to produce more accurate trade data on a regular basis, due to technical reasons. More timely and accurate BOP estimates also require improved coordination among agencies involved in their compilation. The government of Japan is providing technical assistance to address some of these issues.

The BoL reports to the STA quarterly BOP data once a year in a highly aggregated format that makes difficult their re-dissemination through STA's publications (*International Financial Statistics* and *Balance of Payments Statistics Yearbook*). The last published data correspond to 2001.

Lao P.D.R.: Table of Common Indicators Required for Surveillance
(As of June 23, 2008)

	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	06/23/08	06/23/08	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	Apr 2008	06/16/08	M	M	I
Reserve/Base Money	Apr 2008	06/16/08	M	M	M
Broad Money	Apr 2008	06/16/08	M	M	M
Central Bank Balance Sheet	Apr 2008	06/16/08	M	M	M
Consolidated Balance Sheet of the Banking System	Apr 2008	06/16/08	M	M	M
Interest Rates[2]	Apr 2008	06/04/08	M	M	I
Consumer Price Index	May 2008	05/29/08	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3]—General Government[4]	Dec 2007	03/14/08	M	M	I
Stocks of Central Government and Central Government-Guaranteed Debt[5, 7]	Sep 2007	05/02/08	A	A	I
External Current Account Balance	Q1 2008	06/20/08	Q	Q	I
Exports and Imports of Goods and Services	Q1 2008	06/20/08	Q	Q	I
GDP/GNP	2007	05/02/08	A	A	I
Gross External Debt	Dec 2007	03/13/08	Q	Q	I
International Investment Position[6]			NA	NA	NA

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially-determined, including discount rates, money market rates, and rates on treasury bills, notes and bonds.
[3] Foreign and domestic bank, nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Includes currency and maturity composition.
[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[7] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

ANNEX V. LAO P.D.R.: MILLENNIUM DEVELOPMENT GOALS INDICATORS, 1990–2015

	1990	1995	2001	2002	2003	2004	2005	2006	Target 2015
Eradicate extreme poverty and hunger	(2015 target = halve 1990 $1 a day poverty and malnutrition rates)								
Population below $1 a day (%)	53.0	…	31.3	27.0	25.8	…	…	…	[26.5]
Poverty gap at $1 a day (%)	…	…	…	6.1	…	…	…	…	
Percentage share of income or consumption held by poorest 20%	…	7.6	…	8.1	…	…	…	…	
Prevalence of child malnutrition (% of children under 5)	…	40	40	…	…	…	…	…	
Population below minimum level of dietary energy consumption (%)	29.0	28.0	22.0	…	22.0	…	…	…	[14.5]
Achieve universal primary education	(2015 target = net enrollment to 100)								
Net primary enrollment ratio (% of relevant age group)	61.4	70.0	81.4	82.8	85.0	84.4	…	…	[100]
Percentage of cohort reaching grade 5 (%)	53.3	55.4	62.3	64.1	62.6	63.0	…	…	[100]
Youth literacy rate (% ages 15–24)	70.1	74.0	78.6	79.3	80.0	78.5	…	78.0	[100]
Promote gender equality	(2005 target = education ratio to 100)								
Ratio of girls to boys in primary and secondary education (%)	75.3	77.8	81.0	82.0	82.0	83.0	84.0	…	[100]
Ratio of young literate females to males (% ages 15–24)	76.2	80.1	90.4	…	…	…	…	90.0	[100]
Share of women employed in the nonagricultural sector (%)	42.1	…	…	…	…	…	…	…	
Proportion of seats held by women in national parliament (%)	6	9	21	21	23	23	23	25	
Reduce child mortality	(2015 target = reduce 1990 under 5 mortality by two-thirds)								
Under 5 mortality rate (per 1,000)	163	134	105	100	91	83	79	…	[54.3]
Infant mortality rate (per 1,000 live births)	120	105	90	87	82	65	62	…	
Immunization, measles (% of children under 12 months)	32	68	50	55	42	36	41	…	
Improve maternal health	(2015 target = reduce 1990 maternal mortality by three-fourths)								
Maternal mortality ratio (modeled estimate, per 100,000 live births)	650	650	650	…	…	…	405	…	[162.5]
Births attended by skilled health staff (% of total)	…	…	19.4	…	…	…	…	…	
Combat HIV/AIDS, malaria and other diseases	(2015 target = halt, and begin to reverse, AIDS, etc.)								
Prevalence rate of HIV, females (% ages 15–24)	…	…	0.1	…	0.1	…	…	…	[0.0]
Contraceptive prevalence rate (% of women ages 15–49)	…	25.1	…	…	…	…	…	…	
Number of children orphaned by HIV/AIDS	…	…	280	…	…	…	…	…	
Incidence of tuberculosis (per 100,000 people)	…	…	162	159	158	156	155	…	[0.0]
Tuberculosis cases detected under DOTS (%)	…	24	40	46	47	55	68	…	
Ensure environmental sustainability									
Forest area (% of total land area)	56.7	…	54.4	…	…	69.9	…	…	
Nationally protected areas (% of total land area)	…	…	16.0	16.0	16.0	16.0	16.0	…	
GDP per unit of energy use (PPP $ per kg oil equivalent)	…	…	…	…	…	…	…	…	
CO2 emissions (metric tons per capita)	0.1	0.1	0.2	0.2	0.2	…	…	…	
Access to an improved water source (% of population)	…	…	37.0	…	43.0	51.0	…	58.0	[74.0]
Access to improved sanitation (% of population)	…	…	30.0	…	24.0	30.0	…	45.0	[60.0]
Access to secure tenure (% of population)	…	…	…	…	…	…	…	…	
Develop a global partnership for development									
Youth unemployment rate (% of total labor force ages 15–24)	…	5.0	…	…	…	…	…	…	
Fixed line and mobile telephones (per 1,000 people)	1.6	3.9	15.2	21.2	32.0	48.2	120.0	…	[Increase]
Personal computers (per 1,000 people)	…	1.1	3.0	3.3	3.5	3.8	4.0	…	[Increase]
General indicators									
Population (millions)	4.1	4.7	5.4	5.5	5.7	5.8	5.7	5.8	
Gross national income ($ billions)1/	0.8	1.7	1.7	1.8	2.1	2.5	2.7	2.9	
GNI per capita ($)	200	370	315	318	372	431	440	500	
Adult literacy rate (% of people ages 15 and over)	56.5	60.6	68.7	66.4	…	68.7	…	69.0	
Total fertility rate (births per woman)	6.0	5.5	5.0	4.8	4.7	4.6	4.5	…	
Life expectancy at birth (years)	49.7	51.8	53.7	54.5	54.7	55.3	56.0	…	
Aid (% of GNI)	17.3	17.6	14.5	15.9	14.7	11.3	11.4	…	
External debt (% of GNI)	204.3	123.2	150.0	165.2	108.4	104.7	103.0	99.5	
Investment (% of GDP) 1/	13.5	26.0	22.1	26.6	27.4	30.4	31.4	31.1	
Trade (% of GDP) 1/	35.8	60.6	67.5	65.3	65.5	73.1	78.0	87.0	

Sources: Millennium Development Goal Indicators (http://mdgs.un.org/unsd/mdg); World Development Indicators database and World Bank, 2007; World Resources Institute (http://earthtrends.wri.org).

1/ IMF staff estimates.

Statement by the IMF Staff Representative on Lao People's Democratic Republic
July 30, 2008

The information provided below has become available since the issuance of the staff report. The thrust of the staff appraisal remains unchanged.

1. Headline inflation was virtually unchanged in June 2008—at 10.2 percent (y/y), held down by a further appreciation of the kip and partial pass-through of world oil prices. Since the beginning of 2008, the kip has been allowed to strengthen by around 7½ percent against both the U.S. dollar and Thai baht. Retail pump prices were increased in Lao P.D.R. on July 1, but at the time were 8–10 percent below full pass-through prices.

2. Broad money growth was 32 percent (y/y) in May 2008, continuing to be fueled by external inflows. Bank credit accelerated to 54 percent (y/y), with growth still mostly attributable to the state-owned commercial banks. Gross official foreign reserves were US$717 million at end-June 2008 (4.4 months of prospective nonresource imports)—in line with staff's projection for year end.

3. The government presented its 2008/09 budget (October–September) to the National Assembly in early July 2008. Both total revenue and recurrent expenditure are now expected to be higher (as a share of GDP) than originally budgeted, but the overall deficit is broadly unchanged. While the revised revenue target is now closer to staff's projection for 2008/09, higher recurrent spending appears associated with a larger-than-envisaged increase in government wages. Under current plans, the wage bill would be equivalent to 5.2 percent of GDP in 2008/09, compared to staff's projection of 4.6 percent of GDP. Finally, the budget does not appear to account fully for the capital costs associated with hosting the Southeast Asia Games in 2009, which could now run as high as 1½–2 percent of GDP, but in part are expected to be donor financed.

4. The government has also indicated to the National Assembly that further measures are being considered to limit food price inflation. These include establishing a rice reserve and placing price controls on select agricultural inputs, as well as providing subsidies on energy used and increasing credit available for food production.

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IMF Executive Board Concludes 2008 Article IV Consultation with the Lao People's Democratic Republic

On July 30, 2008, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with the Lao People's Democratic Republic.[1]

Background

Lao P.D.R.'s economy has performed well in recent years, owing to generally stable macroeconomic conditions and a rapidly expanding natural resource sector. Real GDP growth has averaged more than 7 percent since 2004, with the resource sector (mining and hydropower) now accounting for more than half of total investment and exports. Inflation has moderated, and the kip has been allowed to strengthen. Despite a large external current account deficit, the overall external position has improved, given a sizable increase in private and official inflows. External public debt, as a share of GDP, also continues to decline in part due to improved fiscal performance and given strong economic growth.

In 2007, real GDP growth was nearly 8 percent, fueled by the resource (investment), tourism, and trading activity. Inflation picked up slightly, mainly reflecting global food and energy price trends, with the headline rate at around 5½ percent (y/y) at year end. The external current

[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. 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.

account deficit widened to more than 17 percent of GDP given a sharp rise in oil and capital imports, the latter associated with large resource projects. Gross official reserves increased to \$539 million, or the equivalent of 3.7 months of prospective nonresource imports.[2]

Growth is projected to reach 7½ percent in 2008, driven by similar factors as last year, as well as higher mining output. So far, global economic weakness and financial turbulence have had limited impact on Lao P.D.R., but inflation pressures have continued to build. Headline inflation was 10¼ percent (y/y) in June 2008 and is expected to stay in the low double digits through the rest of the year, given recent trends in oil and food prices, but with aggregate demand pressures also now a factor. Monetary conditions have become more lax since 2007, due to large external inflows. Credit growth has also picked up considerably the past year—at 54 percent (y/y) in May 2008—with much of the growth attributable to state-owned commercial banks. However, fiscal performance continues to improve, with the overall budget deficit expected to decline by 1 percentage point in 2007/08 to 1.7 percent of GDP on higher resource and nonresource-related revenue.

Progress has been made on structural reforms, but much remains to be done. As a centerpiece of the government's banking reform strategy, the state-owned commercial banks continue to undergo an operational and financial restructuring, with non-performing loans declining sharply and banks beginning to recapitalize. Under the public finance management strengthening program, initial steps have been taken to recentralize fiscal authority and improve overall accountability, in line with the revised Budget Law. The government is also seeking ways to improve the financial performance of large state-owned enterprises, including through external audits.

The medium-term outlook for Lao P.D.R. remains positive, but hinges on sound development of the resource sector and other steps to strengthen competitiveness. The resource sector itself is expected to continue as a major driver of growth, although it poses potential fiscal risks and remains vulnerable to external shocks. Despite increasing mineral and electricity exports, the current account deficit is also projected to remain large over the next few years, on further increases in oil and capital imports, before beginning to moderate. More balanced and sustained high growth will require accelerated structural reforms, strengthened human capital, and sound infrastructure development, supported by enhanced capacity in macroeconomic and resource management. Under these conditions, external debt indicators should also continue to improve.

[2] Nonresource imports exclude those imports associated with large mining (gold and copper) and hydropower projects.

Executive Board Assessment

Executive Directors commended the Lao authorities for their prudent macroeconomic management and further progress on structural reforms, which have helped make the economy more resilient to the global slowdown and financial turbulence. Growth has continued to be strong, fueled by large-scale inflows into the natural resource sector, and the fiscal and overall external positions have improved further. Directors noted that a combination of favorable commodity prices and growing regional demand for hydropower is expected to help improve the current account balance and sustain strong growth over the near to medium term. Nevertheless, they recognized that the authorities face new challenges as Lao P.D.R.'s economy enters a critical stage of development.

Directors stressed that longer-term growth prospects and job creation, particularly in the non-resource sector, will hinge importantly on a stable macroeconomic environment and a business climate that is conducive to foreign investment. They encouraged the authorities to persevere with sound macroeconomic policies and a strong reform agenda to help lower business costs, attract foreign investment, and improve competitiveness. Given the risks associated with the high level of external debt, Lao P.D.R. remains vulnerable to a deterioration in external conditions. Directors accordingly underscored the importance of prudent debt management, including by refraining from contracting non-concessional loans and strengthening control over quasi-fiscal risks.

Directors recognized the difficult challenge of maintaining macroeconomic stability amidst the rising oil and food prices. Large capital inflows have led to significant monetary expansion and rapid credit growth, adding to demand pressures and risking stability gains. Directors generally agreed that exchange rate appreciation has helped ease the burden of higher import costs, but encouraged the authorities to take further steps to tighten monetary policy in order to reduce inflationary pressures. In the near term, Directors recommended the use of the available indirect instruments to manage domestic liquidity, coupled with tighter prudential regulations to contain credit growth, in particular at state-owned commercial banks (SOCBs). They considered that the more flexible exchange rate policy, complemented with measures to deepen the foreign exchange market, will help underpin monetary tightening and enhance the economy's resilience to external shocks. Directors noted the staff's assessment that the real effective exchange rate is broadly in line with fundamentals.

Directors agreed that the fiscal stance aimed at further consolidation is broadly appropriate, and will contribute to reducing external vulnerability and containing demand pressures. This should be complemented by further reforms to broaden the tax base, and strengthen revenue collections and spending oversight. Directors encouraged the authorities to remain vigilant in recentralizing the government's fiscal authority. They suggested that the implementation of the new value-added tax should proceed carefully, underpinned by a reasonable timetable and sound technical preparations, and building on a broader reform of the tax system. It will also be important to reform the civil service and ensure that the government's wage bill is consistent with the available budget envelope and does not crowd out critical spending priorities.

Directors considered that sound development and management of the resource sector will be crucial, given its potential contribution to external viability, debt sustainability, and overall growth. Appropriate fiscal and regulatory regimes, as well as proper environmental standards, will help to maximize gains from sector development and improve governance. Directors accordingly called for the development of a comprehensive strategy for resource management, anchored in a medium-term fiscal framework, and welcomed the operationalization of the State Accumulation Fund as a resource for addressing longer-term expenditure needs. Directors suggested that Lao P.D.R. participate in the Extractive Industries Transparency Initiative.

Directors welcomed the substantial progress in banking reform, notably the passage of the commercial bank law and the reduction of nonperforming loans (NPLs) at SOCBs. Further steps will be necessary to restructure SOCBs and put in place proper risk management and controls to avoid a costly recurrence of NPLs and disintermediation by the banking system. Directors encouraged the central bank to continue to strengthen its regulatory and supervisory framework. Key elements in further progress will be the full implementation of the banking reform strategy and of the new banking law. It would also be important to bring the AML/CFT framework fully in line with international standards.

Directors noted that data deficiencies have hampered the surveillance process. They called on the authorities to give priority to improving balance of payments, national income, and external debt statistics, and to strengthen coordination among statistical agencies.

Lao People's Democratic Republic: Selected Economic Indicators

(Annual percent change, unless otherwise indicated)

	2004	2005	2006	2007	2008 Proj.
GDP at constant prices	6.4	7.1	8.1	7.9	7.5
Inflation (CPI) (end year)	8.6	8.8	4.7	5.6	13.1
(Annual average)	10.5	7.2	6.8	4.5	10.8
Saving and investment (in percent of GDP)					
Gross national saving	12.9	13.0	20.1	21.6	18.3
Gross fixed investment	30.4	31.4	31.1	39.7	37.1
Public finances (in percent of GDP) 1/					
Revenue and grants	12.1	13.2	14.6	15.7	16.3
Expenditure	15.5	17.6	18.4	18.5	18.0
Overall balance (- deficit)	-3.3	-4.5	-3.8	-2.7	-1.7
Domestic financing	-0.3	0.2	-1.1	-1.1	-1.1
External financing	3.6	4.3	4.9	3.9	2.7
Broad money	22.8	7.7	30.1	38.7	38.9
Credit to the economy	9.0	7.6	-9.1	21.0	50.5
Balance of payments					
Exports (in millions of U.S. dollars)	536	684	1,143	1,203	1,516
Imports (in millions of U.S. dollars)	1,056	1,270	1,589	2,114	2,660
Current account balance (in percent of GDP)	-16.9	-17.8	-10.5	-17.4	-17.8
Gross official reserves (in millions of U.S. dollars)	226	238	335	539	789
In months of prospective nonresource imports 2/	2.7	2.4	3.0	3.7	4.9
External public debt (in millions of U.S. dollars)	2,105	2,203	2,308	2,446	2,589
In percent of GDP	83.9	76.9	66.0	59.5	49.3
GDP at current market prices (in billions of kip)	26,549	30,481	35,193	39,285	47,278

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

1/ Fiscal year basis (October to September).

2/ Excludes imports associated with large resource projects.