November 2007
IMF Country Report No. 07/359

Lao People's Democratic Republic: Selected Issues and Statistical Appendix

This Selected Issues paper and Statistical Appendix for the Lao People's Democratic Republic was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on July 20, 2007. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the Lao People's Democratic Republic or the Executive Board of the IMF.

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

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund ● Publication Services
700 19th Street, N.W. ● Washington, D.C. 20431
Telephone: (202) 623 7430 ● Telefax: (202) 623 7201
E-mail: publications@imf.org ● Internet: http://www.imf.org

Price: $18.00 a copy

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

LAO PEOPLE'S DEMOCRATIC REPUBLIC

Selected Issues and Statistical Appendix

Prepared by Luis M. Valdivieso, Kotaro Ishi, Pritha Mitra (all APD), Zaijin Zhan (PDR), and Charles McPherson (FAD)

Approved by the Asia and Pacific Department

July 20, 2007

Contents Page

Tables

I. Macroeconomic Impact of the Resource Sector in Lao P.D.R[1]

A. Introduction

1. **Lao P.D.R.'s economic performance is becoming increasingly dependent on the activities of the large mining and hydropower projects (the resource sector).**

- The sizable foreign direct investments for the production of gold and copper and export-oriented hydropower that have taken place in recent years, are beginning to have a visible direct impact on the balance of payments, fiscal revenues, and growth. The resource sector does not have significant productive linkages to the rest of the economy (the non-resource sector), but it does have the potential to adversely affect it through its impact on inflation and exchange rate appreciation.

- So far, the economic impact has been moderate. However, pressures are beginning to build up, and there are indications of an incipient slowdown in the non-resource sector.

- The full impact of the resource sector is yet to be fully felt and whether it becomes a blessing or a curse will depend on the government's policy response, namely, whether it can ensure that any adverse effects are mitigated and that the conditions for promoting a higher growth of the non-resource sector are in place.

2. **This chapter provides a preliminary assessment of the macroeconomic impact of the resource sector in Lao P.D.R.** It first provides an overview of Lao P.D.R.'s mineral and hydro resource potential, followed by a discussion of the sector's short- and medium-term macroeconomic impact and challenges. In closing, this chapter analyzes the policy implications and illustrates the overall macroeconomic impact of the resource sector under alternative policy responses.

B. Mineral and Hydro Resource Potential

3. **Lao P.D.R. has vast mineral and hydro resources.** These sectors had long been underdeveloped, and large scale investment and operations only began in recent years.

[1]The main contributor to this chapter is Pritha Mitra.

- **Mineral sector:** Available geological data suggest that Lao P.D.R.' mineral wealth could be comparable to resource-rich counties in the region, such as Indonesia, Papua New Guinea, and the Philippines.[2] There are more than 570 mineral deposits identified, including gold, copper, zinc and lead, tin, and iron. Proven gold and copper reserves are estimated at 72 ton and 1.7 million ton, while probable reserves could be as large as 500–600 tons for gold and 8–10 million ton for copper. Large scale gold and copper mines have been developed by Australian investors—Lang Xang Minerals, Ltd. (Oxiana) starting in 2003, and Phu Bia Mining, Ltd. (Pan Australian) starting in 2005.

Inventory of gold and copper deposits and potential

	Name of deposits	Proven reserves	Developer	Potential
Gold (Ton)	Total	72.0		500-600
	Sepon	48.8	Lang Xang Mineral (Australia)	...
	Phu Bia	16.9	Phu Bia Mining (Australia)	...
	Sakay	4.2	Local	...
	Phapon	2.1	Huajing Mining (China)	...
Copper ('000 ton)	Total	1,675.7		8,000-10,000
	Sepon	812.0	Lang Xang Mineral (Australia)	...
	Phu Kham	810.0	Phu Bia Mining (Australia)	...
	Ban Houei Mo	47.0	Lao China Oriental Mining	...
	Phu Taxan	6.7	Yuxuanglong (China)	...

Source: World Bank (2006).

- **Hydropower sector:** The existing installed capacity—developed in the late 1990s to meet Thailand's demand for electricity—will be almost quadrupled when seven additional power plants enter into operation by mid-2010. The increased capacity will be sufficient to cover the export agreements already signed with Thailand and Vietnam for the delivery of 5,000 MW over the next decade. Several additional sites have been identified for possible future development, which if fully implemented could almost double the generation capacity levels projected for 2010.

Hydropower Projects

Dam name	Installed capacity MW	Production GWh / year
Existing hydropower plants	660	3,629
Seven large projects coming on stream by mid 2010s		
Nam Theun 2	1,080	5,936
Xeset 2	76	227
Nam Ngum 2	615	2310
Xe Kaman 3	250	970
Theun Hinboun Expansion	210	518.3
Nam Ngum 3	460	1,919
Nam Ngiep 1	252	1,274
Subtotal	2,943	13,154
Additional most likely potential	3,114	14,498
Total	6,717	31,282

4. **The economic value of the resource projects is significant, even if only proven mineral reserves and hydropower plants already in the pipeline are considered.**

[2] World Bank, 2004

- On current WEO projections for gold and copper prices, and using a discount rate of 4 percent, the net present value of mineral exports from large projects for the period 2007–20 would be equivalent to 110 percent of projected 2007 GDP.

- The net present value of electricity exports for the same period—assuming that Nam Theun 2 export prices will be applicable to the additional six hydropower projects expected to be in operation by 2010—is projected at the equivalent of an additional 110 percent of GDP.

C. Macroeconomic Impact of the Resource Sector

5. **The resource sector has had limited adverse economic effects so far, but their impact is likely to increase over time, posing significant policy challenges** (Figure 1).

Balance of payment

- During 2003–05, the annual resource sector external surplus[3] averaged 5 percent of GDP ($120 million), of which more than 80 percent was absorbed by the non-resource sector's net imports. The resulting small increase in net international reserves was monetized without creating inflationary pressures. In contrast, in 2006 the resource surplus exceeded 6 percent of GDP ($200 million) but only one half of it was absorbed by non-resource sector deficit. As a result, there was a sizable accumulation of international reserves. The rapid accumulation of international reserves has fueled monetary expansion, posing a risk to inflation.[4] So far, however, inflation has remained subdued, reflecting the lagged impact of the exchange rate appreciation and favorable fuel and food prices.

- The emergence of the resource sector has also led to an appreciation of the nominal and real effective exchange rates in recent years, but it has not had so far a significant adverse impact on export performance. The impact of the appreciation on non-resource exports has been mitigated by several factors, including (i) persistently high absorption of resource external surpluses; (ii) a high level of dollarization; (iii) preferential treatments protecting the market share of garments (the most important non-resource export), especially in the European Union; and (iv) low and flexible wages. However, all sectors still confront a high cost of doing business.

- In the next five years, the resource sector annual external surplus is projected to rise further to an average of 6½–7 percent of GDP. This is likely to impose further

---

[3] Defined as the difference between the resource sector's export and FDI inflows minus imports, repatriated dividends and debt service.

[4] For an analysis of the dynamics of inflation in Lao P.D.R. see Annex I.

upward pressures on international reserves, monetary expansion and the kip exchange rate. Under these conditions, the challenge will be to manage aggregate demand pressures while creating conditions for a vibrant private sector that would absorb these surpluses through higher and efficient investment.

Fiscal

- The growing resource sector has also boosted fiscal revenues, helping to improve the overall fiscal position. About 25 percent of the increase in real revenues between 2002/03[5] and 2004/05 has been accounted for by resource revenues. As a result, the share of resource revenues has trebled to reach 10 percent in 2005/06. Despite the increasing dependence on resource revenues, there has not been an explicit policy on their utilization. During 2002/03–04/05, the government used almost all revenues (including resource revenues) to maintain domestic expenditures roughly constant in relation to GDP. In contrast, in 2005/06, the government net domestic financing declined by the equivalent of almost all the yearly resource revenues.

- Looking ahead, annual mineral revenues could increase to 2½ percent of GDP by 2008, before starting to diminish gradually starting in 2015 until proven reserves are exhausted. In contrast, revenues from hydropower companies are expected to remain subdued (around ½ percent of GDP) over the next decade while their pre-tax profits remain low due to a heavy debt service burden. Hydropower revenues are expected to peak only after 2020. Managing these substantial resources in support of broad-based growth and poverty reduction and consistent with debt sustainability is a major challenge.

GDP growth

- Overall growth has accelerated to an average of 7½ percent in 2005–06, compared to an average of about 6 percent in 2001–04. Over the same period, the contribution of the resource sector to growth increased from 25 percent to about 45 percent. The non-resource sector has continued to grow moderately (averaging 4¾ percent in 2001–06), but there are some indications of an incipient slowdown, as signaled by a slower non-resource import growth and declining credit to the private sector.

- In the next five years, the resource sector's annual contribution to growth is projected to remain at about 3 percentage points (reflecting a continued high level of extraction of proven mineral reserves and the construction of seven hydropower plants), before declining to about 1 percentage point. In order to sustain overall growth at the levels recently observed, it would be necessary not only to protect the non-resource sector

[5] The fiscal year ends in September.

growth from the adverse effects of the resource sector, but also to enhance the investment climate to accelerate its growth.

6. **The future impact of the resource sector is subject to considerable uncertainty.** There are both up and downside risks.

- Mining revenues can change significantly in response to commodity price shocks and revisions in the expected life of the mining sites. Although mineral prices have been favorable in recent years, their volatility has increased considerably.[6] On current mining trends, gold and copper proven reserves are expected to last 10–15 years, with production starting to decline significantly from 2015 onwards. The upside risks in mining resides in the vast amount of probable reserves, which as indicated above, can be somewhere between 6–8 times the current level of proven reserves.

- The main downside risk to hydropower estimates stems from delays in completing construction and closing the projects' financing arrangements and to changes in hydrological conditions due to climate changes, although experts believe that the latter risk is low. On the upside, however, if the neighboring countries' reported expressions of interest for additional Lao hydropower exports firm up, it could attract new investments for the sites already identified.

D. Policy Implications

7. **The challenges posed by the resource sector call for a comprehensive and timely policy response.** Specifically, policies need to be geared toward: (i) mitigating the adverse effects of the resource bonanza on price stability by appropriately managing aggregate demand; (ii) optimizing the generation and use of resource revenues consistent with medium term debt sustainability; and (iii) enhancing the investment climate to promote fast and sustained growth of the non-resource sector. Discussions on the most desirable policy response are presented in the Staff Report, hence the rest of this section focuses on those areas of the policy and institutional framework that need to be strengthened to improve policy effectiveness.

Monetary and exchange rate policy framework

8. **The Bank of Lao P.D.R. (BoL) needs to strengthen its capacity to manage liquidity and enhance the transmission mechanisms of monetary policy.** Key areas where action is required include:

- Developing market-based instruments to manage liquidity. The BoL currently relies on reserve requirements, limits on state-owned banks' credit, and moral suasion. It

[6] For further reference see Chapter II.

will be important that the BoL develops its capacity to conduct open market operations using treasury bills and avoid incurring the high costs of past experiences.[7] To this end, the BoL will need to strengthen its monetary programming framework and agree with the Ministry of Finance on a formula to share the net cost of conducting open market operations.

- Developing the interbank money market. The BoL's lending rate to banks should be set at a level higher than the market rate to discourage banks to borrow directly from BoL. It would be equally important to require banks to disclose data on their financial situation to build up business trust on each other. The BoL should also prepare and made publicly available on a regular basis a standard set of financial soundness indicators of the banking system.

9. **BOL also needs to build up its capacity to help manage potentially disruptive changes in the exchange rate,** particularly stemming from a higher exposure to the volatility of resource revenues. This will require developing the foreign exchange market further, strictly enforcing limits on banks' open foreign exchange positions, and by enhancing its reserve management practices.

Fiscal policy framework

10. **The firm pursuit of fiscal consolidation will continue to be essential for maintaining macroeconomic stability and ensuring debt sustainability over time.** The rapidly rising resource revenues certainly provide some budgetary relief to attend to important, but previously unfunded recurrent and capital development needs. However, the pace at which they are spent has to be consistent with achieving fiscal consolidation and debt sustainability over the medium term. In particular, the expenditure plans will need to take into account the uncertain nature of resource revenues to avoid sudden expenditure adjustments or unanticipated borrowing in case of adverse shocks. Moreover, given that some of the resource revenues are finite, their utilization should be framed in a multiyear context to take into account intergenerational equity issues. In this context, there are a number of areas where the current fiscal policy framework needs strengthening, including:

- Developing a fully-fledged medium-term fiscal framework (MTF) that explicitly takes into account the level and nature of resource revenues and use it to frame the annual budgets. The MTF should include a specific quantitative path of fiscal consolidation at the level of both the overall and non-resource balances, and make adequate provisions for contingencies. Until the BoL develops further its set of

---

[7] BoL introduced open market-type operations in the late 1990s, a time of high inflation. Both treasury and central bank securities were auctioned to the public to absorb excess liquidity, but the operations were short lived because of their high cost (interest rates were as high as 60 percent).

monetary management tools, the MTF should continue to envisage an annual reduction in the domestic financing requirements to help control demand pressures.

- Adopting a sound and transparent resource management system that maximizes the resource revenues accruing to the government and sets clear ex-ante rules for their utilization (and saving) in the context of the MTF. The key ingredients of such a system are developed in Chapter II.
- Strengthening further fiscal planning and budgeting, and making budget execution more transparent and accountable.

Growth strategy

11. **Whether Lao P.D.R. benefits from the resource bonanza would ultimately depend on the sustainable development of the non-resource sector.** Given the flexibility in the labor market, it is possible that an expansionary fiscal policy could actually induce a much faster growth of the non-resource sector than a prudent fiscal policy stance. However, the likelihood that such a supply response will be short lived increases if the expansion in aggregate demand is led by consumption and starts putting pressure on the price of non-tradeables, with adverse consequences for investment and growth. By contrast, a moderate expansion of aggregate demand driven by a cautious use of resource revenues together with a renewed impetus to economic reform should create the right climate for higher and long term investment in the non-resource sector. In this context, several areas require decisive action, including:

- Accelerating the reform of the banking system, particularly the state-owned banks, and strengthening the bank prudential and regulatory framework. A sound and competitive system is key to sustain long-term growth.
- Addressing the main impediments to investment as identified in various surveys.[8] This includes, in addition to maintaining macroeconomic stability, improving the infrastructure, reducing and making regulations more predictable, and simplifying and shortening procedures to facilitate trade and secure property rights.
- Pursuing further trade integration to expand non-resource export market opportunities.

E. Overall Macroeconomic Impact Under Alternative Policy Responses

12. **The overall macroeconomic impact of the resource sector over the medium term, will depend on the quality and timeliness of the policies adopted to raise and sustain the growth of the non-resource sector.** To illustrate this point, staff has simulated the evolution

---

[8] See World Bank (2006b) and Asian Development Bank and World bank (2007).

of key macroeconomic parameters under two policy response scenarios: one in which the government adopts sounds policies and accelerates reforms to shelter the non-resource sector in anticipation of a potentially adverse impact of the resource sector (a proactive policy response), and the other where the government waits to take policy action until the resource curse has set in (a reactive policy scenario). The key policies underlying each scenario are presented in Box 1, whereas the main results are summarized below (see also Figure 2).

- **Proactive policy response.** The pursuit of prudent fiscal and monetary policies keeps inflation subdued while the real exchange rate continues to appreciate, albeit at very moderate pace. The prevailing macroeconomic stability, coupled with improvements in the investment climate, encourages private investment. As a result, non-resource exports and output growth accelerate, offsetting an expected decline in mining output due to the depletion of proven reserves. The external sector position continues to strengthen, with the ratio of international reserves to non-resource imports gradually rising to about five months.

- **Reactive policy response.** The pursuit of more expansionary fiscal policy initially raises GDP growth at a faster pace than in the proactive policy response scenario. However, a faster growth in aggregate demand soon causes the price of nontradeables to rise. Inflation starts accelerating and the real exchange rate appreciates more rapidly affecting adversely non-resource export performance. Without tangible improvements in monetary management and continued high costs of doing business, investment slows down and the initial stimulus to growth starts dwindling, particularly that of the non-resource sector.

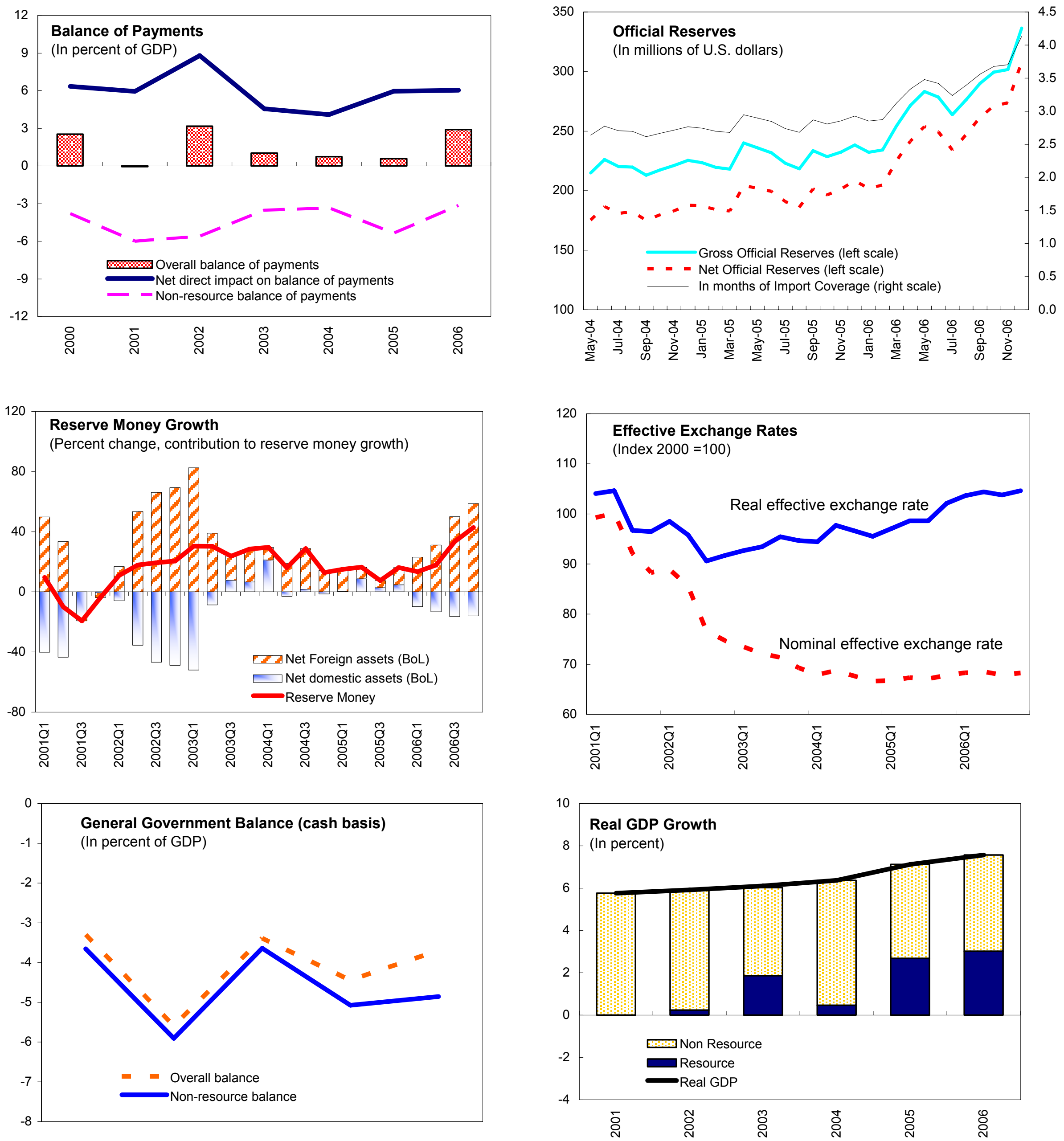
F. Concluding Remarks

13. **Lao P.D.R. has the opportunity to benefit from revenues to be generated from its vast mineral and hydro resource endowment.** However, future revenues are subject to considerable up and downside risks. A prudent approach would be to hope for the best and prepare for the worst. Accordingly, and given the nature of these resources, a policy response that does not wait until the well-known “resource curse” sets in (i.e., a proactive policy response) stands a better chance to maximize the net benefits of the emerging resource bonanza.

Box 1. Proactive and Reactive Policy Response

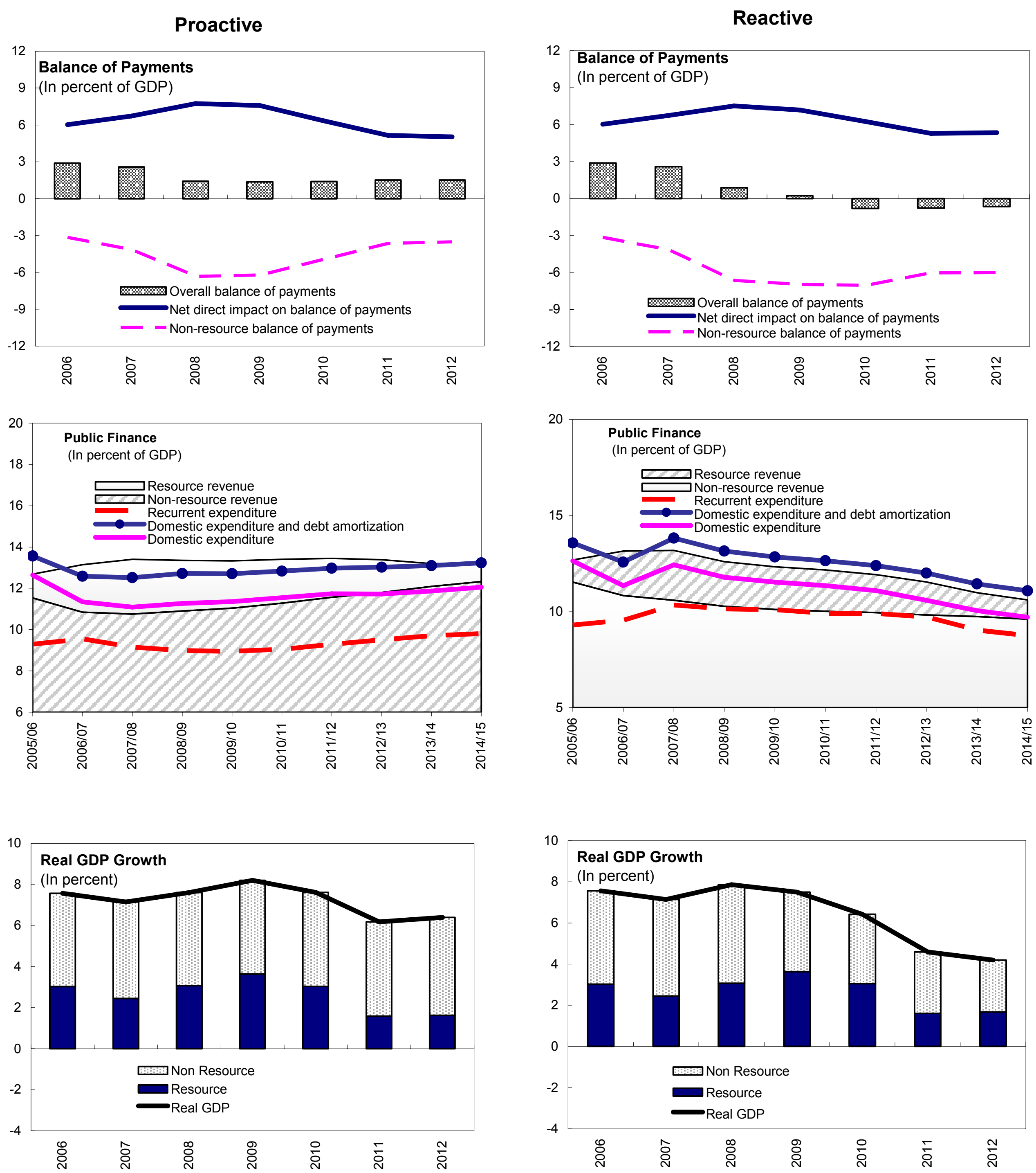
	Proactive case	Reactive case
Fiscal policy	• **Smoothed spending** over the medium term by prudently spending resource revenues during rising resource revenue periods.	• **Volatile spending** in tandem with resource revenue movements.
	• Continued fiscal consolidation with targets on **non-resource fiscal balance** (in addition to overall fiscal balance). Develop a **medium-term fiscal framework**.	• Fiscal policy solely dependent on **annual budget** without developing a medium-term plan.
	• Continued efforts to **mobilize non-resource revenues**. **Optimize the generation of resource revenues**.	• **Weaker revenue collections** from the non-resource sector. No additional efforts to optimize the generation of resource revenues.
	• Resource revenues used for **developing human and physical capital** (as well as associated maintenance costs) to enhance productivity. Set up a framework to enhance transparency.	• Spending of resource revenues for **recurrent items** (such as wages and salaries) in non-transparent manner.
	• Continued efforts to strengthen a public expenditure management system; and an appropriate transparency framework in resource revenue management.	• No particular action.
Monetary policy	• **Tight control on NDA**, coordinating closely with the MoF.	• **Weaker control on NDA**.
	• Development of **market-based instruments** for managing liquidity.	• No particular action.
	• Build-up of **BoL capacity to intervene in the foreign exchange markets**.	• No particular action.
MOF and BoL relation	• **Remuneration of government deposits** at BoL so that budget can benefit from accumulation of financial assets. Set up an appropriate mechanism of BoL **profit and loss sharing with the budget**. **MoF capitalizes BoL with treasury bills** for use in open market operations.	• No particular action.
Structural reform		
Banking	• Appropriate capitalization and profitability; enhanced competition	• Slow SOCBs capitalization and profitability; no strategic investors.
SOEs	• Commercial principles prevail; dividends on rise.	• Delayed restructuring; and continued dependence on budget support.
Cost of doing business	• Lower regulatory burden; streamlined licensing requirements; and better infrastructure.	• Slow resolution of registration problems; and red tape.
Trade and exchange system	• Timely accession to WTO; and advanced liberalization of trade and no restrictions.	• Delays in joining WTO; delayed reduction of non-tariff barriers and elimination of exchange restrictions.

Figure 1. Lao, P.D.R: Macroeconomic Impact of the Resource Sector, 2001-2006



Source: Lao P.D.R. authorities, and Fund staff estimates.

Figure 2. Lao, P.D.R: Macroeconomic Impact of The Resource Sector Under Alternative Policy Responses, 2006-2012



Source: Lao P.D.R. authorities, and Fund staff estimates.

ANNEX 1. INFLATION DYNAMICS IN LAO P.D.R

Inflation, broad money, and the exchange rate

1. A vector autoregressive (VAR) model is applied to better understand the dynamic relationship between inflation, broad money, and the exchange rate in Lao PDR.[9] The model is estimated using monthly data from 1995–2006. The dynamics of the variables is explored with the following VAR model:

$$\Delta E_t = \alpha^E + \sum_{i=1}^{l} \beta_i^E \Delta E_{t-i} + \sum_{i=1}^{l} \chi_i^E \Delta M_{t-i} + \sum_{i=1}^{l} \delta_i^E \Delta P_{t-i} + u_t^E$$

$$\Delta M_t = \alpha^E + \sum_{i=1}^{l} \beta_i^M \Delta E_{t-i} + \sum_{i=1}^{l} \chi_i^M \Delta M_{t-i} + \sum_{i=1}^{l} \delta_i^M \Delta P_{t-i} + u_t^M$$

$$\Delta P_t = \alpha^E + \sum_{i=1}^{l} \beta_i^P \Delta E_{t-i} + \sum_{i=1}^{l} \chi_i^P \Delta M_{t-i} + \sum_{i=1}^{l} \delta_i^P \Delta P_{t-i} + u_t^P$$

Where, E = ln(Kip per US$1 exchange rate), M = ln(broad money), P = ln(consumer price index), and ln represents the natural log.

2. All the variables are first differences as they contain unit roots. Granger causality tests show that all the variables granger cause each other, indicating that the variables are highly correlated with each other, however causality cannot be determined. The VAR model is specified with six lags based on the likelihood ratio test. Alternative lag specifications provided similar results. The structural shocks are recovered from the VAR residuals using the Cholesky decomposition of the variance-covariance matrix.[10] The structure of the shocks the VAR model described above can be defined as follows:

$$u_t^E = \varepsilon_t^E$$

$$u_t^M = \omega_E^M \varepsilon_t^E + \varepsilon_t^M$$

$$u_t^P = \omega_E^P \varepsilon_t^E + \omega_M^P \varepsilon_t^M + \varepsilon_t^P$$

3. The reaction of inflation to independent shocks to broad money or exchange rates, such as resource inflows, is the relationship of interest in this paper. Accordingly, the

---

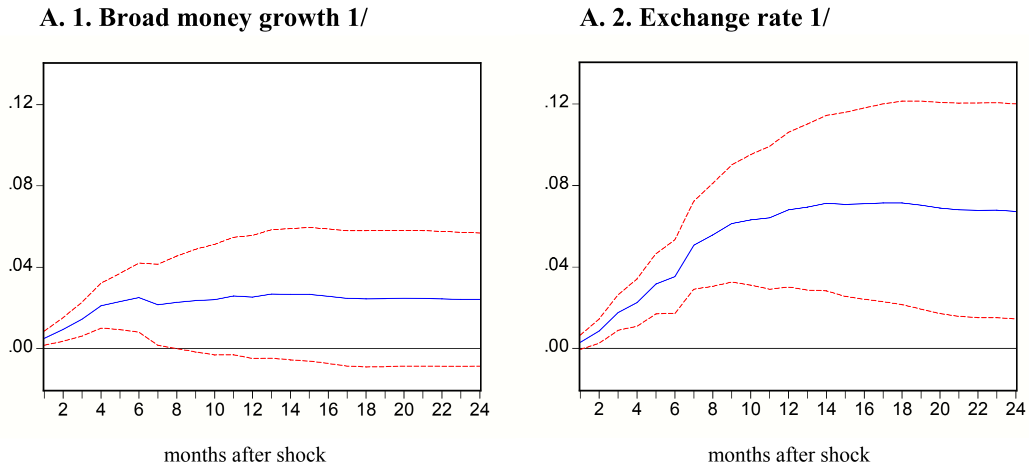
[9] For an application of the VAR approach to studying relationships across monetary variables see Leeper, Sims, et. al (1996).

[10] The Cholesky decomposition imposes the correct number of restrictions for just identification and imposes a recursive structure on the system; so that the most endogenous variable is ordered last. i.e., it is affected by all contemporaneous 'structural' shocks. The results of the VAR thus could be highly susceptible to the ordering chosen.

ordering of variables in the Cholesky decomposition places inflation last so that it is affected by the contemporaneous structural shocks of both broad money growth and inflation.[11]

4. Figures A.1 and A.2 show the accumulated impulse response of inflation to an increase in broad money growth and in the change in exchange rate, with the corresponding 95 percent confidence intervals.[12] Standardizing the magnitude of the shocks presented in the charts would lead to the conclusion that (i) one percent increase in broad money growth would lead to a 0.64 percent increase in inflation after 12 months, and (ii) one percent depreciation of the nominal exchange rate (positive increase in the change in Kip per USD rate) would lead to an increase in inflation of 0.96 percent after 12 months.

Accumulated Impulse Response of Inflation to Shocks in



Source: Fund staff estimates.

1/ The shocks used in this chart correspond to one Cholesky standard deviation. The vertical axis units are Cholesky standard deviations for the variables specified in each chart, expressed in logarithm form, presented with a two standard deviations interval.

5. A VAR estimation directly on 12-month broad money growth, 12-month inflation, and 12-month change in exchange rate provides similar results.

Monetary policy and inflation

6. A similar approach is applied to understand the effectiveness of monetary policy, conducted through changes in NDA relative to broad money[13], on inflation. A vector autoregressive (VAR) model is applied to 12-month inflation, 12-month change in NDA

---

[11] The results are similar regardless of whether broad money growth or the change in exchange rate is ordered first.

[12] The charts are constructed applying one standard deviation shocks to broad money growth and to the change in exchange rate.

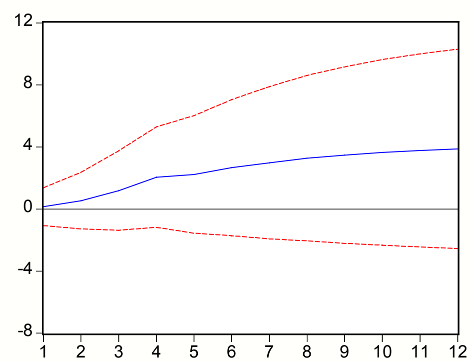
[13] Where broad money is the beginning of period broad money.

relative to broad money, and 12-month change in the exchange rate in Lao PDR.[14] The model is estimated using monthly data from 1995–2006.

7. The model is specified with 4 lags based on likelihood ratio tests. Alternative lag specifications provide similar results.[15] The Cholesky decomposition of the variance-covariance matrix orders the variables follows: 12-month change in the exchange rate, 12-month change in BoL's NDA relative to reserve money,12-month inflation.[16]

8. Figure A.3 shows the accumulated impulse response of inflation growth to growth in NDA changes relative to broad money with the corresponding 95 percent confidence intervals.[17] Standardizing the magnitude of the shocks presented in the chart would lead to the conclusion that one percent increase in the growth of NDA changes relative to broad money results in a 0.31 percent increase in inflation over 12 months. Thus, an acceleration of net domestic assets results in an acceleration of inflation, where the bulk of the confidence interval lies above zero.[18]

Figure A.3. Accumulated Impulse Response to a Shock in NDA Changes Relative to Broad Money 1/



months after shock

Source: Fund staff estimates.

1/The shocks in this chart correspond to one Cholesky standard deviation. The vertical axis units are in Chelosky standard deviation, for the value of logarithm of NDA with two standard deviation intervals.

[14] Inflation and changes in exchange rate are used rather than the price level and exchange rate itself in order to maintain compatibility with changes in NDA relative to broad money.

[15] The data are first differenced as they contain unit roots.

[16] Similar results are found when the ordering of 12-month change in BoL's NDA relative to reserve money and 12-month change in the exchange rate are reversed.

[17] A one standard deviation shock is applied to change in NDA relative to broad money.

[18] For simplicity only 12-month change results are presented here. More rigorous analysis, including log levels and 1-month changes, yield qualitatively similar results.

References

Asian Development Bank and the World Bank, 2007, "Lao P.D.R : Reducing Investment Climate Constraints to Higher Growth."

Leeper, Eric M., C.A. Sims, T. Zha, R.E. Hall, B.S. Bernanke, 1996, "What Does Monetary Policy Do?" *Brookings Papers on Economic Activity*, Vol. 2, pp.1–78.

World Bank (2000), "Botswana: An Example of Prudent Economic Policy and Growth," *Africa Region Findings No.161.*

———, 2004, "Lao P.D.R. Country Economic Memorandum: Realizing the Development Potential of Lao P.D.R"

———,2006a, World Bank Economic Geology DFR2, "Sector Plan for Sustainable Development of the Mining Sector in Lao PDR."

———,2006b, "World Bank Diagnostic Trade Integration Study".

II. MANAGING RESOURCE REVENUES IN LAO P.D.R[1]

A. Introduction

1. **The emerging resource sector poses significant challenges to the design and management of fiscal policy in Lao P.D.R.**

- In Lao P.D.R, as in many resource-rich countries, the government is the most important domestic recipient of the revenues generated by the sector through taxation and equity participation.
- Large resource projects are usually very intensive in the use of capital (not produced domestically) and require sizable investments funded by foreign direct investment. As a result, a significant portion of resource revenues flows out of the country in the form of imports, debt service, and dividends, with little direct impact on the domestic non-resource sector or labor market.
- As resource revenues accruing to the budget grow rapidly and become more important relative to non-resource revenues, the government will confront three major challenges. It will need to ensure that resource revenues are maximized and used effectively in support of growth and poverty reduction, while achieving the government's medium-term objectives of fiscal consolidation and debt sustainability.
- The experience of other resource-rich low-income countries indicates that meeting these challenges requires the development of an appropriate fiscal regime for managing resource revenues that is fully integrated into a medium-term fiscal framework.[2]

2. **This chapter discusses the main challenges faced by the Lao P.D.R. authorities in managing resource revenues.** It also makes a preliminary assessment of the existing fiscal regime against international best practices and discusses key features of a fiscal framework to manage resource revenues.[3] The paper focuses only on revenues from copper, gold, and

---

[1] The main contributor of this chapter is Kotaro Ishi.

[2] IMF (2007a) argued that the quality of institutions matters for fiscal policy. See also Manasse (2006) and Mehlum et al. (2006).

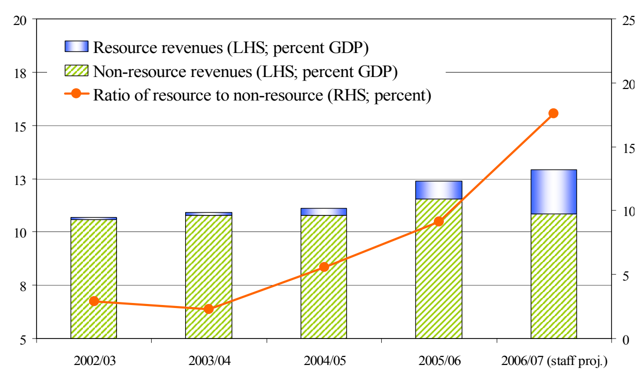
[3] The assessment is based on the information made available to staff during 2007 Article IV consultation mission. A more comprehensive assessment is needed, but it will require multi-donor technical assistance missions as there are a number of highly specialized issues.

hydropower, because these commodities will be the most important sources of resource fiscal revenues in the years to come.[4]

B. Overview of Recent Fiscal Developments

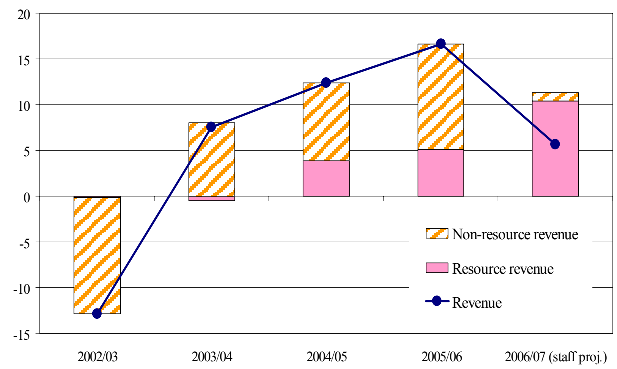
3. **Fiscal revenues have risen in recent years, increasingly driven by resource revenues.** In the last four years, total revenues increased by 1¾ percentage points of GDP to 12¾ percent of GDP in 2005/06, with more than half of the increase accounted for by resource revenues.[5] The share of resource revenues in total revenues rose to nearly 10 percent in 2005/06, while the contribution of resource revenue reached about one third of total real revenue growth, reflecting higher commodity prices and expansion in production. This trend is expected to continue in 2006/07.

Revenue Performance



Sources: Lao P.D.R. authorities; and IMF staff calculations.

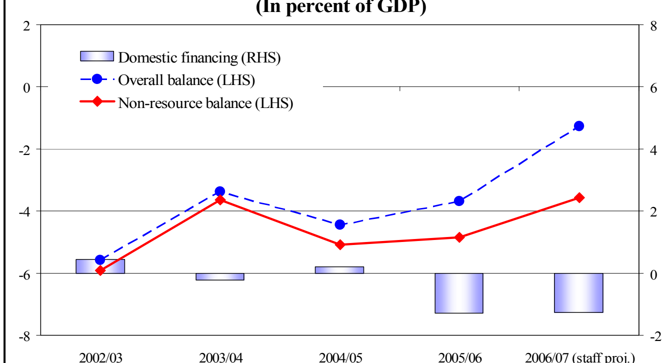
Revenue Growth
(Contribution to constant price revenue growth; percent)



Sources: Lao P.D.R. authorities; and IMF staff calculations.

4. **With increased revenues and a prudent spending policy, the fiscal position has strengthened.** The overall deficit is expected to decline to 1¼ percent of GDP in 2006/07 from 5½ percent of GDP in 2002/03, while the non-resource deficit is projected to decline to 3½ percent of GDP from 6 percent of GDP. As a result, the government is expected to accumulate net deposits in the banking system of 1¼ percent of GDP,

Fiscal Balance and Domestic Financing
(In percent of GDP)



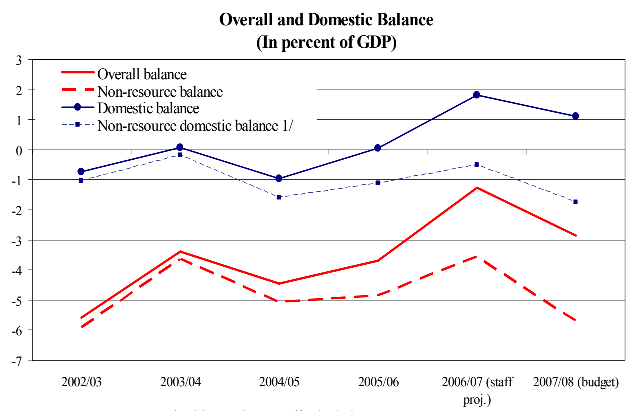
Sources: Lao P.D.R. authorities; and IMF staff calculations.

[4] Other important resource revenues include timber revenues, which used to account for about 15 percent of total fiscal revenue. However, concerned about the sustainability of forestry resources, the government has imposed a strict limit on logging activities since 2002. In 2005/06, revenues from timber accounted for less than 5 percent of total revenue.

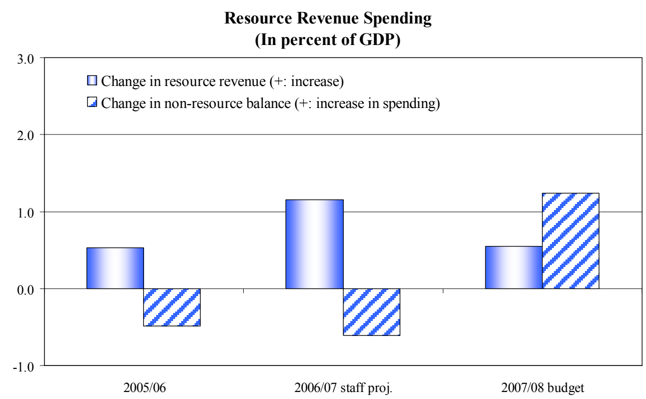
[5] The fiscal year ends in September.

which is equivalent to "saving" half of the resource revenues generated during the period. This outcome, however, reflects the fact that the government underestimated the rapid increase in resource revenues, resulting in an ex-post saving of a large portion of them, rather than an ex-ante decision to save within a medium-term fiscal (MTF) framework.

5. **As resource revenues have kept rising, so have spending pressures.** The 2007/08 budget envisages an increase in both the overall and non resource deficits, driven by higher recurrent expenditures, including wages, allowances, and transfers. The budget implies nearly a full utilization of the annual resource revenues, and it does not have an explicit contingency reserve to protect the spending plan from adverse movements in commodity prices. This expansionary fiscal stance, if fully implemented, would represent a departure from the recent path of prudence and does not appear to be fully consistent with the government's medium-term fiscal objectives.



Sources: Lao P.D.R. authorities; and IMF staff calculations.
1/ Defined as overall balance net of grants and externally financed capital expenditures.



Sources: Lao P.D.R. authorities; and IMF staff calculations.

6. **On the financing front, Lao P.D.R. has invited private sector participation in resource sector developments**, and has thus far contained its financial exposure to these projects (Box 1). The large mining projects are privately owned, but the government has the option to acquire some equity to be paid out for future dividends. The NT2 project is being developed using a public private partnership framework, with the government taking an equity stake of 25 percent funded largely through donor concessional grants and loans. Equity participation in the second biggest hydropower project (Nam Ngum 2) has been set at 25 percent and the government is planning to issue commercial bonds to pay for it. A number of future projects have a provision for government's equity participation (Table 1), although it remains unclear whether the authorities intend to avail themselves of this option.

Box 1. Resource Projects: Financing Structure

Large mining projects have been developed fully by the private sector. Two existing large mining concessions, Lane Xang Minerals Ltd. (LXML) and Phu Bia Mining Ltd., were fully owned by subsidiaries of Australian companies. The projects were financed by parent companies' equity and loans. The concessional agreements gave the government an option to acquire up to 10 percent of the shares, and the government has recently decided to exercise this option with LXML.

Large hydro dam projects are being developed with a mixture of private and public funds.

- The total project cost for Nam Theun 2 (NT2) hydro dam is estimated at $1.5 billion. The shareholders contribute $0.5 billion to the project. The government holds about 25 percent of the equity, funded by loans and grants. The remaining $1 billon have been secured through debt financing from official creditors and international banks. IDA, MIGA, and ADB provide partial risk guarantees for international lenders.

- The Nam Ngeum 2 (NN2) project (estimated cost, $770 million) is expected to adopt a similar financing structure, with about 30 percent of the cost covered by equity and the remaining 70 percent by commercial loans. Electricite du Laos, on behalf of the government, will hold about 25 percent of total equity shares. However, with no concessional funding available, the government is planning to issue commercial bonds with guarantee of Thai Exim bank (about $45 million) to pay for its equity contribution.

Financing structure of Nam Theun 2
(In millions of U.S. dollars)

Project Cost	1,450
Base cost	1,250
Contingency	200
Financing	1,450
Equity	450
Private	338
Eletricite de France International	158
Electricity Generating Public Company Ltd	113
Italian-Thai Development Public company	68
Government (NTPC)	112
Debt	1,000
Official creditors	160
International Banks	340
Thai commercial banks (THB loans)	500

Source: World Bank.

1/ Dollar amounts are approximate due to exchange rate

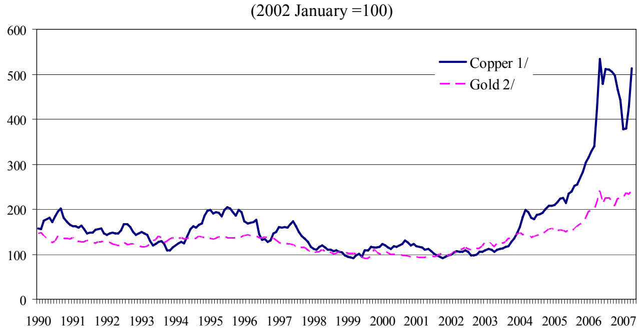
C. Challenges in Managing Resource Revenues[6]

7. **The first challenge lies with uncertainties associated with resource revenues**, particularly in the case of minerals.

[6] See Barnett and Ossowski (2003) for extensive discussions about fiscal challenges faced by non-renewable resource rich countries.

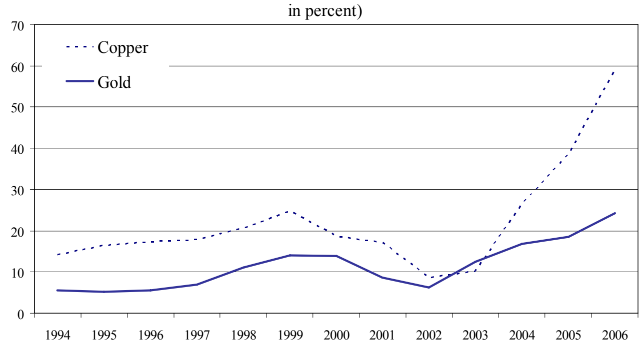
- **Mineral revenues are not only finite but also highly volatile and uncertain.** The remaining life of the two largest mines currently in production is estimated at 10–15 years, but these estimates are highly uncertain. Available geological mapping and survey information suggests that the mineral resource potential in Lao P.D.R. is quite high (Table 2 and Marutani, 2006), but adding to proven reserves and developing new mines take time and require additional investment. Mineral prices have been very favorable in recent years, but their volatility has increased. Between 2002 and 2006, average copper prices increased by more than 330 percent, while gold prices nearly doubled. At the same time, price volatility (calculated as dividing the standard deviation of monthly commodity prices for five-year rolling periods by their mean) has risen to 60 percent for copper and 25 percent for gold.

Commodity Prices
(2002 January =100)



Sources: IMF commodity Price System; and IMF staff calculations.
1/ Grade A cathode, LME spot price.
2/ Fixing Committee of the London Bulletin Market Association.

Volatility in Commodity Prices
(Coefficient of variation; five-year rolling standard deviation/mean; in percent)



Sources: IMF commodity Price System; and IMF staff calculations.

- **Hydropower resources are generally considered as a more stable and certain source of revenue.** However, they are subject to other risks, such as changes in hydrological conditions and delays in project development and construction. The NT2 project will be protected from electricity demand and price risks by long-term power purchase agreements (PPA), such as with Electricity Generating Authority of Thailand (a main off-taker), and hydrological risks are not regarded as a immediate concern for this project.[7] However, for some of the other hydropower projects, PPAs have not been fully finalized, and the extent of the government's exposure to demand and price risks remains uncertain. Moreover, in the long run, severe drought, possibly caused by a global climate change, could adversely affect hydropower generation capacity, and ultimately revenues for the government.

8. **A second challenge is to ensure a proper utilization of resource revenues over time.**

[7] As long as a pattern of annual inflows into the reservoir follows historical patterns, the hydrological risks for NT2 are considered to be small. See Nam Theun Power Company Ltd. (2005).

- Many low-income countries face significant immediate spending pressures, particularly given the substantial human and physical capital development needs, and Lao P.D.R. is not an exception.
- Using resource revenues effectively will require adequate institutions and capacity to monitor the quality of spending. Indications are that Lao P.D.R. needs to strengthen these areas, including public expenditure management, and until such institutional capacity develops, any increase in spending should be cautious and focused on the provision of high-priority public goods only.

Spending Needs and Capacity in Regional Resource-Rich Low-Income Countries

		Countries			Low-Income Countries				
	Lao P.D.R	Brunei	Indonesia	Malaysia	Mongolia	Papua New Guinea	Timor-Leste	Vietnam	Asia Average 1/
Indicators of human and physical capital									
Public infrastructure quality (most recent year)									
Paved roads (percent of total roads)	14.1	34.7	58.0	77.9	3.5	3.5	Poor	25.1	58.4
Water quality (percent of population with access)	30.0	...	55.0	94.0	59.0	44.0	36.0	61.0	58.3
Human capital quality Index									
Adult literacy rate (percent of ages 15 and over)	68.7	92.7	90.4	88.7	97.8	57.3	58.6	90.3	87.9
Life expectancy at birth (years)	55.1	76.6	67.2	73.4	64.5	55.7	56.0	70.8	72.1
Indicators of country capacity to spend[2]									
Government effectiveness	-1.1	0.6	-0.5	1.0	-0.4	-1.0	-1.0	-0.3	0.6
Rule of law	-1.1	0.5	-0.9	0.6	-0.3	-0.9	-0.5	-0.4	0.3
Political stability	-0.3	1.1	-1.4	0.5	0.9	-0.8	-0.7	0.3	-0.2

Sources: World Bank, *World Development Indicators*; and Kaufamm, Krayy and Mastruzzi (2005).
1/ Coverage varies depending on data availability.
2/ Governance indicators (government effectiveness, rule of law, and political stability) are measured in units ranging from about -2.5 to 2.5, with higher values corresponding to better governance outcomes.

- The uncertainty surrounding resource revenues in general, and the finite nature of mineral revenues in particular, also argue in favor of a prudent use of such resources. It also underscores the need for making spending decisions on the basis of a medium term fiscal framework to take account of intergenerational considerations.

9. **Large financing needs arise in developing resource projects.** Accordingly, resource projects in a low-income country are often developed using public-private partnerships (PPP) framework. However, PPPs could entail several financial risks, unless a sound institutional framework is in place for managing PPPs. In particular, whether the government takes equity stake in resource projects would warrant careful considerations, because direct participation could become costly given the financial risks associated to resource sector activities and the potential for a conflict of interest between the government's dual roles as regulator and as shareholder.

D. Key Features of a Fiscal Framework to Manage Resource Revenues

10. **A sound and transparent fiscal regime should maximize the resource revenues accruing to the government**, while an MTF fiscal framework should help ensure their appropriate use over time. The current mining and hydropower fiscal regimes of Lao P.D.R. have a number of desirable features that are in line with international best practices, but they could benefit from greater simplicity and transparency. The government has reduced its net

domestic borrowing by "saving" an important proportion of resource revenues, but such outcome has not reflected ex-ante spending decisions taken in the context of an MTF framework.[8]

Maximizing resource revenues

11. **Lao P.D.R.'s current resource fiscal regime is complex and lacks transparency** (Box 2). The existing fiscal regimes combine royalties, income taxation, and equity participation. The terms applicable have been negotiated on a case-by-case basis, and have not been fully disclosed.[9] As a result, there is a proliferation of fiscal regimes that could have adverse consequences for revenue administration, risk hampering investors' interest, and give rise to governance concerns.

12. **A properly designed resource fiscal regime should strike the right balance between capturing an appropriate share of rents for the government and nurturing investors' interest.**

- Standardizing all taxation terms across projects in each resource sub-sector and stipulating them in tax laws and regulations should facilitate tax compliance and administration, while providing a level playing field, and helping to improve investor confidence.
- In maximizing rents, there are two important trade offs that need to be considered: one is between a regime based purely on taxation versus one that in addition has equity participation (dividends), and the other is among the various tax instruments that could be used and their impact upon investors' interest. It would be possible to design a tax system that would generate a present value of an income stream equivalent to the one that would be obtained through dividends. However, if the government has minority participation and limited expertise, it will have marginal influence in establishing the dividend payment policy and difficulties in contesting technical arguments for retaining profits. A careful assessment of the pros and cons of equity participation is warranted. As regards the choice of taxation instruments, the principle should be that the regime chosen should help capture the rents as the profitability of the projects increases without hampering investors' interest (Box 3).[10]

[8] At technical levels, the Ministry of Finance prepares only a simple and very aggregate MTF framework.

[9] Taxation terms are stipulated in Mineral Exploration and Production Agreements for each concession.

[10] See Sunley, et al (2003) for a full discussion about mineral taxation.

Box 2. Resource Taxation

Broad framework: Both the mining and hydropower sector are subject to a combination of royalties, corporate income tax, and state equity. The fiscal terms are negotiated concession by concession.

Mining Sector

Royalties: the rate is based on sale value and varies from 2 to 6 percent, depending on the type of mineral. A sliding scale royalty has recently been introduced in one concession to better capture price-induced windfall gains.

Corporate income tax: varies from 25 percent to 33 percent depending on the concession, and may or may not include tax holidays. The tax base is determined according to the general tax law, which does not contain any provisions specific to the mining sector.

State participation: The government has been given the option to purchase up to 10 percent of equity, which is calculated based on historical costs, once commercial development has been established. The state equity will be paid out of dividends. The government has exercised this option with LXML recently.

Hydropower

Royalties and income tax: the applicable rates vary by concession. Royalty rates typically start at 5 percent, while a tax holiday typically applies to income taxes during first years of operation. Thereafter the tax rate structure generally reflects the results of the project feasibility study (such as the amount of costs and investments, as well as construction and operation periods), financing arrangements, levels of tariffs, and the investor's required return. Both royalty and tax rates increase with the years of operation, with larger increases envisaged after the investment cost has been recovered.

State participation: The two largest concessions include equity participation rates of 25 and 30 percent, but the options for the future range from 15 percent to 25 percent. The government has paid the 25 percent participation in NT2 with grants and concessional funding but it intends to borrow commercially to pay for the 25 percent already agreed for NN2.

Box 3. Impact of Selected Tax and Nontax Instruments

- **Royalties** can bring revenues to the government as soon as production starts and are easier to administer than many other instruments. However, royalties could be costly for investors if set at too high a level.

- **Corporate income tax** would create fewer distortions than royalties and allow the government to capture more upside risks from rising prices, but are more complex to administer and prone to transfer pricing.

- **Resource rent tax—**a cash-flow-based tax imposed once the investor earned a certain rate of return—can be uniformly applied to all types of resource activities without considering the nature of different resource activities. The resource rent tax can properly capture a share of the resource rent (the return over and above the company's opportunity cost of capital). However, the revenue stream for the government is back-loaded, and for less profitable projects, the government may not generate any revenue.

- **State equity** is highly risky and costly, particularly if the government needs to commercially borrow to purchase equity. This option would also have non-economic implications, such as possible conflicts arising from the government's role as regulator, and an equity holder, especially if a strong and independent regulatory system does not exist.

Resource revenue utilization

13. **Given the uncertainty of resource revenues, decisions concerning their use need to be consistent with achieving medium-term fiscal sustainability.** To this end, such decisions should be made in the context of an MTF framework that allows the government to assess fiscal sustainability in a forward looking manner**.** By framing annual budget plans in an MTF framework that takes into account a potentially volatile resource revenue stream, the expenditure path can be smoothed and sheltered from unexpected changes in resource revenues. A prudent use of resources also provides the flexibility required to confront shocks that may destabilize aggregate demand and cause inefficiency in capital spending, such as having to stop project executions suddenly due to shortfalls in resource revenues caused by adverse commodity price shocks. Furthermore, the MTF framework should include options to mitigate risks due to high dependence on resource revenues, including the accumulation of net financial assets.

14. **In designing an MTF framework, policymakers need to have an ex-ante view regarding the amount of resource revenues they should save.** Several considerations

should enter into such a decision (illustrative alternative fiscal spending approaches are presented in Annex 1).[11]

- Front-loaded spending approach will directly affect aggregate demand, and unless there is a slack in labor and product markets, the demand stimulus could put upward pressures on inflation and thereby the real exchange rate. On the other hand, a front-loaded spending approach would be desirable, if there is a substantial development gap. Empirical studies generally support that larger spending in social areas (such as education and health) helps enhance economic growth.[12] However, main constraints would be that it would take certain time to plan and develop a cost effective expenditure program and strengthen public expenditure management capacity.
- The larger the savings are, the greater the ability of the government would be to confront shocks without recourse to borrowing to sustain a particular level of expenditure. This is particularly relevant for countries with a high level of debt, such as Lao P.D.R.
- To the extent that the resource sector is largely separate from the rest of the economy, the non-resource balance should become a more important fiscal indicator to gauge fiscal pressures on aggregate demand.[13] The overall balance remains an important fiscal target, but more as a measure of financing needs.
- Finally, because the resources will eventually be exhausted, intergenerational equity considerations require a long run policy perspective.

E. Final Remarks

15. **Rising resource revenues pose several challenges to Lao P.D.R. in fiscal policy formulation.** Enhancing transparency in fiscal regime and developing MTF framework would help the authorities handle these challenges. In this regard, participation in the global Extractive Industries Transparency Initiative and IMF's Fiscal Transparency Report on the Observance of Standards and Codes will be highly desirable to improve transparency.

---

[11] Main policy recommendations in this section are based on IMF (2005a and 2007a). For a review of institutional framework in resource-rich low-income Asian countries, see IMF (2007b).
[12] See for example, Barro 1991.
[13] See Barnett and Ossowski, 2003.

Table 1. Seven Large Projects Coming on Stream by Mid 2010s

Dam name	Installed capacity	Production	Cost	Gov't equity stake
	MW	GWh / year	Million $	Percent
Nam Theun 2	1,080	5,936	1,450	0.25
Xeset 2	76	227	138	0.25
Nam Ngum 2	615	2310	771	0.25
Xe Kaman 3	250	970	278	0.25
Theun Hinboun Expansion	210	518.3	288	0.30
Nam Ngum 3	460	1,919	630	0.23
Nam Ngiep 1	252	1,274	340	0.25
Total	2,943	13,154	3,895	

Table 2. Inventory of Gold and Copper Resources

	Reserves	Potential	Comments
Gold (in ton)	72.0	500-600	
Of which: Sepon	48.8	...	Lang Xang Minerals (Oxiana Ltd., Australia), started in 2002
Phu Bia	16.9	...	Phu Bia Mining (Pan Australian, Australia), started in 2005
Copper (in million ton)	1.7	8-10	
Of which: Sepon	0.8	...	Lang Xang Minerals (Oxiana Ltd., Australia), started in 2005
Phu Kham	0.8	...	Phu Bia Mining (Pan Australian, Australia), expected in 2008

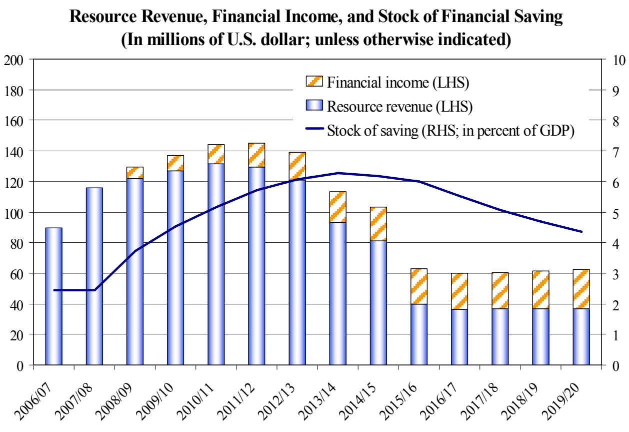
Sources: Marutani (2006).

ANNEX I. ILLUSTRATIVE ALTERNATIVE FISCAL SPENDING APPROACHES

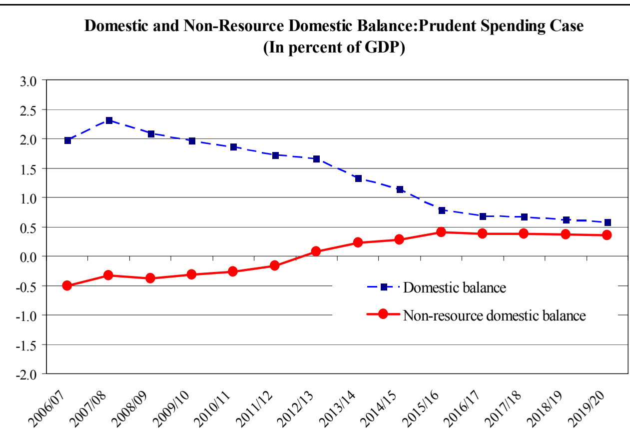
Prudent spending[14]

- **Key assumptions.** To maintain macroeconomic stability by containing aggregate demand pressures, the government will smooth spending and aim at a gradual improvement in non-resource balance. This will allow the government to save a large portion of resource revenues (about 50 percent) and deposit them in a (hypothetical) resource fund. [15] Government deposits will yield a 4 percent interest return to the government a year.

- This scenario shows that as resource revenues start declining, the government will be required to make fiscal adjustments—non-resource domestic fiscal balance will improve from minus ½ percent of GDP in 2006/07 to positive ½ percent of GDP by 2015/16.[16] However, the required size of adjustments would be very small, only by 1 percent of GDP in 10 years. This reflects that prudent spending stance at times of rising resource revenue would allow the government to accumulate financial assets, and at later stages, a resource revenue loss will be offset by an increase in interest income.



Sources: IMF staff calculations.



Sources: Lao P.D.R. authorities; and IMF staff calculations.

---

[14] This scenario is consistent with proactive policy response discussed in the staff report.

[15] A typical spending approach widely used in other resource rich countries include the one based on permanent income of resource revenues. However, results from this approach are subject to large variability dependent on a choice of discount rate, interest rate, and size of potential resource wealth.

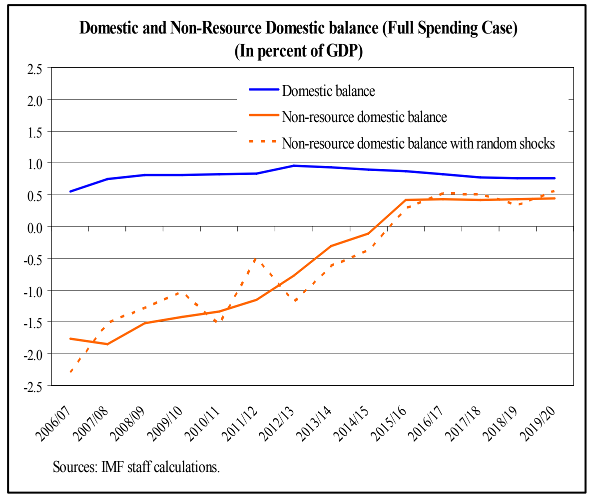
[16] The domestic balance is defined as the overall balance net of grants and externally-financed capital expenditures, and the non-resource domestic balance is defined as the domestic balance net of resource revenue.

- With adequate buffer built in the budget framework (50 percent of resource revenues saved every year), fiscal operations would be shielded from resource revenue shocks. As long as the size of an unexpected resource revenue shortfall is below 50 percent of projected resource revenues, the government can avoid recourse to domestic financing, while being able to adhere to a planned expenditure path.

Full spending[17]

- **Key assumptions.** The government spends all resource revenues and does not save anything. The main fiscal policy target is maintaining domestic financing at zero.

- The simulation results show that initially, the government will be able to run a much larger non-resource domestic deficit (about 2 percent of non-resource GDP). However, once resource revenues start declining, the government is required to make a large fiscal adjustment. Between 2008/09 and 2015/16, the government must cut spending by 2 ½ percent of GDP: in other words, non-resource domestic balance should be improved from -2 percent of GDP to ½ percent of GDP.



- This spending approach also highlights risks of excessive aggregate fluctuations driven by fiscal policy. As an illustration, a random shock of ± 40 percent (per year) of resource revenue fluctuation is given to the resource revenue path. This results in a highly volatile non-resource domestic balance path (*dot* line in the figure). For example, spending should be cut by ½ percentage point of non-resource GDP in 2011/12, followed by a spending expansion of about 1 percentage point of GDP in 2012/13. Such volatile spending policy is not only costly but also could lead to aggregate demand fluctuations of the whole economy.

[17] This scenario is consistent with reactive policy response discussed in the staff report.

REFERENCES

Barnett, Steven, and Rolando Ossowski, 2003, "Operational Aspects of Fiscal Policy in Oil-Producing Countries," in *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*, ed. by J. Davis, R. Ossowski, and A. Fedelino (Washington: International Monetary Fund).

Barro, Robert. J., 1991, "Economic Growth in a Cross-Section of Countries," Quarterly Journal of Economics 106.

Baunsgaard, Thomas, 2001, "A Primer on Mineral Taxation," IMF Working Paper 01/139, (Washington: International Monetary Fund)

Davis, Jeffrey, Rolando Ossowski, and Annalisa Fedelino, ed., 2003, *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*, (Washington: International Monetary Fund).

International Monetary Fund, 2005a, *Oil Market Developments and Issues* (Washington).

———, 2005b, *Guide on Resource Revenue Transparency*, (Washington).

———, 2007a, *The Role of Fiscal Institutions in Managing the Oil Revenue Boom*, (Washington).

———, 2007b, *World Economic and Financial Surveys: Regional Economic Outlook Asia and Pacific*, (Washington).

Manasse, Paolo, 2006, "Procyclical Fiscal Policy: Shocks, Rules, and Institutions—A View From MARS," IMF Working Paper 06/27, (Washington: International Monetary Fund).

Marutani, Masaharu, 2006, "Final Report for Economic Geology: DFR-2 Sector Plan Sustainable Development of the Mining Sector in the Lao P.D.R.," (Washington, The World Bank).

Mehlum, Halvor, Karl Ove Moene, and Ragner Torvik, 2006, "Institutions and the Resource Curse," The Economic Journal, 116, 1-20, (Oxford: Blackwell Publishing).

Nam Theun Power Company Ltd., 2005, "The EGAT Power Purchase Agreement: Presentation for Public Disclosure," www.namtheun2.com/PPA_Summary.htm

Sunley, Emil M., Thomas Baunsgaard, and Dominique Simar, 2003, "Revenue from the Oil and Gas Sector: Issues and Country Experience," in *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*, ed. by J. Davis, R. Ossowski, and A. Fedelino (Washington: International Monetary Fund).

Table 1. Lao P.D.R.: Real GDP by Industrial Origin, 2000–06

(In billions of kip; at 1990 constant market prices)

	2000	2001	2002	2003 1/	2004 1/	2005 1/	2006 1/ Est.
Agriculture	584	606	630	644	666	682	702
Crops	347	361	373	373	388	398	408
Livestock and fishery	202	207	217	227	234	238	245
Forestry	35	38	40	43	44	46	49
Industry	254	280	308	344	387	449	525
Mining and quarrying	5	6	6	22	21	47	88
Manufacturing	189	212	239	254	289	315	340
Construction	25	29	27	30	38	45	96
Electricity, gas, and water	35	34	36	37	39	41	…
Services	281	297	314	337	363	387	415
Transportation, storage, and communication	65	71	77	84	92	96	103
Wholesale and retail trade	105	114	123	136	149	160	173
Banking, insurance, and real estate	9	10	5	6	5	6	6
Ownership of dwellings	33	34	35	36	37	38	39
Public wage bill	33	34	39	40	41	41	42
Nonprofit institutions	9	8	8	8	9	9	10
Hotels and restaurants	25	25	26	24	28	35	40
Other	2	2	2	2	3	3	3
GDP at factor cost	1,119	1,183	1,253	1,324	1,415	1,518	1,642
Import duties	8	9	10	11	13	14	16
GDP at market prices	1,127	1,192	1,263	1,335	1,428	1,532	1,659

Source: Data provided by the Lao P.D.R. authorities.

1/ Differ from Fund staff estimates.

Table 2. Lao P.D.R.: Real GDP Growth, 2000–06

(In percent)

	2000 Weights	2000	2001	2002	2003 1/	2004 1/	20051/	2006 1/ Est.
Agriculture	52.1	4.9	3.8	4.0	2.2	3.5	2.5	2.9
Crops	31.0	13.2	4.1	3.5	0.0	4.0	2.5	2.6
Livestock and fishery	18.1	2.3	2.5	4.6	4.9	3.0	1.8	2.8
Forestry	3.1	-33.6	8.1	5.1	8.6	1.3	5.5	6.4
Industry	22.7	8.5	10.1	10.1	11.5	12.5	16.0	17.0
Mining and quarrying	0.5	1.4	1.2	10.1	267.5	-5.1	121.4	86.7
Manufacturing	16.9	7.2	12.1	13.0	6.3	13.7	9.0	8.0
Construction	2.3	-9.2	13.0	-6.5	12.9	24.6	19.4	114.4
Electricity, gas, and water	3.1	39.0	-1.3	6.3	1.2	5.3	6.4	…
Services	25.2	4.9	5.7	5.7	7.2	7.5	6.7	7.3
Transportation, storage, and communication	5.8	9.0	8.6	8.4	9.3	9.5	4.8	7.5
Wholesale and retail trade	9.4	5.0	8.9	7.5	10.7	9.2	7.4	8.4
Banking, insurance, and real estate	0.8	-35.7	12.7	-46.3	14.0	-24.0	22.2	16.0
Ownership of dwellings	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.3
Public wage bill	3.0	7.1	1.6	15.0	3.4	1.0	1.0	1.0
Nonprofit institutions	0.8	7.5	-12.5	4.2	7.0	7.4	2.9	2.5
Hotels and restaurants	2.3	16.5	-1.2	2.7	-5.0	16.5	22.0	15.1
Other	2.3	28.9	-1.5	2.6	8.7	16.1	7.8	7.5
GDP at factor cost	100.0	5.7	5.7	5.9	5.7	6.9	7.3	8.2
Import duties	0.7	20.4	15.8	12.6	8.9	14.5	11.1	15.0
GDP at market prices	100.7	5.8	5.8	5.9	5.8	6.9	7.3	8.3

Source: Data provided by the Lao P.D.R. authorities.

1/ Differ from Fund staff estimates.

Table 3. Lao P.D.R.: Nominal GDP by Industrial Origin, 2000–05

(In billions of kip)

	2000	2001	2002	2003 1/	2004 1/	2005 1/ Est.
Agriculture	7,127	7,975	9,174	10,829	12,378	13,593
Crops	4,233	4,750	5,439	6,280	7,216	7,929
Livestock and fishery	2,468	2,727	3,156	3,824	4,350	4,747
Forestry	427	497	578	725	811	917
Industry	3,106	3,687	4,492	5,783	7,190	8,937
Mining and quarrying	67	73	89	378	397	941
Manufacturing	2,306	2,787	3,483	4,277	5,373	6,278
Construction	309	377	390	508	700	896
Electricity, gas, and water	423	450	530	619	720	822
Services	3,330	3,899	4,554	5,703	6,785	7,800
Transportation, storage, and communication	794	930	1,115	1,408	1,703	1,913
Wholesale and retail trade	1,284	1,507	1,792	2,292	2,764	3,180
Banking, insurance, and real estate	105	128	76	100	84	2,017
Ownership of dwellings	406	449	509	603	682	110
Public wage bill	393	517	643	822	957	750
Nonprofit institutions	12	11	12	15	15	1,083
Hotels and restaurants	309	329	374	423	528	15
Other	26	28	32	41	51	691
Import duties	107	141	182	211	237	269
GDP at market prices	13,669	15,702	18,401	22,525	26,590	30,600

Source: Data provided by the Lao P.D.R. authorities.

1/ Differ from Fund staff estimates.

Table 4. Lao P.D.R.: Output of Major Commodities, 2000–05

	Unit	2000	2001	2002	2003	2004	2005 Est.
Agriculture							
Paddy	thousand tons	2,230	2,335	2,417	2,375	2,529	2,704
Corn	thousand tons	117	111	124	143	204	…
Sweet potatoes and cassava	thousand tons	52	101	111	150	175	…
Coffee	thousand tons	255	631	633	663	671	…
Tobacco	thousand tons	18	26	32	22	23	…
Livestock							
Buffalo	thousand heads	1,007	1,052	1,091	1,113	1,112	1,096
Cattle	thousand heads	987	1,218	1,209	1,245	1,249	1,272
Pigs	thousand heads	1,101	1,427	1,416	1,655	1,728	1,826
Goats and sheep	thousand heads	100	123	126	138	139	…
Poultry	thousand heads	12,028	14,065	15,275	19,475	19,481	19,801
Forestry							
Logs	thousand m^3	378	239	…	…	…	…
Industry							
Tin	tons	800	816	…	…	1,250	900
Gypsum	thousand tons	185	150	99	98	236	220
Gold	Kg	...	...	...	8,900	7,000	…
Manufacturing							
Hydropower	million kwh	3,678	3,590	3,603	3,179	3,347	3,430
Beer	thousand hectoliter	508	577	652	702	827	885
Soft drinks	thousand hectoliter	143	142	148	164	187	194
Cigarettes	million packs	41	41	55	68	84	82
Agricultural tools	thousand units	4	4	4	4	4	4
Detergent	tons	900	700	700	710	860	700
Nails	tons	650	740	745	760	900	1,000
Oxygen	thousand bottles	21	21	21	21	23	23
Electric cord	thousand m	2,000	...	…	…	…	…
Plastic products	tons	3,850	4,350	4,420	4,530	5,500	6,500
Salt	thousand tons	19	21	22	22	25	26
Wood furniture	million kip	12,700	15,240	15,350	15,550	…	…
Rattan furniture	million kip	275	320	345	350	430	450
Garments	million pieces	24	32	33	34	37	38
Sugar	tons	300	265	562	450	…	…
Tobacco	thousand tons	1,100	358	593	947	1,897	2,800
Plywood	million sheets	2,100	2,200	2,250	1,550	1,300	2,000
Cement	thousand tons	75	75	263	280	282	320
Bricks	million pieces	66	87	89	90	120	100
Wood	thousand meters	240	230	235	198	...	...
Ventilators	thousand pieces	400	465	320	330	340	350

Source: Data provided by the Lao P.D.R. authorities.

Table 5. Lao P.D.R.: Consumer Price Indices, 2001–07

	2001	2002	2003	2004	2005	2006	2007
	(NSC Index; December 2005 = 100)						
January	61.3	65.7	75.8	85.4	92.2	99.7	105.2
February	61.8	66.2	76.6	86.5	92.6	100.5	105.4
March	62.0	66.4	78.3	87.7	93.3	101.0	105.7
April	63.0	67.6	79.7	89.2	94.9	102.8	106.5
May	63.8	68.0	80.4	90.4	95.8	103.4	107.0
June	63.7	69.5	81.1	91.3	96.3	104.1	107.7
July	64.4	71.6	82.3	92.3	97.2	104.7	...
August	65.8	74.1	85.1	93.0	99.1	105.9	...
September	66.3	75.9	86.9	93.3	100.5	106.0	...
October	66.3	75.8	86.7	92.5	101.3	105.0	...
November	65.7	75.0	85.2	92.1	100.2	104.6	...
December	65.2	75.1	84.6	91.9	100.0	104.7	...
	(Twelve-month percentage change)						
January	10.1	7.2	15.4	12.6	8.0	8.1	5.5
February	9.0	7.2	15.6	12.9	7.0	8.6	4.9
March	8.5	7.2	17.9	11.9	6.5	8.2	4.7
April	7.8	7.4	17.8	11.9	6.4	8.3	3.6
May	7.9	6.7	18.2	12.4	6.0	8.0	3.4
June	6.7	9.1	16.7	12.6	5.5	8.1	3.5
July	6.9	11.2	15.0	12.1	5.4	7.7	...
August	8.1	12.6	14.8	9.2	6.6	6.9	...
September	6.2	14.6	14.5	7.4	7.7	5.5	...
October	7.1	14.3	14.4	6.8	9.5	3.7	...
November	8.2	14.0	13.7	8.1	8.7	4.4	...
December	7.5	15.2	12.6	8.6	8.8	4.7	...
Period average	7.8	10.6	15.5	10.5	7.2	6.8	...

Source: Data provided by the Lao P.D.R. authorities.

Table 6. Lao P.D.R.: Consumer Price Indices Components, 2004–07

(Twelve-month percentage change)

	Weight	2004				2005				2006				2007
		Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.
Foods	46.2	14.5	14.5	4.0	7.5	5.5	4.8	9.4	12.0	10.9	10.6	7.7	9.4	12.3
Rice, bread, flour, and other cereals	14.7	27.0	23.9	-7.7	-1.9	-4.3	-2.0	9.5	17.6	22.0	23.2	24.5	23.5	27.3
Meat and poultry	12.1	6.3	10.7	21.0	19.2	14.0	7.9	8.2	10.0	9.9	9.2	6.1	4.9	6.7
Fish	4.4	9.3	12.8	20.2	12.7	8.4	9.4	7.8	7.5	4.7	4.4	4.1	4.8	5.8
Dairy products and egg	0.9	9.2	11.9	35.7	34.2	29.1	21.0	11.3	8.7	5.9	-0.8	-1.5	-1.5	-0.8
Oils and fats	0.2	13.3	10.2	9.8	10.0	8.2	4.2	3.3	1.9	0.9	0.7	-0.2	-2.2	-1.6
Fruit and vegetables	5.3	5.1	9.2	0.6	7.5	10.9	12.2	13.7	13.5	-0.7	-1.8	-7.6	2.9	12.5
Sugar, sweets	2.9	4.2	3.5	1.4	0.6	0.6	2.9	9.5	11.2	23.4	31.4	23.7	20.0	9.6
Spices	1.9	9.5	8.3	5.0	7.6	6.1	5.9	5.1	1.5	2.3	2.7	10.7	11.1	10.7
Alcoholic beverages and tobacco	6.4	10.8	10.3	5.7	3.5	2.6	0.9	1.2	3.1	5.3	7.5	9.1	7.6	7.8
Alcoholic beverages	4.0	9.6	8.9	4.5	3.9	5.0	3.9	3.5	3.5	4.7	8.0	10.6	8.0	7.3
Tobacco	2.4	12.8	12.5	7.5	2.9	-1.1	-3.6	-2.2	2.6	5.8	5.8	5.0	6.8	8.8
Clothing and foot wear	4.9	7.9	7.7	8.6	6.8	7.0	8.0	7.1	9.0	6.2	5.2	3.6	1.7	3.5
Men's clothing	1.3	9.3	10.5	14.3	10.9	10.5	9.2	6.4	10.1	7.4	5.2	4.6	1.9	4.4
Ladies' clothing	1.3	3.3	4.3	5.4	3.6	2.2	2.3	2.3	3.9	1.7	-0.5	-0.7	-1.6	0.3
Children's clothing	1.2	7.4	5.7	5.5	4.1	5.3	9.6	8.9	11.3	9.0	11.0	7.0	6.2	7.8
Foot wear	0.8	14.0	12.4	8.8	7.7	9.6	11.5	12.0	11.6	7.5	5.7	3.8	0.4	1.4
Housing	3.8	19.6	21.0	18.6	14.4	8.6	4.6	2.3	3.0	3.5	3.1	3.1	1.4	1.6
Water charges	0.3	6.8	5.9	4.6	5.7	5.3	5.9	4.2	4.6	4.1	4.0	4.0	2.3	1.9
Housing maintenance and repair	1.5	15.0	46.3	46.6	43.0	15.0	15.1	1.4	2.6	2.6	0.1	-1.2	-2.4	-2.4
House repair (labor cost)	0.2	25.4	25.5	21.9	15.6	9.2	3.4	1.8	2.5	3.4	-0.9	-1.0	-2.9	-2.4
House construction/extensions (labor cost)	0.4	8.3	6.0	7.5	8.6	8.2	8.9	9.7	9.1	8.9	7.8	4.1	2.7	2.1
Fuel and power	1.9	12.0	6.9	5.0	8.7	11.3	14.0	20.6	16.2	12.2	9.8	3.8	3.0	2.5
Household goods	8.1	7.2	7.4	7.5	9.8	6.7	7.4	8.1	8.3	8.1	7.2	4.3	1.4	4.1
Household furniture	1.6	6.5	4.6	2.9	2.2	2.9	2.2	1.5	3.0	3.7	4.6	5.4	4.2	3.0
Household operation	3.3	8.3	6.9	11.9	11.3	8.7	9.0	7.5	7.7	9.9	8.6	3.7	2.3	0.3
Medical care	3.8	14.9	18.1	14.8	10.3	4.7	2.0	1.1	0.7	0.7	0.7	1.2	0.5	0.5
Transport and communications	17.9	9.7	6.6	10.8	11.3	9.2	7.7	10.2	8.5	7.7	7.2	1.8	-2.0	-1.7
Personal transport	15.7	13.0	9.2	11.1	12.0	9.8	9.4	12.6	8.8	7.9	6.9	0.5	-2.2	-1.9
Public transport	1.8	-3.5	-4.8	9.7	10.5	8.7	1.6	1.3	8.1	8.1	8.8	9.5	2.3	2.9
Communications	0.4	12.5	12.5	10.3	-0.6	-1.0	0.2	0.7	1.2	1.2	-2.7	-3.2	-5.1	-5.1
Recreation, education, and printed matter	4.7	8.2	8.0	7.3	6.9	5.4	4.9	2.1	2.6	2.6	2.8	4.2	2.9	3.0
Personal care and effects	4.2	8.7	6.5	7.0	8.3	5.7	5.9	6.4	8.1	12.0	14.5	12.9	7.5	4.8
Total	100.0	12.6	11.9	7.4	8.6	6.5	5.4	7.7	8.8	8.2	8.1	5.5	4.7	4.7

Source: Data provided by the Lao P.D.R. authorities.

Table 7. Lao P.D.R.: General Government Operations, 2000/01–2006/07

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07 Budget
	(In billions of kip)						
Revenue and grants	2,476	2,683	2,798	3,104	3,886	4,962	5,370
Revenue	2,000	2,324	2,345	2,822	3,387	4,266	4,689
Tax	1,629	1,875	1,928	2,337	2,803	3,641	4,086
Of which: non renewable resources1/	24	17	23	32	95	291	698
Of which: renewable resources1/	51	46	45	32	93	99	103
Of which: non resource revenue	1,554	1,812	1,860	2,273	2,615	3,252	3,285
Nontax	372	449	417	484	584	625	602
Grants	476	359	453	283	499	696	681
Expenditure	3,274	3,175	4,003	3,970	5,204	6,205	6,761
Current	1,123	1,280	1,527	1,838	2,517	3,124	3,603
Wages, salaries, and benefits	410	547	668	900	1,058	1,263	1,540
Transfers	243	265	341	309	514	674	874
Interest payments	134	138	123	235	318	277	394
Of which: external	117	108	115	194	267	244	361
Other recurrent	336	330	394	394	626	911	795
Capital and net onlending 2/	2,045	1,785	2,370	1,646	2,261	2,529	2,788
Others and contingencies 3/	107	203	120	237	347	348	370
Above below-the-line discrepancy	...	-93	-14	249	80	203	...
Overall balance	-798	-492	-1,205	-866	-1,318	-1,242	-1,392
Non resource balance 4/	-873	-555	-1,273	-930	-1,506	-1,632	-2,178
Financing	798	492	1,205	866	1,318	1,242	1,392
Domestic financing (net) 5/	253	83	97	-57	64	-427	-28
Foreign financing (net)	545	409	1,108	923	1,254	1,670	1,419
Disbursements	792	691	1,309	1,151	1,551	1,982	1,819
Amortization	-247	-282	-201	-228	-296	-312	-400
	(In percent of GDP)						
Revenue and grants	16.3	15.1	13.0	12.1	13.1	14.8	14.2
Revenue	13.2	13.1	10.9	11.0	11.4	12.7	12.4
Tax	10.7	10.6	8.9	9.1	9.4	10.8	10.8
Of which: non renewable resources1/	0.2	0.1	0.1	0.1	0.3	0.9	1.8
Of which: renewable resource 1/	0.3	0.3	0.2	0.1	0.3	0.3	0.3
Of which: non resource revenue	10.2	10.2	8.6	8.9	8.8	9.7	8.7
Nontax	2.4	2.5	1.9	1.9	2.0	1.9	1.6
Grants	3.1	2.0	2.1	1.1	1.7	2.1	1.8
Expenditure	21.5	17.9	18.6	15.5	17.5	18.5	17.8
Current	7.4	7.2	7.1	7.2	8.5	9.3	9.5
Wages, salaries, and benefits	2.7	3.1	3.1	3.5	3.6	3.8	4.1
Transfers	1.6	1.5	1.6	1.2	1.7	2.0	2.3
Interest payments	0.9	0.8	0.6	0.9	1.1	0.8	1.0
Other recurrent	2.2	1.9	1.8	1.5	2.1	2.7	2.1
Capital and net onlending 2/	13.5	10.1	11.0	6.4	7.6	7.5	7.4
Others and contingencies 3/	0.7	1.1	0.6	0.9	1.2	1.0	1.0
Discrepancy including unidentified expenditure	...	-0.5	-0.1	1.0	0.3	0.6	...
Overall balance	-5.3	-2.8	-5.6	-3.4	-4.4	-3.7	-3.7
Non resource balance 4/	-5.7	-3.1	-5.9	-3.6	-5.1	-4.9	-5.7
Financing	5.3	2.8	5.6	3.4	4.4	3.7	3.7
Domestic financing (net) 5/	1.7	0.5	0.4	-0.2	0.2	-1.3	-0.1
Foreign financing (net)	3.6	2.3	5.1	3.6	4.2	5.0	3.7
Memorandum items:							
Nominal GDP (in billions of kip)	15,194	17,726	21,548	25,553	29,663	33,612	37,926

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

1/ Non-renewable resource: royalties and taxes from mining; renewable resource: those from hydro-power.
2/ Net onlending includes the government NT2 equity purchase.
3/ Includes payments on liabilities carried in from the previous budget years and arrears clearance.
4/ Overall balance net of resource revenues.
5/ Excludes bank restructuring bonds.

Table 8. Lao P.D.R.: General Government Revenue, 2000/01–2006/07

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07 Budget
				(In billions of kip)			
Revenue	2,000	2,324	2,345	2,822	3,387	4,266	4,689
Tax	1,629	1,875	1,928	2,337	2,803	3,641	4,086
Of which: non-renewable resource1/	24	17	23	32	95	291	698
Of which: renewable resource1/	51	46	45	32	93	99	103
Of which: non resource revenue	1,554	1,812	1,860	2,273	2,615	3,252	3,285
Profit tax	205	239	225	222	307	459	733
Mining	0	0	0	0	0	73	388
Hydro	0	0	0	0	36	42	33
Others	205	239	225	222	271	344	306
Income tax	145	125	140	179	215	234	241
Turnover tax	318	375	466	594	673	887	872
Excise tax	371	286	293	483	523	800	870
Import duties	179	240	316	351	429	515	518
Timber royalty receipts	182	362	218	225	189	172	150
Natural resource tax	24	17	23	32	95	218	310
Hydro royalties	51	46	45	32	57	57	70
Other fees	61	92	107	136	211	163	193
Other	92	93	94	82	104	136	130
Nontax	372	449	417	484	584	625	602
SOE dividends	67	84	87	106	178	175	180
Over flight revenues	114	187	174	198	222	229	227
Others	190	177	156	180	185	222	195
				(In percent of GDP)			
Revenue	13.2	13.1	10.9	11.0	11.4	12.7	12.4
Tax	10.7	10.6	8.9	9.1	9.4	10.8	10.8
Of which: non-renewable resource 1/	0.2	0.1	0.1	0.1	0.3	0.9	1.8
Of which: renewable resource 1/	0.3	0.3	0.2	0.1	0.3	0.3	0.3
Of which: non resource revenue	10.2	10.2	8.6	8.9	8.8	9.7	8.7
Profit tax	1.4	1.4	1.0	0.9	1.0	1.4	1.9
Mining	0.0	0.0	0.0	0.0	0.0	0.2	1.0
Hydro	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Others	1.4	1.4	1.0	0.9	0.9	1.0	0.8
Income tax	1.0	0.7	0.6	0.7	0.7	0.7	0.6
Turnover tax	2.1	2.1	2.2	2.3	2.3	2.6	2.3
Excise tax	2.4	1.6	1.4	1.9	1.8	2.4	2.3
Import duties	1.2	1.4	1.5	1.4	1.4	1.5	1.4
Timber royalty receipts	1.2	2.0	1.0	0.9	0.6	0.5	0.4
Natural resource tax	0.2	0.1	0.1	0.1	0.3	0.6	0.8
Hydro royalties	0.3	0.3	0.2	0.1	0.2	0.2	0.2
Other fees	0.4	0.5	0.5	0.5	0.7	0.5	0.5
Other	0.6	0.5	0.4	0.3	0.3	0.4	0.3
Nontax	2.4	2.5	1.9	1.9	2.0	1.9	1.6
SOE dividends	0.4	0.5	0.4	0.4	0.6	0.5	0.5
Over flight revenues	0.8	1.1	0.8	0.8	0.7	0.7	0.6
Other	1.3	1.0	0.7	0.7	0.6	0.7	0.5
Memorandum items:							
Nominal GDP (fiscal year; in billions of kip)	15,194	17,726	21,548	25,553	29,663	33,612	37,926

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

1/ Non-renewable resource: royalties and taxes from mining; renewable resource: those from hydro-power.

Table 9. Lao P.D.R.: General Government Expenditure, 2000/01–2006/07

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07 Budget
				(In billions of kip)			
Expenditure 1/	3,274	3,268	4,017	3,721	5,124	6,002	6,761
Current	1,123	1,280	1,527	1,838	2,517	3,124	3,603
Wages, salaries and benefits	410	547	668	900	1,058	1,263	1,540
Salaries	230	396	493	706	869	...	...
Remuneration	180	152	175	194	190	...	...
Transfers	243	265	341	309	514	674	874
Allowances and social welfare	127	156	172	204	317	...	...
Of which: social welfare	29	34	40	60	81	...	...
Subsidies and transfers	116	109	169	105	196	...	...
Interest payments	134	138	123	235	318	277	394
Domestic	17	30	9	41	51	32	33
External	117	108	115	194	267	244	361
Other recurrent	336	330	394	394	626	911	795
Capital and onlending	2,045	1,785	2,370	1,646	2,261	2,529	2,788
Domestically financed	1,005	995	1,026	592	468	403	517
Externally financed	1,200	931	1,499	1,169	1,531	1,956	2,416
Onlending (net) 2/	-160	-141	-156	-115	261	171	-145
Others and contingencies 3/	107	203	120	237	347	348	370
				(In percent of GDP)			
Expenditure 1/	21.5	18.4	18.6	14.6	17.3	17.9	17.8
Current	7.4	7.2	7.1	7.2	8.5	9.3	9.5
Wages, salaries and benefits	2.7	3.1	3.1	3.5	3.6	3.8	4.1
Salaries	1.5	2.2	2.3	2.8	2.9	...	...
Remuneration	1.2	0.9	0.8	0.8	0.6	...	...
Transfers	1.6	1.5	1.6	1.2	1.7	2.0	2.3
Allowances and social welfare	0.8	0.9	0.8	0.8	1.1	...	...
Of which: social welfare	0.2	0.2	0.2	0.2	0.3	...	...
Subsidies and transfers	0.8	0.6	0.8	0.4	0.7	...	...
Interest payments	0.9	0.8	0.6	0.9	1.1	0.8	1.0
Domestic	0.1	0.2	0.0	0.2	0.2	0.1	0.1
External	0.8	0.6	0.5	0.8	0.9	0.7	1.0
Other recurrent	2.2	1.9	1.8	1.5	2.1	2.7	2.1
Capital and onlending	13.5	10.1	11.0	6.4	7.6	7.5	7.4
Domestically financed	6.6	5.6	4.8	2.3	1.6	1.2	1.4
Externally financed	7.9	5.3	7.0	4.6	5.2	5.8	6.4
Onlending (net) 2/	-1.1	-0.8	-0.7	-0.5	0.9	0.5	-0.4
Others and contingencies 3/	0.7	1.1	0.6	0.9	1.2	1.0	1.0
Memorandum items:							
Nominal GDP (in billions of kip)	15,194	17,726	21,548	25,553	29,663	33,612	37,926

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

1/ Does not include above below-the-line discrepancy and differs from Table 7.
2/ Net onlending includes the government NT2 equity purchase.
3/ Includes payments on liabilities carried in from the previous budget years and arrears clearance.

Table 10. Lao P.D.R.: Monetary Survey, 2002–06 1/

	2002	2003	2004				2005				2006			
			Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.
	(In billions of kip; end of period)													
Net foreign assets	2,326	2,724	2,963	3,298	3,115	3,321	3,416	3,331	3,021	4,624	4,607	3,459	3,912	4,912
Bank of Lao P.D.R.	1,612	1,797	1,756	2,022	1,981	1,989	1,972	2,141	2,074	2,249	2,331	2,520	2,688	2,984
Commercial banks	713	927	1,207	1,276	1,134	1,333	1,444	1,190	947	2,375	2,276	939	1,224	1,928
Net domestic assets	1,110	1,371	1,507	1,326	1,698	1,707	1,841	1,807	2,182	792	957	2,168	2,188	2,134
Domestic credit	2,259	2,323	2,391	2,196	2,517	2,466	2,715	2,493	2,896	2,953	2,972	2,725	2,673	2,528
Net claims on government	-379	-131	-166	-373	-162	-210	-109	-211	-111	73	105	-302	-290	-89
Credit to the economy	2,638	2,454	2,557	2,569	2,678	2,676	2,824	2,703	3,007	2,880	2,867	3,026	2,963	2,617
Of which : in foreign currency	2,240	2,083	2,164	2,209	2,330	2,272	2,402	2,251	2,515	2,322	2,234	2,359	2,289	1,908
Credit to private sector	1,505	1,480	1,571	1,552	1,683	1,677	1,852	1,958	2,296	2,144	2,142	2,204	2,199	2,061
Of which : in foreign currency	1,137	1,126	1,195	1,205	1,346	1,287	1,442	1,517	1,818	1,603	1,547	1,582	1,567	1,404
Credit to state enterprises	1,133	974	987	1,017	995	999	972	745	711	736	725	822	764	556
Of which : in foreign currency	1,104	957	969	1,004	984	986	959	733	696	719	687	776	722	503
Other items (net)	-1,150	-953	-884	-870	-819	-759	-874	-685	-714	-2,160	-2,015	-556	-485	-394
Broad money	3,435	4,095	4,471	4,623	4,813	5,029	5,257	5,138	5,203	5,416	5,564	5,627	6,100	7,046
Narrow money	493	699	847	781	859	1,049	1,261	1,170	1,189	1,415	1,428	1,427	1,501	1,998
Currency outside banks	135	262	306	316	350	511	578	579	613	805	855	782	849	1,231
Demand deposits	358	437	541	465	509	537	683	591	577	610	573	645	652	768
Quasi-money	2,942	3,396	3,623	3,842	3,953	3,980	3,996	3,969	4,014	4,001	4,136	4,200	4,598	5,048
Time and savings deposits	452	762	813	897	919	897	853	864	879	843	877	845	896	945
Foreign currency deposits	2,490	2,634	2,811	2,945	3,034	3,083	3,143	3,105	3,135	3,159	3,259	3,355	3,702	4,103
	(Annual percentage change)													
Domestic credit	-7.3	2.8	3.2	2.9	7.0	6.1	13.5	13.5	15.1	19.8	9.5	9.3	-7.7	-14.4
Credit to the economy	3.3	-7.0	-4.8	1.3	5.4	9.0	10.4	5.2	12.3	7.6	1.5	11.9	-1.5	-9.1
Broad money	27.0	19.2	21.3	21.7	22.4	22.8	17.6	11.1	8.1	7.7	5.8	9.5	17.2	30.1
Memorandum items:														
Exchange rate														
(Kip/US$; end of period, annual percentage change)	11.9	-1.4	-2.0	1.1	3.7	0.0	0.2	0.8	-0.1	3.2	-1.0	-5.8	-7.8	-10.3
Money multiplier	3.2	3.0	3.1	3.2	3.1	3.3	3.2	3.1	3.1	3.0	3.0	2.9	2.8	2.8

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

1/ Valued at current exchange rates.

Table 11. Lao P.D.R.: Balance Sheet of the Bank of the Lao P.D.R., 2002–06 1/

	2002	2003	2004				2005				2006			
			Mar.	Jun.	Sept.	Dec.	Mar.	Jun. 2/	Sept.	Dec.	Mar.	Jun. 2/	Sept.	Dec.
							(In billions of kip; end of period)							
Net foreign assets	1612	1797	1756	2022	1981	1989	1972	2141	2074	2249	2331	2520	2688	2984
Foreign assets	2077	2257	2196	2443	2387	2380	2339	2489	2423	2574	2634	2815	2973	3258
Foreign liabilities	-464	-459	-440	-421	-407	-392	-367	-348	-350	-325	-304	-295	-286	-273
Net domestic assets	-538	-428	-329	-582	-425	-447	-307	-460	-404	-426	-470	-589	-535	-482
Net domestic credit	550	440	489	302	504	409	535	114	167	144	47	-95	-19	108
Net claims on government	-411	-375	-356	-552	-360	-451	-302	-401	-355	-433	-409	-552	-419	-282
Of which: in foreign currency	-419	-350	-293	-459	-327	-353	-238	-346	-365	-501	-495	-567	-630	-642
Claims on government	239	234	219	233	203	186	216	266	295	261	410	423	400	620
Of which: in foreign currency	104	90	64	72	73	71	70	42	58	53	52	46	45	42
Government deposits	-650	-609	-575	-785	-563	-637	-518	-667	-650	-694	-819	-975	-820	-902
Of which: in foreign currency	-523	-439	-357	-531	-400	-424	-308	-389	-424	-554	-546	-613	-675	-684
Claims on state enterprises	567	524	555	565	570	575	559	237	237	228	208	193	181	176
Of which: in foreign currency	566	523	554	565	570	575	559	237	237	228	208	193	181	176
Claims on private sector	176	153	153	155	156	154	151	150	140	127	108	90	74	70
Of which: in foreign currency	176	152	152	154	156	153	151	150	140	127	108	90	74	70
Claims on other banking institutions	218	138	139	134	138	131	128	128	145	222	140	174	146	143
Of which: in foreign currency	102	26	26	23	20	19	19	19	18	18	17	47	15	11
BOL securities	-166	-46	-38	0	0	0	0	0	0	0	0	0	0	0
Other items (net)	-922	-823	-780	-884	-929	-855	-842	-574	-572	-426	-470	-589	-535	-482
Government lending funds	-428	-324	-349	-368	-369	-357	-342	-341	-349	-340	-314	-297	-284	-276
Other items	-494	-499	-430	-516	-559	-498	-500	-233	-223	-86	-156	-292	-251	-206
Reserve money	1074	1369	1427	1440	1556	1542	1665	1681	1669	1823	1861	1931	2153	2502
Of which: in kip	302	581	606	599	709	724	836	841	875	1021	1092	1028	1203	1567
Currency in circulation (in kip)	135	262	306	316	350	511	578	579	613	805	855	782	849	1231
Vault cash (in kip)	47	63	96	110	98	81	126	133	102	72	119	121	111	106
Bank deposits	893	1044	1025	1014	1107	950	960	969	955	947	887	1028	1193	1165
Of which: in kip	120	256	203	173	261	132	132	130	160	145	118	125	243	231
Required reserves	477	525	554	0	0	0	0	0	0	0	0	0	0	0
Of which: in kip	60	83	90	0	0	0	0	0	0	0	0	0	0	0
Excess reserves (clearing deposits in kip)	60	172	113	173	261	132	132	130	160	145	118	125	243	231
Other deposits (in FC)	355	346	358	841	847	821	811	841	795	802	768	455	466	410
Capital deposits	191	135	133	136	143	152	153	206	214	159	152	144	154	152
Clearing deposits 3/	164	211	225	705	703	666	658	634	581	643	617	312	312	258
Private sector demand deposits	0	0	0	0	1	3	0	1	1	0	0	0	0	0
							(In millions of U.S. dollars)							
Net foreign assets of Bank of Lao PDR (a)	152	172	169	190	183	190	183	199	191	208	226	249	269	308
Forex component of reserve money (b)	73	75	79	79	78	78	80	78	73	74	75	89	95	96
Net official international reserves (= (a) - (b))	79	96	90	111	105	112	104	121	118	134	152	160	174	211

Source: Data provided by the Lao P.D.R. authorities.

1/ Valued at current exchange rates.
2/ Includes debt write-offs on NPLs to SOEs (amounting to Kip 320 billion), reflected in a decrease in claims on state enterprises and a corresponding adjustment in provisioning under other items.
3/ From May 2004, includes required reserves.

Table 12. Lao P.D.R.: Summary Balance Sheet of All Commercial Banks, 2002–06 1/

	2002	2003	2004				2005				2006			
			Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.
	(In billions of kip; end of period)													
Net foreign assets	713	927	1,207	1,276	1,134	1,333	1,444	1,190	947	-1,167	-1,228	-1,230	-1,236	-1,286
Foreign assets	1,577	1,717	1,962	2,151	2,120	2,321	2,456	2,193	2,197	1,139	1,127	939	1,224	1,928
Foreign liabilities	-864	-790	-755	-876	-986	-989	-1,012	-1,003	-1,249	-2,306	-2,355	-2,169	-2,459	-3,214
Net domestic assets	2,587	2,906	2,957	3,032	3,328	3,184	3,235	3,370	3,643	5,779	5,937	6,075	6,486	7,102
Net domestic credit	1,928	2,021	2,041	2,028	2,151	2,188	2,308	2,507	2,874	2,767	2,804	2,994	2,837	2,564
Net claims on government	32	244	190	179	198	241	194	190	243	241	253	250	129	193
Claims on government	69	324	300	334	374	356	365	376	452	464	483	556	562	549
Government deposits	-37	-81	-109	-156	-175	-115	-171	-186	-209	-223	-230	-305	-433	-356
Of which: in foreign currency	-16	-58	-51	-91	-100	-53	-85	-112	-117	-134	-135	-188	-245	-194
Of which: in kip	-21	-22	-58	-65	-75	-62	-86	-74	-92	-89	-95	-118	-189	-162
Claims on state enterprises	566	451	432	452	425	423	413	508	475	508	518	630	583	380
Of which: in foreign currency	537	434	415	439	415	411	401	496	460	491	480	583	542	327
Claims on private sector	1,329	1,327	1,418	1,397	1,527	1,524	1,701	1,809	2,156	2,017	2,034	2,114	2,125	1,990
Of which: in foreign currency	961	974	1,043	1,051	1,190	1,133	1,291	1,368	1,678	1,476	1,439	1,493	1,493	1,334
Other items (net)	660	884	916	1,004	1,177	996	927	863	769	3,012	3,133	3,081	3,649	4,538
Credit from monetary authorities	-252	-166	-164	-163	-103	-98	-94	-94	-93	-150	-173	-203	-113	-165
Other liabilities	-172	-352	-338	-283	-349	-447	-522	-530	-505	-488	-480	-347	-289	-468
Capital account	-487	-201	-162	-109	-88	-47	-70	-137	-193	-192	-314	-448	-557	-159
Restricted deposits	-24	-20	-72	-20	-20	-22	-20	-22	-41	-28	-26	-805	-859	-904
Other assets	656	523	551	487	551	622	588	598	580	600	790	825	895	882
Reserves	941	1,101	1,102	1,092	1,187	989	1,046	1,048	1,021	3,269	3,335	4,059	4,572	5,352
Deposits	3,301	3,832	4,164	4,307	4,462	4,517	4,679	4,560	4,591	4,612	4,709	4,845	5,251	5,815
Kip deposits	810	1,198	1,353	1,363	1,428	1,435	1,535	1,455	1,456	1,453	1,450	1,490	1,549	1,712
Current deposits	358	437	541	465	509	537	683	591	577	610	573	645	652	768
Time and savings deposits	452	762	813	897	919	897	853	864	879	843	877	845	896	945
Foreign currency deposits	2,490	2,634	2,811	2,945	3,034	3,083	3,143	3,105	3,135	3,159	3,259	3,355	3,702	4,103
	(In millions of U.S. dollars; end of period)													
Net foreign assets	67	89	116	120	105	127	139	111	87	-108	-119	-122	-124	-133
Foreign currency deposits	234	252	271	277	280	295	302	289	289	292	316	332	370	423
Memorandum item:														
NFA coverage of foreign currency deposits (percent)	28.6	35.2	42.9	43.3	37.4	43.2	45.9	38.3	30.2	-37	-38	-37	-33	-31

Source: Data provided by the Lao P.D.R. authorities.

1/ Valued at current exchange rates.

Table 13. Lao P.D.R.: Summary Balance Sheet of State-owned Commercial Banks, 2002–06 1/ 2/

	2002	2003	2004				2005				2006			
			Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.
	(In billions of kip; end of period)													
Net foreign assets	489	565	863	965	863	984	989	741	629	626	720	631	833	1,312
Foreign assets	1,006	875	1,162	1,292	1,187	1,320	1,310	1,056	988	967	1,024	927	1,117	1,638
Foreign liabilities	517	310	299	328	323	335	322	315	359	341	304	297	284	326
Net reserves	400	642	620	639	701	502	515	460	434	400	492	579	722	689
Reserves	516	675	655	673	730	531	539	483	458	480	514	630	739	706
Credit from monetary authorities	116	33	35	34	30	29	24	24	24	80	22	51	17	17
Claims on government (net)	-2	201	175	150	137	177	135	128	126	110	117	68	68	74
Claims in kip	14	259	226	241	236	230	219	240	243	243	251	255	311	267
Claims in foreign currency	-16	-58	-51	-91	-99	-53	-85	-111	-117	-133	-134	-187	-244	-193
Net domestic assets (excluding net credit to government)	1,593	1,413	1,358	1,420	1,516	1,529	1,688	1,807	1,936	2,031	1,898	1,971	1,843	1,675
Credit to the economy	1,224	951	972	987	1,076	1,035	1,200	1,326	1,447	1,526	1,489	1,659	1,576	1,184
Of which: in foreign currency	1,028	817	823	830	899	822	974	1,090	1,170	1,197	1,121	1,286	1,198	787
Credit to state enterprises	449	331	315	313	280	277	277	348	306	326	315	412	355	95
Credit to private sector	776	620	657	674	796	757	923	979	1,141	1,200	1,175	1,246	1,222	1,089
Other items (net)	368	462	387	433	440	495	489	481	489	504	409	312	267	491
Deposits	2,480	2,822	3,017	3,173	3,217	3,193	3,327	3,136	3,125	3,166	3,227	3,249	3,466	3,750
Deposits in kip	605	903	1,023	1,018	1,046	1,028	1,081	980	957	957	977	978	996	1,005
Deposits in foreign currency	1,875	1,919	1,993	2,156	2,171	2,165	2,246	2,156	2,168	2,209	2,250	2,271	2,470	2,745
	(In millions of U.S. dollars; end of period)													
Net foreign assets	46	54	83	91	80	94	95	69	58	58	70	62	83	135
Foreign currency credit to the economy	97	78	79	78	83	79	94	102	108	111	109	127	120	81
Foreign currency net credit to government	-2	-6	-5	-9	-9	-5	-8	-10	-11	-12	-13	-18	-24	-20
Foreign currency deposits	177	183	192	202	200	207	216	201	200	204	218	224	247	283
	(Annual percentage change)													
Credit to the economy (excluding credit to government)	-6.1	-22.3	-19.7	-12.0	7.7	8.8	23.5	34.4	34.5	33.2	17.7	17.8	-4.9	-22.1
Of which: in foreign currency	1.0	-20.6	-18.4	-12.9	4.9	0.6	18.4	31.4	30.2	29.6	7.8	12.1	-11.0	-32.4
Deposits	23.4	13.8	12.9	14.8	15.2	13.1	10.3	-1.2	-2.9	-2.6	43.6	3.4	12.4	17.3
Memorandum items:														
Issue of debt clearance bonds, accumulative stocks (kip billions)	0.0	207.8	207.8	207.8	244.2	244.2	244.2	244.2	244.2	244.2	372.9	443.9	444.9	444.9
Net foreign assets coverage of foreign currency deposits (percent)	26.1	29.5	43.3	44.7	39.8	45.5	44.0	34.4	29.0	28.3	32.0	27.8	33.7	47.8
Reserves to deposits ratio	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Exchange rate (kip/US$; end of period)	10,620	10,470	10,381	10,649	10,850	10,465	10,400	10,735	10,843	10,805	10,300	10,116	10,002	9,696

Source: Data provided by the Lao P.D.R. authorities.

1/ Comprises Banque pour le Commerce Extérieur (BCEL) and Lao Development Bank (LDB).
2/ Valued at current exchange rates.

Table 14. Lao P.D.R.: Interest Rates, 2001–06

	2001	2002	2003	2004	2005	2006
	(In percent; end of period)					
Local banks (representative rates) 1/						
Deposit rates						
Savings (U.S. dollar accounts)	2.0	1.0	0.4	0.3	0.5	1.3
Fixed (U.S. dollar accounts)						
3 months	2.5	1.5	0.5	0.4	1.0	1.8
6 months	3.0	1.8	0.6	0.8	1.3	2.5
12 months	3.5	2.3	0.8	1.0	1.5	3.0
Savings (kip accounts)	12.0	15.0	12.0	5.0	3.0	3.0
Fixed (kip accounts)						
3 months	16.0	17.0	15.0	8.0	5.0	6.0
6 months	18.0	19.0	18.0	9.0	8.0	8.0
12 months	20.0	21.0	20.0	10.0	9.0	10.0
Lending rates						
Overdraft						
Kip	24.0	24.0	28.0	21.0	20.0	20.0
Baht	10.0	10.0	12.0	12.0	12.0	12.0
U.S. dollar	11.0	11.0	11.0	12.0	12.0	12.0
Foreign banks (representative rates) 2/						
Deposit rates						
Savings (U.S. dollar accounts)	0.5	0.5	0.5	0.3	0.3	0.5
Fixed (U.S. dollar accounts)						
3 months	1.0	1.0	1.0	0.5	0.5	0.8
6 months	1.0	1.0	1.0	0.5	0.5	…
12 months	2.0	2.0	2.0	0.8	0.8	…
Lending rates						
Overdraft						
Kip	22.0	22.0	22.0	22.0	22.0	22.0
Baht	14.0	14.0	14.0	13.0	13.0	16.0
U.S. dollar	11.0	11.0	11.0	10.5	10.5	12.0

Source: Data provided by the Lao P.D.R. authorities.

1/ Local banks representative rates are from Banque Pour Le Commerce Exterieur Lao.
2/ Foreign banks representative rates are from Thai Military Bank Branch .

Table 15. Lao P.D.R.: Balance of Payments, 2000–06

	2000	2001	2002	2003	2004	2005	2006 Est.
	(In millions of U.S. dollars; unless otherwise indicated)						
Current account	-183	-146	-131	-175	-358	-582	-456
Excluding official transfers	-299	-209	-180	-237	-417	-639	-567
Merchandise trade balance	-376	-288	-263	-244	-478	-559	-388
Exports, f.o.b.	342	362	370	450	500	646	996
Imports, c.i.f.	718	650	633	694	977	1206	1384
Services (net)	132	125	131	95	132	161	171
Income (net)	-75	-67	-70	-113	-98	-269	-409
Of which: interest payments	-38	-35	-29	-38	-54	-106	-94
Of which: public debt	-11	-11	-10	-15	-27	-31	-24
Transfers (net)	136	85	71	86	85	85	170
Private	21	22	23	24	26	28	59
Official	115	63	48	62	60	57	111
Capital account	227	145	187	197	376	599	556
Medium- and long-term loans	63	66	127	118	118	115	164
Disbursements	99	105	165	146	147	156	195
Amortization	-36	-39	-38	-28	-29	-41	-31
Foreign direct investment	31	24	60	42	234	349	319
Net foreign assets of commercial banks (increase -)	25	28	-7	-21	-39	22	-93
Other private flows and errors and omissions	108	27	6	58	63	113	166
Overall balance	44	-1	55	22	19	17	99
Financing	-44	1	-55	-22	-19	-17	-99
Central bank net foreign assets	-44	1	-55	-22	-19	-17	-99
Assets (increase -)	-33	6	-62	-18	-12	-11	-98
Liabilities (reduction -)	-10	-5	7	-4	-6	-6	-1
Memorandum items:							
Current account (percent of GDP)							
(Excluding official transfers)	-17.2	-11.9	-9.9	-11.0	-16.6	-22.1	-16.5
Gross official reserves							
(In millions of U.S. dollars)	127	134	196	214	226	238	336
(In months of goods and services imports)	2.6	2.4	3.0	3.2	3.0	2.8	3.6
Nominal GDP at market prices (US$ million)	1,740	1,762	1,818	2,149	2,508	2,887	3,437

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

Table 16. Lao P.D.R.: Merchandise Trade by Major Commodity, 2000–06

(In millions of U.S. dollars; unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006 Est.
Merchandise exports	342.1	361.8	370.1	450.1	499.6	646.3	996.0
Gold	0.0	0.0	0.0	60.1	57.8	90.7	116.1
Copper	0.0	0.0	0.0	0.0	0.0	112.1	409.3
Electricity	112.2	106.4	103.6	86.6	91.1	107.0	107.1
Timber	70.1	106.7	114.2	128.2	144.9	136.8	158.1
Garments	105.9	112.9	113.9	129.9	154.7	138.0	132.0
Coffee	12.1	14.9	17.1	11.2	14.4	21.9	29.9
Other	41.8	20.9	21.3	34.2	36.8	40.0	43.5
Merchandise imports	717.8	650.3	633.1	693.7	977.2	1,205.6	1,384.1
Petroleum	159.9	87.2	100.6	89.6	107.6	159.5	201.3
Capital goods	236.3	226.9	197.1	271.6	467.6	615.0	728.0
Garments materials	62.5	82.3	79.9	86.6	115.5	103.0	98.6
Electricity	5.8	6.5	5.0	6.8	18.2	23.1	25.1
Other	253.2	247.5	250.5	239.1	268.4	305.0	331.2
Trade balance	-375.7	-288.5	-263.0	-243.6	-477.6	-559.3	-388.2
(in percent of GDP)	-21.6	-16.4	-14.5	-11.3	-19.0	-19.4	-11.3
Memorandum items:							
Export volume growth (goods and services; percent)	...	8.6	1.1	-3.6	5.6	14.2	3.5
Import volume growth (goods and services; percent)	...	-5.6	-6.5	17.0	28.2	14.0	2.2
Terms of trade (percent change)	...	-2.7	-1.6	6.8	0.8	4.4	31.0
Gold volume (000s oz.)	0.0	0.0	0.0	165.3	141.2	203.8	192.0
Electricity exports (GWh)	2,961.9	2,870.4	2,751.4	2,285.0	2,424.0	2,830.0	2,820.0
Electricity imports (GWh)	160.0	182.0	200.7	229.3	277.6	290.0	369.4

Sources: Lao P.D.R. authorities, Eurostat, Comtrade, and Fund staff estimates.

Table 17. Lao P.D.R.: External Aid and Loan Disbursements, 2000–06

(In millions of U.S. dollars)

	2000	2001	2002	2003	2004	2005	2006
Grants 1/	115.0	63.2	47.7	62.4	59.5	49.2	100.4
Bilateral	114.6	63.0	43.0	62.4	56.4	45.4	87.6
Program grants	0.0	2.8	12.0	12.3	12.6	10.6	21.0
Project grants	114.6	60.2	31.0	50.1	43.8	34.8	66.6
Of which: Technical assistance	22.1	11.2	7.7 …		…	…	…
Multilateral	0.4	0.2	4.7	0.0	3.2	3.8	12.8
UN agencies	0.1	0.0	3.6	0.0	0.1	0.0	0.1
AsDB	0.0	0.0	0.2	0.0	0.4	0.8	3.1
Other (including NGOs)	0.3	0.2	0.8	0.0	2.6	3.0	9.6
Loan disbursements	98.3	105.1	105.0	128.9	113.8	156.3	159.7
Program loans	11.3	0.0	5.0	22.0	12.3	4.4	15.0
IDA	0.0	0.0	0.0	7.0	12.3	4.4	0.0
AsDB	11.3	0.0	5.0	15.0	0.0	0.0	15.0
Project loans	87.0	105.1	100.0	106.9	101.5	151.9	144.7
AsDB	37.7	51.9	36.0	46.0	51.8	73.2	67.2
IDA	26.8	36.4	47.8	39.6	27.5	32.0	29.0
IFAD	2.5	4.2	5.5	3.0	3.8	3.5	5.7
OPEC	4.6	3.9	1.8	1.9	2.6	1.7	0.3
Nordic Fund	2.5	6.8	1.1	1.4	6.0	1.2	4.3
OECF	0.0	0.4	2.2	-1.0	0.0	0.0	0.0
Other	12.9	1.5	5.6	16.0	9.7	40.2	38.4

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

1/ Includes project related and general technical assistance.

Table 18. Lao P.D.R.: International Reserves, 2001–06

(In millions of U.S. dollars)

	2001	2002	2003	2004	2005	2006
Net foreign assets of the banking system	150	219	260	317	428	507
Foreign assets	253	344	380	449	452	667
Foreign liabilities	103	125	119	132	24	161
Central bank net foreign assets	96	152	172	190	208	308
Foreign assets	133	196	216	227	238	336
Foreign liabilities	38	44	44	37	30	28
Commercial banks' net foreign assets	55	67	89	127	220	199
Foreign assets	120	149	164	222	213	331
Foreign liabilities	65	81	75	94	-6	133

Source: Data provided by the Lao P.D.R. authorities.

Table 19. Lao P.D.R.: Debt Stock and Debt Service, 2000–06 1/

(In millions of U.S. dollars)

	2000	2001	2002	2003	2004	2005	2006 Est.
Total debt stock (public and private)	1,447	1,458	1,614	2,171	2,530	2,910	3,179
Public debt	1,179	1,213	1,330	1,915	2,086	2,225	2,416
Bilateral official	79	68	64	437	453	476	506
Of which: Russian Federation	...	...	...	387	387	385	382
Multilateral	1,042	1,089	1,191	1,338	1,516	1,621	1,759
Of which:							
AsDB	541	575	603	715	754	810	871
IDA	394	407	435	485	618	649	684
IMF	48	37	43	46	38	32	28
Commercial	58	56	75	140	117	127	151
Private debt	268	245	284	257	444	685	762
Total debt service	81	84	76	91	120	182	219
Amortization	43	49	47	56	70	82	132
Public debt	20	25	27	28	29	41	31
Bilateral official	2	4	4	1	5	9	5
Multilateral	17	20	23	26	22	29	27
Of which: IMF	8	9	9	9	3	6	3
Commercial	0	1	0	0	4	9	0
Private debt	24	24	20	27	41	40	101
				0	0	0	0
Interest payments	38	35	29	35	49	100	88
Public debt	11	11	10	12	22	26	18
Bilateral (official debt)	1	1	1	1	5	9	5
Multilateral	9	9	9	11	16	14	13
Of which: IMF	1	1	0	0	0	0	0
Commercial	1	1	0	0	2	2	0
Private debt	27	24	20	23	27	75	70

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

1/ Debt service and the stock of debt are calculated on the basis of existing debt, and currently identified disbursements.

Table 20. Lao P.D.R.: Composition of Net Foreign Income, 2000–06

(In millions of U.S. dollars; unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006
Receipts	7.3	5.6	4.7	3.5	12.5	16.8	29.3
Payments to Lao workers by embassies	0.6	0.6	0.7	0.7	0.8	0.9	0.9
Interest on Bank of Lao P.D.R. reserve assets	4.2	3.9	1.9	1.9	4.2	6.8	13.3
Interest on commercial banks nostro accounts	2.5	1.1	2.1	0.9	7.5	9.1	15.0
Income from royalty	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payments	78.0	74.0	69.0	116.3	110.2	285.9	437.8
Payments to foreign workers in Lao embassies	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Income from direct investment in Lao P.D.R.	34.6	36.7	36.2	77.7	55.9	179.5	343.7
Interest on official borrowing	10.0	10.2	9.5	11.9	22.4	25.3	18.2
Interest on Bank of Lao P.D.R. foreign liabilities	0.6	0.6	0.7	0.0	0.1	0.2	0.0
Interest on commercial banks foreign liabilities	5.5	2.0	2.6	3.2	4.5	5.7	5.7
Interest payable on other private debt	26.9	24.1	19.5	23.1	26.8	74.7	69.7
Net foreign income	-70.6	-68.4	-64.3	-112.8	-97.7	-269.1	-408.5
(In percent of GDP)	-4.1	-3.9	-3.5	-5.3	-3.9	-9.3	-11.9

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

Table 21. Lao P.D.R.: Composition of Net Services, 2000–06

(In millions of U.S. dollars; unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006
Receipts	175.6	166.0	176.3	147.5	187.0	222.2	240.0
Transportation	19.7	22.7	29.8	21.0	29.7	31.3	36.0
Overflight	11.3	14.9	22.1	18.0	21.9	24.1	28.3
Freight to Lao carriers (exports)	2.9	2.7	2.6	2.6	2.8	2.6	2.7
International fares to Lao carriers	3.7	3.5	3.4	3.2	3.2	2.8	3.3
Lao port charges	1.8	1.6	1.8	1.6	1.8	1.8	1.7
Travel	113.9	103.8	106.8	84.0	119.0	150.0	160.0
Communications	15.7	13.7	14.7	15.6	16.5	16.5	18.8
Insurance	0.8	0.3	1.0	2.2	2.6	5.2	6.0
Embassies (nonsalary)	25.5	25.5	24.0	24.7	19.2	19.2	19.2
Payments	43.1	43.8	44.3	52.1	55.1	61.2	69.1
Transportation	4.9	5.4	5.7	6.0	6.5	7.4	8.5
International fares to foreign carriers	4.1	4.3	4.5	4.7	5.2	5.9	6.8
Foreign port charges	0.8	1.1	1.2	1.2	1.3	1.5	1.7
Travel	8.1	8.4	13.5	13.5	14.7	16.8	19.3
Communications	4.3	5.6	4.4	4.4	5.0	5.0	5.0
Construction	11.9	15.6	14.3	16.5	16.8	19.1	22.0
Hydropower	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Other projects	11.4	15.6	14.3	16.5	16.8	19.1	22.0
Technical assistance (50 percent of inflow)	11.5	5.6	2.2	4.2	4.9	5.0	5.5
Lao embassies abroad (nonsalary)	2.4	2.4	2.4	3.2	2.4	2.5	2.5
Services (net)	132.5	122.2	132.0	95.4	131.9	161.0	170.9
(In percent of GDP)	7.6	6.9	7.3	4.5	5.3	5.6	5.0
Memorandum item:							
Tourist arrivals (000s)	737.2	673.8	735.7	636.4	894.8	1,095.3	1,161.0

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

Lao P.D.R.: Summary of Tax System as of End-May 2007

Tax	Nature of Tax	Exemptions and Deductions	Rates	
1. Taxes on income and profits				
1.1 Tax on enterprise profits (profit tax)	Annual levy on profits derived in the Lao P.D.R. by enterprises from business operations (production, trade, and service), payable in advance on a quarterly basis.	a. Expenses normally incurred in producing income with limits for reception and travel costs (0.40 percent for each trip) of annual income.		Tax Rate (In percent)
			General rate	35
			Foreign investors	
		b. Asset amortization of each asset permitted, using fixed line or declining balance methods and using the following five annual rates: 50 percent: business formation; 20 percent: land transportation, machines and other equipment; 10 percent: sea transport equipment, office improvement, supplies and temporary trade premises; 5 percent: industrial premises used < 20 years, permanent trade premises and air transport; 2.5 percent: industrial premises used between 21–40 years. Unallowed residue is deducted from the sale price to compute the profit or loss.	Discount rates applies only to the sectors under the investment promotion:	
			For enterprises in designated areas/city	20
			For enterprises in rural and lowland areas	15
			For enterprises in mountain and remote areas.	10
		c. Carry-forward of losses available for up to 3 years.		
		d. Three computational regimes. Full real regime: based on extended accounting system for foreign investors, import-export traders and businessmen with annual turnover greater than KN 2,400 million; partial real regime: based on ordinary or		

		common accounting system, for other businessmen with annual turnover between 200 million and 2,400 million kip; contract regime: for those with primary accounting system, based on agreed estimation for turnover less than 200 million kip with progressive rates for production, construction, and transport (8–10 percent), trade (5 percent), and services, drinking bars (20 percent). e. Amounts appropriated to savings or recapitalization accounts, bonuses, meeting allowances or received from capital reduction, enterprise merging, share transfer, bankruptcy or debt liquidation. f. Reliefs: Case-by-case tax relief given to new foreign and domestic investment promotion law.		
1.2 Minimum profit tax	Applicable to gross turnover of the previous year of those enterprises subject to the extended or ordinary accounting system. Payment on an annual basis. Creditable against final profit tax liability but no reimbursement of over payment.	Foreign and local investors who are in a system of annual profit tax exemption.	Domestic production Other businesses	0.25 percent 1 percent
1.3 Tax on social/ religious/cultural organizations and associations	Incomes from immovable property leasing and non-business activities of public or other social associations.	None		10 percent

1.4	Tax on personal income from employment	Levied on wages, salaries, bonuses, and other emoluments derived from employment in Lao P.D.R. or, when deputed to international organizations, by Lao citizens receiving emoluments abroad on which they are not taxed. Withheld at source by the employer on a monthly basis.	All persons with monthly wages or salaries below kip 300,000. Exemptions are granted to a selected list (12) of incomes, including income from agricultural production by peasants themselves, from cultural events, etc.	Monthly Wage or Salary (In kip) 300,001–1,500,000 1,500,001–4,000,000 4,000,001–8,000,000 8,000,001–15,000,000 15,000,001 and above	Tax Rate (In percent) 5 10 15 20 25
1.5	Tax on personal incomes of persons in self-employment	Levied on net profits made by individuals from business operations, and immovable property leasing. Payment on an advance quarterly basis.	Less than kip 2,400,001 is exempt.	General Activities (In kip) 2,400,001– 5,000,000 5,000,001–10,000,000 10,000,001–30,000,000 30,000,001– 60,000,000 60,000,000 and above	Tax Rate (In percent) 10 15 20 30 35
1.6	Tax on personal incomes from immovable property leasing	Levied on incomes received by individuals from immovable property leasing.			15 percent of rent price
1.7	Tax on investment income	Levied on incomes of entities and individuals from gross market-based rents, dividends, lending interest rates, and guarantee fees on a global basis, where appropriate.	Interest on bank deposits		10 percent
1.8	Tax on property rights	Copyright or other intellectual property rights of individual or business entity.	None		5 percent

2. Taxes on land and property				Tax Rate (In percent)
2.1 Transfer taxes	Applied to the market value of real estate property transferred between private persons through inheritance, sale, or gift.	None	Transfers between: • Direct descendants • Second-degree relatives • Third-degree relatives • Other land and houses • Undeveloped land	 0.5 1.0 2.0 3.0 4.0
2.2 Land tax	Annual tax levied on land area. Tax is collected from January to end-April. Taxable land is divided in two categories: • Occupied land (i.e., land occupied by buildings and factories) • Agricultural land	• Land occupied by temples, public welfare buildings, embassies, and housing for disabled persons (for extensions of less than 5,000 sq km). • Agricultural land, not exceeding two hectares per family, occupied by disabled military personnel and civilians. • Agricultural land situated in mountainous areas yielding less than 150 kg rice per person per year. • Agricultural land affected by natural disaster or other damages in accordance to the damage. • Newly cleared rice fields in mountainous (5 years) and flat land (3 years). • Industrial orchards (2–3 years).	1. Occupied land: Rates vary from kip 5 to kip 300 per square meter per year in accordance with the use (housing, production factories, business or service and unused open land) and location. 2. Agricultural land: Rates vary from kip 20,000 to kip 45,000 per hectare per year in accordance with: (i) land use (rice land, garden land, and farm land); (ii) location (level field and mountainous areas); and (iii) type of production (for rice, number of crops per year and for garden, type of trees).	

Lao P.D.R.: Summary of Tax System as of End-May 2007

				Tax Rate (In percent) Domestic Production	Importation
3. Taxes on goods and services 3.1 Turnover tax	The tax is collected from imports of goods to the Lao P.D.R, first time sale of imported goods or domestically produced products, and general services Importers, producers or servers who operate sales or services inside the Lao P.D.R. and have paid the initial tax (e.g., at customs checkpoints) shall have the right to get a deduction of initially paid turnover tax. Deductions are not allowed for service charges, purchases of transport vehicles, including accessories and spare parts which are not used directly by the companies, and purchases of consumer goods for personal utilization by the company. All imports, not exempt from import duties, are subject to turnover tax and the base of taxation is customs value, plus customs duty, plus excise duty, if any. In case of the first time sale of goods imported or manufactured inside the country, that tax shall be calculated during its selling or delivery by importers or domestic manufacturers. The calculation shall be based on the actual sales amounts without turnover tax.	The following activities are exempt from turnover tax: • Import of crop seeds, animal breeds, and insecticides. • Import of materials, instruments and chemical components for research purposes. • Import of gold for the notes issuing institution. • Import of bank notes or coins. • Import or activity relating to tax or post stamps. • Import of planes and instruments for international air transportation. • Import of goods or accessories for components of international air transportation. • Import of goods for selling to diplomats and international organizations in the Lao P.D.R. according to permissions of Ministry of Foreign Affairs. • Import of goods with tax exemption or temporary import. • Import and sales of animal treating medicines. • Sales of self-produced agricultural products by peasants. • Forestation activities, industrial trees and fruits planting. • Sales of agricultural and handicraft products by government employees or cooperative members on family basis or limit. • Export of goods and services.	The turnover tax is levied at 5 percent and 10 percent differently from domestic production and services or importation. Illustrations of items subject to these rates follow:		
			• Fertilizers, animal feeds, rice bran and rice polish, cotton thread, silk thread, and other yarn.	Exempted	5
			• Food stuffs including food ingredients, crudely rice, barley rice, tools and accessories for fishing and fish farming, education materials, instruments for sports and fiscal training, and toys for children, bicycles, tricycles, any types of fuel, motor oil, brake oil, tobacco leaves.	Exempted	5
			• Harvested products, trees spout and livestock, rice and unprocessed rice.	Exempted	10
			• Raw material, semi-processed products, agricultural chemicals, industrial and handicraft production, machines and equipment used in agricultural, industrial and handicraft production, machines and equipment for discovering, mining of mineral, oil and natural gas, and basic infrastructure construction such as bridges, roads, irrigation, dams and airport s including their spare parts.	5	5

Lao P.D.R.: Summary of Tax System as of End-May 2007

					Tax Rate (In percent)	
					Domestic Production	Importation
3.1	Turnover tax (continued)	The tax on services shall be calculated after completion of the work. The calculation shall be based on the actual service charges without turnover tax. Turnover tax declarations must be submitted monthly and turnover tax collected must be paid monthly (turnover tax on imports is collected at custom checkpoints). All purchase and sales must be substantiated by tax invoices.	• Sales of allowed text books. • Newspapers and magazines. • International transportation and relevant services (international transportation—transportation of passengers or cargoes from abroad or to abroad by land, air, and sea/river). • Transport by people, animals, and boats without engines. • Provision of leasing immovable properties, such as land, houses, and others by persons who do not have business activities. • Export services. • Independent job-occupation by one's own labor. • Educational activities: child schools, primary schools, secondary and high schools, universities, and technical schools. • Activities for public benefits held by government authorities and international organizations; and banking and insurance activities. • Rice, unprocessed rice, and rice bran domestically produced. • Domestically produced: Fertilizer, animal foods, and rice polish. • Wheelchairs (for disabled people) • Fire trucks, ambulance, and specific vehicles for the government, national defense, and security purposes. • Unreal human and animal organs for medical.	• Clothes, hat, shoes, belt (except those made by silver or gold) and umbrellas, silk and other yarn made products, sewing machines and its components, medicaments medical accessories and electric power, unrecorded cassette and compact disk s, and electric tools and instrument, ores, glue-stone, lignite, coal, gas and similar others.	5	10
				• Agricultural products e.g. rice flour, manioc and maize flour, and other flour.	Exempted	10
				• Art and craft products, communication instruments including spare parts, wooden coal and fire-wood, tea and coffee made products, ships, motor boats for domestic transportation or tourism purposes.	5	10
				• Suitcase, travel bags handbags and other similar products, house furniture, watches, glasses, product for body cleaning, perfume and cosmetics, general office supplies, tool and components for water supply, pure drink water, soft-drinks, non-alcoholic drinks, lump-ice and ice cream, electric household supplies (e.g. fridge, washing machines, cookers, etc.).	5	10

Tax	Description	Tax Rate (In percent) Domestic Production	Importation
3.1 Turnover tax (continued)	• Air conditioners and their spare parts, TV sets, VDO-cameras, VCD-players and similar others including spare parts and components, musical instrument and its components.		
	• Billiard and snooker tables, football tables other games machines, construction materials and instruments. Play cards and other similar plays, beer, wine, alcohols and alcoholic drinks, cigarettes and other tobacco products.	10	10
	• Precious metal and glass, wood and rattan-made products, sport motor boat, vehicles, motorcycles and their spare parts, fireworks, explosive materials for construction, sport and air-compressed guns.	5	10
	Services		
	• Agricultural service with machines, analysis of agriculture, forest and construction soils, ores, development of land for cultivation and cattle-breeding purposes, medical treatment for human and animal, massage, slaughter-house and animal killing activity, printing and publication activity, municipal sanitation, decorating, golden and silver hand-made product making, advertising, survey and study, planning, analysis of data and information, accounting, law engineering and architectural consultancy, concert, art play, opera and cultural events, sport activities, tailoring and dresser's salons, photo and sewing shops, hairdressing salons and barber shops, and dress washing salon.	5	
	• Soil and land loading service, development of land for construction purpose, exploitation of forest and non-forest products, wood-sawing mills, wood and rattan manufacturing plants, tobacco-leave drying mills, security, post and transport service, diamond, jewel and glass processing, brokerage, snooker and billiard business, activity of movies and video screening recording of video, conducting leasing business.	10	
3.2 Excise duties			

3.1 Turnover tax (continued)			• Market management service, construction of road bridge, irrigation, dam, ports and airport, general construction, installation and repairs, development of land and construction houses for sales, telecommunication service, hotel, guesthouse, resort tourism and restaurant activities, entertainment activities (night club, discotheque, karaoke), and lottery activity.	10
3.2 Excise duties	Levied equally on imports and domestic supplies of petroleum products and selected consumer goods. Imported items are subject to tax on customs duty-inclusive values while domestic suppliers are subject to tax on ex-factory costs.	The following are exempt: • Purchases by embassies and international organizations. • Kerosene. • Alcohol (90) for medical purposes. • Purchases of petroleum products for externally-funded projects. • Exports of excisable goods.	The ad valorem excise duties are as follows:	
			<u>Item</u>	
			Petroleum products:	
			Premium gasoline	25
			Regular gasoline	24
			Diesel	12
			Kerosene	10
			Hydraulic, brake, lubricating, and grease oil	5
			<u>Item</u>	
			Alcohol:	
			All types with 15 proof and more	70
			All types with less than 15 proof	60
			Beer	50
			Cigarettes and cigars	55
			Cosmetics and perfumes	30
			Playing cards, and the like	70

3.2	Excise duties (continued)	Vehicles-cars:	
		Pickup with two doors	20
		Pickup with four doors	25
		Minibus with less than 15 seats	25
		Bus	20
		Jeep with soft top	30
		Jeep with hard top less than 2.000 cc	65
		Jeep with hard top 2.001–4.000 cc	70
		Jeep with hard top more than 4.000 cc	75
		Cars less than 1.000cc	60
		1.000–1.500cc	65
		1.501–3.000cc	75
		More than 3.000cc	90
		Motorcycles	20
		Speed boats, motor boats for sport activities, including their motor and accessories	10
		Miscellaneous items:	
		Electrical appliances such as: air-conditioners, satellite TV signal receivers, audio-video, cameras, audio-video recorders, musical instruments, including components and accessories.	15
		Freezer, heater, washing machine, vacuum cleaners.	10
		Billiard and snooker tables, football game tables and other game machines, service activities of billiard and snooker, bowling, and lottery.	20
		Activity of night club, discotheque and karaoke.	25

3.3 Tax registration license	Levied annually on registered industrial and commercial enterprises, based on turnover and on import-export enterprises, based on capital. Payable during the first three months of the year on a current basis.	None	Different rates apply to enterprises producing for the local market and import-export enterprises.	

Turnover (In million of kips)	Rates applicable to local enterprises (In kip)
12	0.0
>12–30	10,000
>30–80	15,000
>80–200	30,000
>200–500	50,000
>500–1,500	70,000
>1,500-2,000	100,000
2,000 and above	150,000

Capital (In million of kips)	Rates applicable to import-export (In kip)
200–500	200,000
500–1,500	300,000
1,500–2,000	400,000
200 and above	500,000

3.4 Road tax	Levied annually on all motor vehicles (motorcycles, cars, trucks, etc.)	The following are exempt: • Government cars. • Cars of the diplomatic corps, international organizations, and foreign experts.	Fees vary according to size of engine (for cars and motorcycles), weight (for trucks), and number of seats (for buses).	kip 5,000 to kip 90,000
3.5 Air travel fees	Levied annually for: (i) Civil aviation registration	None	Fees vary according to weight.	US$17–175
	(ii) Examination issuance and renewal of permits			US$32–192

3.6 Airspace overflight fees	Levied on all aircraft without regard to nationality overflying the territory of the Lao P.D.R.	• VIP special aircraft. • Hospital aircraft carrying patients.		US$50–360 per overflight
3.7 River transport fees	Levied annually	None	Fees vary according to size of boats.	kip 1,000 – kip 20,000
3.8 Border entry and exit fees		• Diplomatic personnel and relatives. • Foreign experts and relatives.		
Persons Vehicles			Land and water vehicles.	kip 50,000
3.9 Fees for extended residence in Lao P.D.R.		• Diplomatic corps, foreign experts, and their relatives.	Fees vary according to length of stay.	kip 5,000– kip 20,000 per day
3.10 Fee for temporary border passes		None		kip 5,000 – kip 10,000
3.11 Fees on delivery of passports, visas, and laissez-passer documents		None	Fees vary according to nature of document and applicant: Foreigners: Lao nationals:	 US$10–120 US$ 5–60
3.12 Consular fees overseas	Levied every five years	None	Fees vary in accordance with the location of the consular office and type of document.	US$10

4. Taxes on international trade				
4.1 Import duties	Until recently, imposed on values fixed in U.S. dollar terms. Such values were fixed for most items, jointly by the Ministry of Trade and the Customs Department. The main exceptions are motor vehicles and selected computer equipment, for which invoice values are accepted. The U.S. dollar values are converted into local currency at the market rate.	Imports of diplomats and army/police are exempt. Goods imported by the government for use in externally-financed development projects are also exempt; the government otherwise pays duties on its other imports. Imports of fuel by Lao Aviation for international transport is exempt. Also exempt are imports under bilateral grants and externally-funded humanitarian imports.	Six rates ranging from 5 to 40 percent. The kinds of goods subject to these rates are as follows:	Tax Rate (In percent)
			Raw materials, chemicals (including fertilizers), packaging materials, some machinery (incl. tractors and tools for agriculture), and essential consumer goods (rice, wheat flour, salt, baby foods, medicines, books and printed materials), cameras.	5
		Imported inputs (raw materials, machinery and equipment, building materials) for approved foreign-financed private sector and joint venture investment projects are subject to an import fee of 1 percent.		
		Raw materials and intermediate components imported for the purpose of processing and then re-exported are fully exempt from import duties. In highly exceptional cases and by specific decision of the government, foreign investors may also be exempt from the 1 percent duty rate because of the large size of their investments and the significant positive impact which those investments are expected to have upon the socio-economic development of the country.	Other machinery and spare parts, and less essential goods (sugar, cheese, butter, chocolate, footwear, garments, photographic films, refrigerators, dishwashers, household electrical appliances, stereo systems, carpets, pearls and diamonds).	10
			Selected luxury consumer goods (premium petrol, cosmetics and toiletries, TVs and VCRs, radio cassette players, table games and fun fair articles, buses, minibuses, units).	20

4.1 Import duties (continued)		There are no discretionary exemptions. The Minister of Finance does not have the power to grant duty exemptions.	Other luxury consumer goods (prepared meats and fish, cereals and prepared foods, white chocolate confectionery, toilet soaps and deodorants, perfumes, wines and spirits), pickup trucks.	30
		Currently, there is no drawback scheme for import duties paid on inputs for exports.	Soft drinks, liquors, beer, tobacco, detergents, processed wood, jeeps, cars, motorbikes, cigarettes, cigars.	40
4.2 Export duties		All exported finished products produced from raw materials and intermediate components imported free of import duty under Article 17 of the Law on the Promotion and Management of Foreign Investment in the Lao P.D.R. are exempt.	Electricity: 20 percent of invoice value; coffee: 5 percent of FOB value; livestock: 5 percent of FOB value; logs: specific rates; saw wood: specific rates; semi finished wood products (lumber, parquet): 30 percent of FOB value; finished wood products (plywood): 3 percent of FOB value.	
4.3 Transit tax	Imposed on “transit” vehicles shipping traded commodities between Thailand, Vietnam, and China via the Lao P.D.R.			

Lao P.D.R.: Summary of Tax System as of End-May 2007

5. Taxes on timber and other natural resources				
5.1 Timber royalties	Levied as a fixed dollar amount per cubic meter of timber sold, both for domestic consumption and export. Timber royalties incorporate other taxes previously levied on timber products, i.e., the reforestation tax, the resource tax levied on the timber production rate, and the export duties, levied by the Customs department on exported timber.	None	Royalties established by the Ministry of Commerce and the Forestry Department of the Ministry of Agriculture. The timber royalties are set year by year.	
5.2 Taxes on natural resources	Levied in the form of specific duties on volume of mineral extraction, or ad valorem duties on sale price of mineral products.		• Ferrous metals	2 percent of sale value
			• Non-ferrous metals	2–5 percent
			• Coal	2–3 percent
			• Construction materials	KN 50 per 100m^3

Source: Ministry of Finance.