



Lao PDR Economic Monitor

Safeguarding Stability: an Ongoing Agenda

Thematic Section:

How can farmers get more for their rice and consumers pay less?

June 2018

Macroeconomics, Trade and Investment Global Practice
East Asia and Pacific Region
World Bank Group

CURRENCY EQUIVALENTS
 (Exchange Rate Effective as of June 13, 2018)
 Currency Unit = LAK (Lao kip)
 LAK 8,359 = US\$1.00

ACRONYMS AND ABBREVIATIONS

AEC	ASEAN Economic Community	MOIC	Ministry of Industry and Commerce
ASEAN	Association of Southeast Asian Nations	MW	megawatt
BOL	Bank of Lao PDR	NA	National Assembly
BOP	Balance of Payments	NEER	Nominal Effective Exchange Rate
CB	Commercial Banks	NFA	Net Foreign Assets
COD	Commercial Operation Date	NPL	Nonperforming Loan
CPI	Consumer Price Index	NSEDP	National Socio-Economic Development Plan
EAP	East Asia and Pacific	PIP	Public Investment Projects
EdL	Electricité du Lao	PPG	Public and Public Guaranteed Debt
EDL GEN	EDL Generation	PPP	Purchasing Power Parity
FAO	Food and Agriculture Organization	PV	Present Value
FDI	Foreign Direct Investment	REER	Real Effective Exchange Rate
GDP	Gross Domestic Product	SEZ	Special Economic Zones
GNI	Gross National Income	SME	Small and Medium sized Enterprises
GOL	Government of Lao PDR	SOCBs	State-owned Commercial Banks
IMF	International Monetary Fund	SOE	State-owned Enterprise
LAK	Lao kip	VAT	Value Added Tax
LNCCI	Lao National Chamber of Commerce and Industry	WBG	World Bank Group
MFI	Microfinance Institution	WEO	World Economic Outlook
MOF	Ministry of Finance	YOY	year-on-year

Regional Vice President: Victoria Kwakwa
 Country Director: Ellen A. Goldstein
 Practice Director: John Panzer
 Acting Country Manager: Viengsamay Srithirath
 Practice Manager: Deepak Mishra

ACKNOWLEDGEMENTS

The Lao PDR Economic Monitor June 2018 was prepared by a team comprising of Evgenij Najdov (Senior Country Economist), Somneuk Davading (Senior Economist), and Keomanivone Phimmahasay (Economist), Konesawang Ngardsayson (Trade Economist), Mombert Hoppe (Senior Trade Specialist) and Sergiy Zorya (Senior Agricultural Economist). Part II, on the thematic topic on, “How can farmers get more for their rice and consumers pay less?” was led by Mombert Hoppe (Senior Trade Specialist) and Sergiy Zorya (Senior Agricultural Economist) with inputs from Konesawang Ngardsayson (Trade Economist). The team worked under the guidance of Deepak Mishra (Practice Manager, Macroeconomics and Fiscal Management Global Practice), Viengsamay Srithirath (Acting Country Manager) and Shabih Ali Mohib (Program Leader). We gratefully acknowledge Souksavanh Sombounkhanh’s and Hannah Louise Mcdonald-Moniz’s support of the report’s production and dissemination.

The team would like to express its gratitude to the Government of Lao PDR, particularly the Ministry of Finance, Ministry of Planning and Investment, Ministry of Industry and Commerce, Ministry of Energy and Mines, the Bank of Lao PDR and other line ministries, and representatives from the Lao National Chamber of Commerce and a number of businesses for sharing valuable views and inputs.

The findings and interpretations expressed here are those of the authors and do not necessarily reflect the views of the World Bank Group, its Executive Directors, or the countries they represent.

The Lao PDR Economic Monitor provides updates on macroeconomic developments and sectoral issues in the country. It is produced bi-annually and distributed widely to the Government agencies, development partners, the private sector, think tanks, civil society organizations, and academia.

For comments and questions on this publication, please contact Keomanivone Phimmahasay (kphimmahasay@worldbank.org). To be included in the email distribution list, please contact Souksavanh Sombounkhanh (ssombounkhanh@worldbank.org).

Contents

Executive Summary.....	1
Recent Economic Developments and Outlook.....	1
Thematic Section: How can farmers get more for their rice and consumers pay less.....	4
Part I: Recent Economic Developments	8
Global and regional economies performed well in 2017	8
The economy continues to grow robustly, despite a slight deceleration	8
Good export performance helped narrowed the current account deficit.	13
However, the foreign reserves buffers remain low.....	16
Inflation remains low, but started to pick up reflecting recovery of the oil price.	16
Manufacturing and agriculture growth is expected to benefit the poor	17
Macroeconomic management is gradually improving, but risks remain high	18
The fiscal deficit widened in 2017 due to strong public investment and some arrears clearance.	18
Persistently high fiscal deficit resulted in high public debt level.....	21
Greater flexibility in the exchange rate helped reverse some of the earlier appreciation.	23
Credit growth continued to decelerate, despite a slight monetary loosening	24
A weakening portfolio and low profitability weigh on the banking sector.....	28
Outlook and Risks.....	30
The near-term outlook still remains broadly favorable, but risks are growing.....	32
Addressing risks to macroeconomic vulnerabilities is a key priority	36
Achieving more sustainable and stable growth will require a genuine and vibrant private sector..	37
Part II: How can farmers get more for their rice and consumers pay less	39
Summary.....	39
Rice production exceeds domestic consumption, allowing for limited exports	40
The rice value chain is highly fragmented, weakly coordinated and expensive	41
High production and transaction costs drive consumer prices.....	44
Policy Considerations.....	47
References.....	49

FIGURES

Figure 1: Global GDP growth.....	8
Figure 2: Growth fell below historical average, but remained strong.....	8
Figure 3: Growth remained robust.....	9
Figure 4: Driven largely by industry sector.....	9
Figure 5: Tourist arrivals declined in the last two years, except from non-ASEAN market.....	10
Figure 6: Tourists from non-ASEAN countries increased.....	10
Figure 7: China investment in Lao PDR is largely concentrated in the energy sector	10
Figure 8: Most firms invest in services sector	12
Figure 9: Increasing employment opportunities for local labor	12
Figure 10: Exports continued to grow fast	13
Figure 11: The share of non-resource exports increased.....	13
Figure 12: Power exports continue to increase	14
Figure 13: Rapid growth of electronic parts exports	14
Figure 14: Rising export share of emerging electronic and telecommunication products	14
Figure 15: Rubber and vegetables exports continued to grow fast in recent years	15
Figure 16: Top three products (rubber, vegetables and coffee) accounted for 50 percent of total agriculture exports	15
Figure 17: Lao PDR has low reserves adequacy (data at end-2017).....	16
Figure 18: Headline inflation remains low	17
Figure 19: Inflation, by component.....	17
Figure 20: Poverty continued falling	18
Figure 21: Addressing inequality remains a challenge	18
Figure 22: Revenues in Lao PDR lag regional and structural peers.....	19
Figure 23: Domestic revenues declined as a share of GDP	19
Figure 24: Non-wage recurrent expenditures accounted for most of the expenditure adjustment	20
Figure 25: Fiscal deficit remains high, but expected to decline in 2018	20
Figure 26: The fiscal deficit remains high compared to regional peers in 2017	20
Figure 27: Lao PDR's public debt is on the high side compared to regional economies	21
Figure 28: Financing needs and debt service are growing	21
Figure 29: Lao PDR increasingly resorts to bilateral and commercial loans ^{1/}	22
Figure 30: Lao external debt mostly comprises of US\$-denominated debt ^{2/}	22
Figure 31: The kip recently depreciated against the US dollar and Thai baht	24
Figure 32: The effective exchange rate also depreciated	24
Figure 33: The gap between official and parallel exchange rates narrows	24
Figure 34: Broad money growth was driven by growing foreign currency deposits	25
Figure 35: The kip deposit interest rate declined since introduction of an inflation linked cap in end 2015	25
Figure 36: Growing foreign currency deposits	25
Figure 37: Restriction on foreign currency lending contributed to lower credit growth.....	25
Figure 38: Share of foreign currency loans in total loans	27
Figure 39: Lending to commerce sector continued to increase while other sectors borrowing moderated	27
Figure 40: Financial Soundness Indicators	29

Figure 41: Global Real GDP growth	30
Figure 42: Regional Real GDP growth	30
Figure 43: World Commodity prices forecast	31
Figure 44: Lao PDR still lags regional peers in doing business indicators.....	33
Figure 45: Most firms find informal practices the biggest obstacles.....	33
Figure 46: The outlook on key commodities prices generally look favorable	34
Figure 47: High production costs leave farmers with low profit margin	40

BOXES

Box 1: Development of Special Economic Zones in Lao PDR.....	11
Box 2 Public Debt management in Lao PDR	23
Box 3. Global and Regional Outlook and Risks ¹	30

TABLES

Table 1. Key Macroeconomic Indicators and Projections	38
Table 2: Rice profitability: cross-country comparisons	42
Table 3: Lao PDR rice value chain: costs, prices, profits.....	45

Executive Summary

Recent Economic Developments and Outlook

1. **GDP growth slightly decelerated to 6.9 percent in 2017, but remained robust¹.** Continued expansion in power generation, manufacturing, and agriculture was offset by declining mining output, moderating in public services and weaker tourism performance. On the expenditure side, growth was driven by exports of goods and stronger than expected investment. Compared to developing East Asia and Pacific (EAP) and regional peers, growth in Lao PDR has remained robust.
2. **The economy is expected to further ease to 6.7 percent in 2018².** Growth in the power sector is expected to continue with at least additional 350MW coming on stream this year. The recent growth in manufacturing of electronic parts and components³ is expected to continue. After an unexpected drop in the previous year, tourism is gradually recovering with the number of international tourists (Europe, USA, and so on, who generate slightly more than half of the tourism revenue), and non-ASEAN countries (mostly China, Japan, Korea), who tend to have higher average spending per stay, increasing in Q1-2018. Mining is expected to remain flat this year as the production at the two large mines matures, but higher metal prices, compared to 2017, are likely to help exports. Prices of key export products are expected to preserve recent gains, being on average higher compared to 2017, except for rubber and coffee prices which could affect production. Inflation started to pick up since early this year reaching almost 2 percent in April, reflecting the increase in oil prices.
3. **Recent expansion of labor-intensive industries (agriculture, manufacturing and services) and robust remittances inflows are expected to continue to support poverty reduction.** Growth in agriculture exports in recent years—the sector that engages two-thirds of the labor force—has been due to increased participation of traditionally small-scale farming households in the production of export linked commodities, such as rice, fruits, vegetables, rubber, etc. The growth in manufacturing, albeit from a low base, is expected to have created job opportunities, reflected also in a 13 percent increase in the number of insurees registered with the social security system for private sector companies, albeit from a low base, from 88 thousand in 2015 to almost 100 thousand in 2017. Faster economic growth in Thailand is also improving the outlook for remittances.
4. **Macroeconomic vulnerabilities remain significant despite some improvement in economic management.** The fiscal consolidation effort slipped in 2017 as cuts in recurrent spending were not sufficient to offset the increase in public investment. Total revenue increased by 5 percent in nominal terms compared to a year ago, but fell short of the target and declined to 16.1 percent of GDP in 2017

¹ The 2017 GDP growth rate was recently reported by the Lao Statistic Bureau and was slightly higher compared to the World Bank's earlier estimate of 6.7 percent growth, also published in the latest World Bank Global Economic Prospects. The difference appears to be largely due to higher than expected growth rate reported for construction and trade.

² The projection was revised slightly upward reflecting better-than-expected outcome in 2017 reported by the Lao Statistics Bureau and some trends in 2017 are expected to continue in 2018.

³ Mostly parts for digital camera, parts for teleconference facility, followed by glass lenses, parts for aero planes, toys, etc.

from 16.5 percent in FY15/16⁴. Value Added Tax (VAT) collection increased due to improved administration and expanded tax base; while natural resource royalties benefited from the recovery in the copper price. On the other hand, foreign trade, even though exceeding the target level, declined compared to the last year, due to lower imports of vehicles and fuels. The lower imports also affected excise taxes collection. Adjustments in non-wage recurrent spending were not sufficient to offset the higher capital spending, including arrears clearance and the increase in foreign-loan-financed public investment (most of which is financing power generation and transmission projects). As a result, total expenditure increased to 21.4 percent of GDP in 2017 from 21 percent a year earlier, resulting in widening of the deficit to 5.3 percent of GDP in 2017 from 4.3 percent of GDP a year ago. A medium-term fiscal consolidation plan has been initiated, with the 2018 deficit expected to come down to 4.9 percent of GDP. Performance in Q1-2018 suggests that careful monitoring of fiscal developments will be required, especially on the foreign-financed capital spending, to ensure that the 2018 target is met.

5. The large deficit has resulted in public debt reaching around 61 percent of GDP in 2017. Public debt is largely external and increasingly on less concessional terms, including bond issuance to finance the budget. This makes Lao PDR increasingly vulnerable to risks of sudden exchange rate volatility, and to a lesser extent to an upward movement in external interest rates. Lower concessionality adds to the pressure on debt service, keeping the risk of debt distress high. For instance, interest payment accounted for almost 10 percent of domestic revenues in 2017 compared to 8 percent a year ago. Bringing public debt back to a sustainable path will require commitment on the fiscal consolidation plan over the medium term as well as improving public debt management. The approval of the public debt management law, which is submitted to the current National Assembly session, and the institutional arrangements being undertaken in the Ministry of Finance (MOF), is expected to strengthen MOF's role and capability to manage public debt.

6. The current account deficit narrowed in 2017 on the back of strong exports of electricity, manufacturing and agriculture products, while improved metal prices supported higher mining exports. Imports increased at a slower pace compared to exports growth, reflecting moderating domestic demand. As a result, the deficit in trade in goods and services declined despite falling tourism revenues last year. Similar trends continued in early 2018 on exports of goods, while the increased number of tourist arrivals is expected to also increase services revenues. Still, the current account deficit is projected to temporarily widen in 2018 as imports pick up in response to the construction of the Lao section of the Kunming-Singapore railway and in response to the higher oil prices. The deficit will continue to be financed by foreign direct investment and foreign borrowing. Reserves increased to around US\$1 billion at the end of 2017 and in Q1-2018, though reserves adequacy is low, with reserves covering less than 30 percent of foreign currency deposits. The authorities allowed greater flexibility in the exchange rate, with the effective exchange rate depreciating during 2017 and so far in 2018, helping reverse some of the strong appreciation in earlier years and narrowing the gap between the official and parallel market exchange rates.

7. Monetary conditions were slightly loosened near the end of 2017; however, the monetary policy transmission mechanism remains weak. The Bank of Lao PDR reduced the policy rates in November 2017; however, underdeveloped money markets, interest rate caps, dollarization and informality limit the effectiveness of such policy. Credit growth moderated to about 11 percent y/y at

⁴ As of January 1, 2017, the budget calendar changed from a fiscal year starting on October 1 and finishing on September 30) to a calendar year. This is also reflected in the references to fiscal year used in this report.

end 2017 compared to 21 percent at end 2016, and the trend continued in Q1-2018. Parts of the financial sector still face thin buffers, weak loan portfolio, and low profitability, particularly some of the state-owned commercial banks (SOCBs) and private banks.

8. **The overall medium-term outlook remains broadly favorable, subject to implementation of the announced improvements in fiscal and debt management, reforms in business environment and sustainability in the power sector.** A favorable regional outlook will continue to provide a supporting environment for foreign direct investment and exports. In the baseline, growth is projected to slightly rebound to slightly below 7 percent during 2019 and 2020 as an additional 2,200MW of installed capacity comes on stream during this period. Strong exports are expected to offset the impact from the gradual fiscal consolidation. The contribution from the mining sector is expected to gradually decline as current projects reach their mine life. Outside of the resource sectors, greater regional integration and improvements in the business environment expected from the implementation of the Government Order No.02⁵ to improve the ease of doing business, open up opportunities for agriculture, agro-processing, tourism, and trade as well as in manufacturing, which could promote opportunity for Lao PDR to become part of regional value chains. These sectors have significant potential to create jobs and reduce poverty further.

9. **The fiscal deficit is expected to gradually decline while the external deficit will temporary widen.** The medium-term fiscal plan envisages the fiscal deficit to decline from 5.3 percent in 2017 to 4.9 percent in 2018 and further to around 3 percent by 2020. The consolidation is underpinned by strengthened revenue administration, step-wise increase in excise tax rates, improved tax-payer services and modernization as well as continued control on spending and slowdown in public recruitment. These measures are expected to contain the deficit and public debt, which is critical in order to lower the risk of debt distress. The current account deficit is likely to widen in this year reflecting larger imports due to the accelerated construction of the Lao PDR section of the Kunming-Singapore railway project and the continued rise in oil prices. It is expected to decline in the medium term as the construction completes and major power projects start operation and begin to export.

10. **The outlook, however, is subject to several downside risks.** Steeper-than-expected slowdown in China or a reversal in recent trends in Thailand could depress demand for Lao exports and put pressure on reserves and macroeconomic stability. Growth outlook weakened in Q1-2018 in advanced economies and had spillover effects on some developing economies through moderation in global trade and investment flows. Faster tightening of global financial conditions or a sudden rise in financial market volatility could affect investment inflows, which could cause exchange rate volatility and undermine growth prospects. Such movement could lead to higher debt service costs as almost 20 percent of Lao PDR's external debt is under variable interest rates. The rapidly expanding power sector could be affected in case of lower external demand which will result in a build-up of significant liabilities for the public utility which in turn could threaten the sector sustainability and the government budget. Reversal of the agricultural and metal prices increase could also affect prospects for growth and fiscal revenues while continued oil price surge could hinder growth, impact fiscal revenue and push up inflation. Domestically, fiscal slippage, continued low reserves buffers, and failure to deal with weaknesses in the financial sector could threaten macroeconomic stability, with a disproportionate

⁵ Prime Minister Order NO. 02, dated 1 February 2018 on Order on Improvement of Regulations and Coordination Mechanism on Doing Business in Lao PDR

impact on the poor and on future growth prospects. The recent increase in the minimum wage could affect prospects for growth in labor-intensive industries (manufacturing, agriculture, tourism) in case it is not matched with productivity improvements.

11. While there are some improvements, addressing macroeconomic risks remains a priority.

Taking bolder steps on the fiscal consolidation plan and fiscal discipline is of utmost importance at this stage. While the budget plan for 2018 projects some consolidation, budget execution data for Q1-2018 suggests the need to carefully monitor investment and to identify savings, where possible, in order meet the expenditure and fiscal target. Higher revenue collection will benefit from improved tax administration, expanding the tax base (lowering exemptions, closing loopholes to address international taxation issues and tax avoidance, introducing environment tax, property tax) including setting up up-to-date tax payer registries, modernizing revenue collection methods. The on-going revision of laws (on taxes, value added tax, excise and income taxes) is a good opportunity to address a number of these issues. Recent efforts to put public employment under control and improve productivity are welcomed. Importantly, public investment, especially loan-financed, should be carefully prioritized and scaled-back. This is particularly important in the power sector, where continued debt accumulation has worsened the financial health of the public utilities which could add significant liabilities to the budget, if well-paying market for power is not secured. The ongoing efforts to strengthen the public debt management legal framework and to reorganize the institutional setup can improve public debt management and reduce risks. The authorities are exploring options for strengthening the balance sheets, including dealing with non-performing loans, of weaker banks, including some state-owned commercial banks, and are also in the process of revising the key parts of the legal framework. This provides an opportunity to take into account good practices in important areas, such as objectives and instruments of the central bank, relations with market participants, including the government, supervision authority, and so forth.

12. Achieving stable and long-term growth will require a vibrant private sector development.

Decelerating GDP growth in recent years is indicative of the limitations of a growth pattern that relies excessively on use of natural resources and public spending. Promoting private sector development would require addressing informality, and key constraints to doing businesses, including starting a business, paying taxes and dealing with licences. In response, a Prime Minister Order on improvement of regulations and coordination mechanism on Doing Business in Lao PDR was issued in February 2018 instructing line ministries to work on reforms related to doing business indicators. Prioritizing a functional and efficient “one-stop shop” for business registration, improving consistency and establishing a level playing field for regulation implementation, strengthening the tax system for consistency and transparency are some of the critical pre-condition for the private sector growth. Investing in human capital and infrastructure services will help improve productivity and competitiveness of firms.

[Thematic Section: How can farmers get more for their rice and consumers pay less.](#)

13. Lao PDR agriculture sector is still largely subsistence, despite some evidence recently of commercialization and diversification.

Agriculture has traditionally concentrated on rice, but improved commodity prices and external demand has promoted commercialization and export of other non-rice crops such as vegetables, rubber, fruits, cassava over the past decade. Still, rice is and will remain dominant and critical for the majority of the population. On the consumption side, glutinous rice constitutes about 70 percent of households’ caloric and protein intake. Farmers generally complain about low paddy prices while consumers about high rice prices. Indeed, rice prices in Vientiane Capital

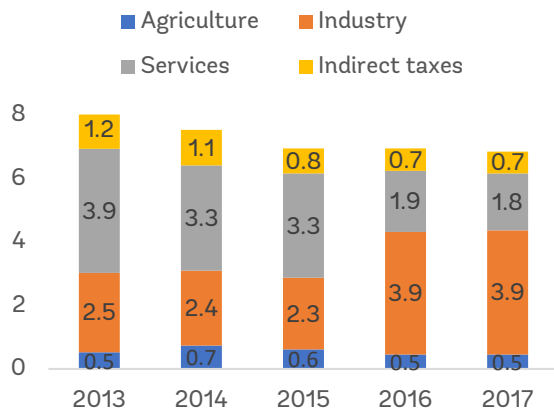
are among the highest in Asia. This section, which draws from a forthcoming study on understanding the linkages in the agriculture value chain, explores factors driving up rice prices in Lao PDR, and the cost-build-up along the value chain from production in Khammouane province to retail stores in Vientiane Capital in 2017.

14. High cost of paddy production and operational inefficiencies among multiple players in the value chain are responsible for high consumer rice prices. The study finds that Lao farmers receive relatively high farm-gate price, yet high production cost eats their profits. The high production costs are pertained to low productivity and quality management at the farm and immediate post-farm levels. Prices are further escalated along the value chain and, as a consequence, even though farm-gate prices are high, their share in wholesale and retail prices in Lao PDR is the lowest among its peers. As a result, supply responses by farmers to changes in consumer prices are dampened. In addition, Lao PDR's rice sector is held back by: i) a fragmented milling sector, dominated by small operators with old technology; ii) an overall market system that fails to provide incentives for product quality; and iii) a lack of significant consumer class with high purchasing power and larger consumer markets who could foster consolidation of wholesale and retail sectors and reduce their costs.

15. These constraints are largely structural and they require: (i) facilitating value chain linkages between farmers and millers through productive partnerships; (ii) enhancing access to finance of farmers and millers; and (iii) improving quantity and quality of public services critical to reduce the currently high production costs and enhance commercialization, e.g., seed, applied research, mechanization, cooperatives, and good agricultural practices. Reduction of farm production costs appears to be the most important challenge and opportunity at this point of time for Lao PDR.

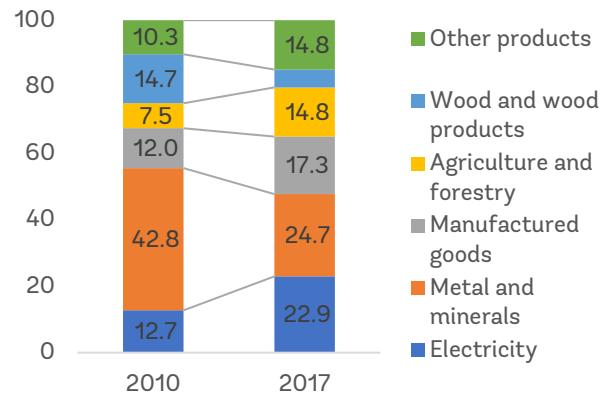
The June 2018 Lao Economic Monitor in figures

Growth continue to moderate, but remains strong
(percent y/y)



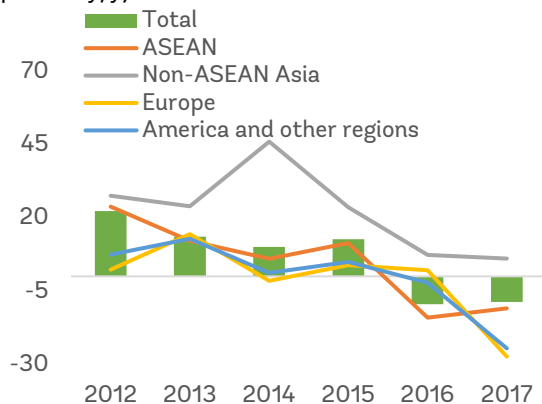
Source: Lao Statistics Bureau and WB staff estimate

Electricity, manufacturing, and agriculture exports continue to grow
(percent annual average)



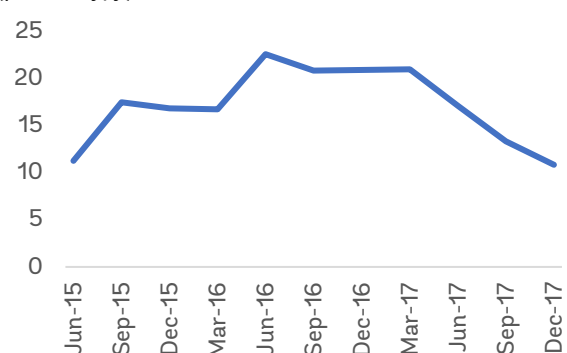
Source: WB staff calculation based on COMTRADE data

But tourism weakened
(percent y/y)



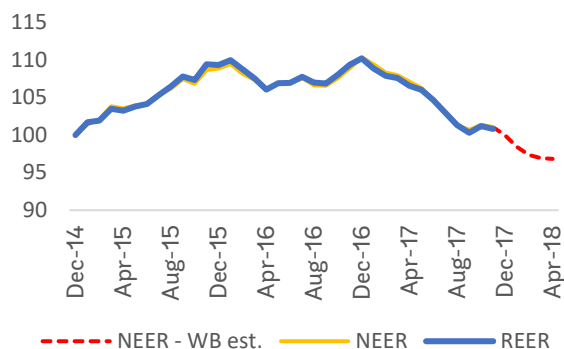
Source: Ministry of Information, Culture and Tourism

Credit growth has moderated
(percent y/y)

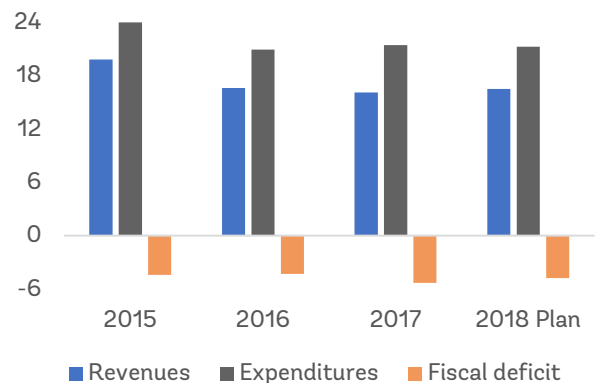


Source: Bank of Lao PDR

Greater flexibility in the exchange rate helped reverse some of the earlier appreciation
(Index Dec 2007 = 100)

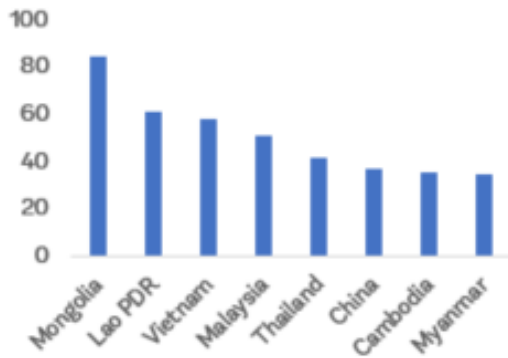


Fiscal balance deteriorated in 2017, but the 2018 plan foresees an improvement
(percent of GDP)



Source: <http://bruegel.org/> and WB staff estimates

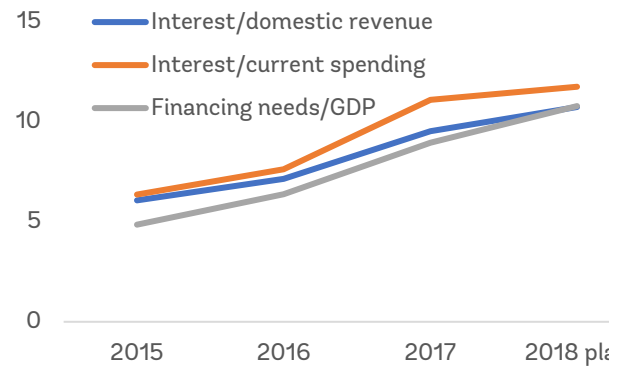
Public debt is on the high side compared to regional peers (end-2017)
(percent of GDP)



Source: WB staff inputs

Source: Ministry of Finance

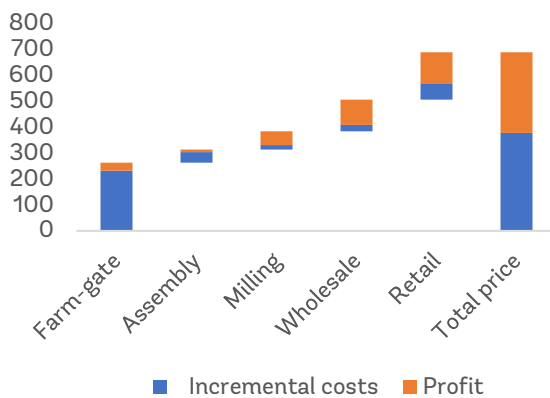
Resulting in higher debt burden
(percent)



Source: WB staff calculation based on BOL data

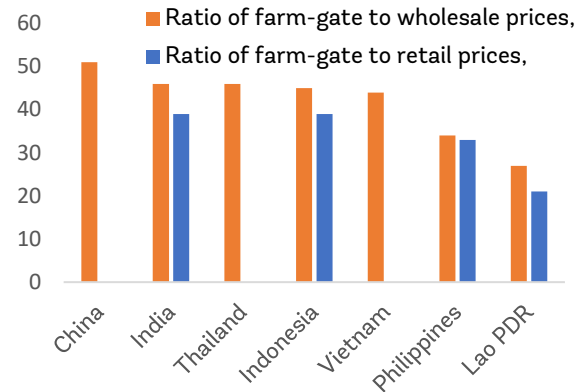
Rice prices in Lao PDR: Farmers get little, consumers pay a lot

Production costs at the farm-level explain half of the consumer price of rice
(US\$/tons)



Source: World Bank report (2018)

Despite high farm-gate price, Lao farmers do not benefit from high consumer prices
(ratio of farm-gate price to distribution prices)



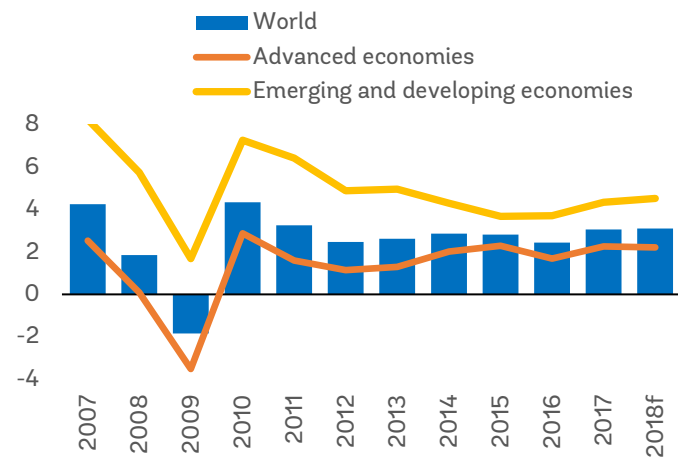
Source: World Bank report (2018)

Part I: Recent Economic Developments

Global and regional economies performed well in 2017

1. **The global and regional economy grew faster than expected in 2017.** Strong investment drove growth in advanced economies. In the meantime, recovery in commodity exports and continued robust growth in commodity importers resulted in stronger push for emerging market and developing economies. Such development fostered stronger trade and manufacturing globally, as well as in developing East Asia and Pacific (EAP) (Figure 1). China, Thailand and Vietnam, Lao PDR's main trading partners, recorded stronger economic growth than initially expected. At the same time, few economies used this to strengthen fiscal buffers while regional financial markets generally remained buoyant.

Figure 1: Global GDP growth
(Percent, y/y)

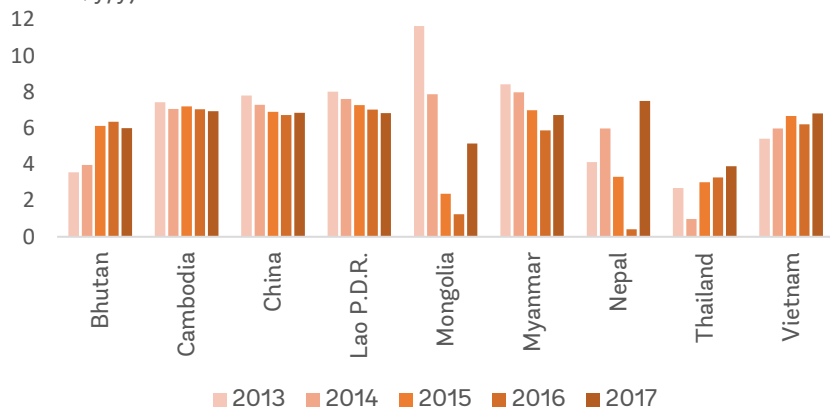


Source: EAP Economic Update April 2018

The economy continues to grow robustly, despite a slight deceleration

2. **Economic activity remained strong, with the authorities estimating the GDP growth rate at 6.9 percent in 2017⁶.** While 2017 represents the fourth year of gradual moderation of GDP growth rates, economic expansion remains robust and on par with the best performing regional peers (Figure 2). On the production side, growth was driven by strong performance of

Figure 2: Growth fell below historical average, but remained strong
(Percent, y/y)



Source: IMF World Economic Outlook April 2018

industry (Figure 3, Figure 4), especially expansion in electricity generation and manufacturing, as well as robust construction. Industrial output was estimated to increase by 11.6 percent in 2017, contributing around 4.2 percentage points of the 6.9 percent growth. In that, the power sector

⁶ This estimate was recently reported by the Lao Statistic Bureau and is slightly higher compared to the World Bank's earlier estimate of 6.7 percent growth, also published in the latest World Bank Global Economic Prospects. The difference appears to be largely due to higher than expected growth rate reported for construction and trade.

contributed 2.5 percentage points as new generation capacity of almost 300MW came on stream, which is also reflected in high exports to Thailand. Construction added 1.3 percentage point supported by the on-going construction of pipeline power-sector projects, as well as infrastructure projects, including the Lao section of the Kunming-Singapore railway. Manufacturing added 0.9 percentage points, partly supported by emerging electronic parts and components⁷, particularly from the Special Economic Zones, as well as increased cement production resulting from recent new investments, which appears to be increasingly meeting domestic demand, especially outside of the power sector. Lao PDR also started to export cement to Thailand, despite from a very low base. Agriculture performance remained mixed (adding only 0.6 percentage points to GDP growth); with stronger output in some sectors (rubber, vegetables and other crops) in response to better agriculture commodity prices. This offset stagnant rice production at 4.1 tons. Rice production declined slightly in 2017 due to low productivity in dry season rice as well as competitiveness issues (see Thematic Note on rice value chain). Banana harvests also declined, due to tighter control on production after reported misuse of dangerous chemicals.

Figure 3: Growth remained robust
(Percent, y/y)

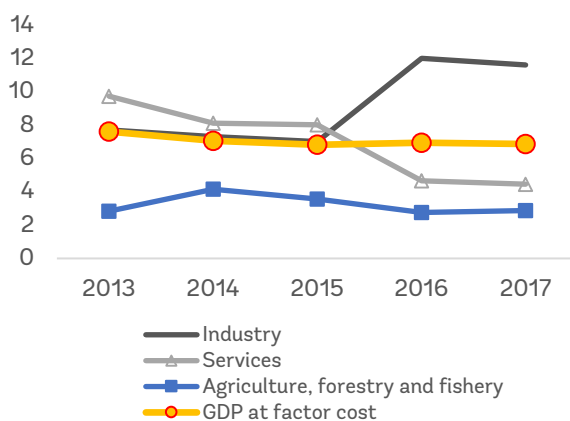
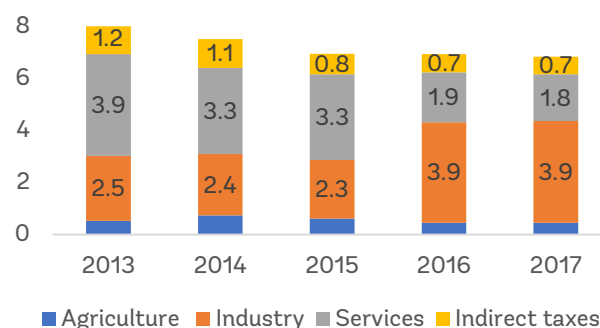


Figure 4: Driven largely by industry sector
(contribution to factor cost, percentage point)



Source: Lao Statistics Bureau and WB staff estimate

3. Growth in the services sector moderated in 2017 due to stronger control on public consumption as well as weaker tourism performance. Retail trade as well as insurance continued to expand as the number of companies increased. However, the contribution from public sectors (education, health, administration) moderated while financial services also slowed down due to continued moderation in credit growth and low profitability of the sector. In addition, the total tourist arrivals fell by 9 percent in 2017, contrary to trends observed in neighboring countries. The decline was driven by a drop in visitors from most neighboring countries and several western high-end markets. As a result, the revenue from tourism declined by 10 percent year-over-year (y/y) to US\$650 million in 2017, from US\$724 million a year ago. Still, taking a longer-term perspective, non-ASEAN travelers, particularly from China and South Korea, have doubled between 2013 and 2017, supported by more intercountry connections and direct flights between Lao PDR and cities in those two countries as well as tourism marketing campaigns by the authorities.

⁷ Mostly parts for digital camera, parts for teleconference facility, followed by glass lenses, parts for aero planes, toys, etc.

Figure 5: Tourist arrivals declined in the last two years, except from non-ASEAN market (percent change)

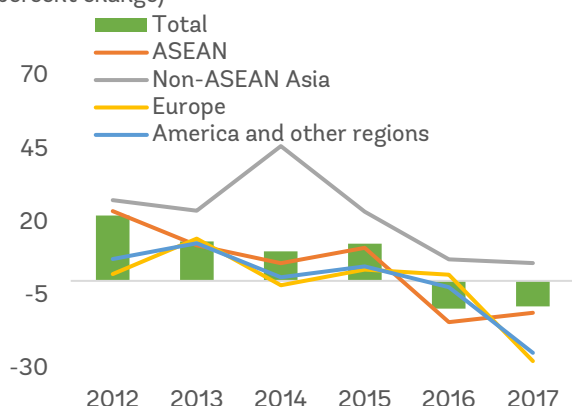
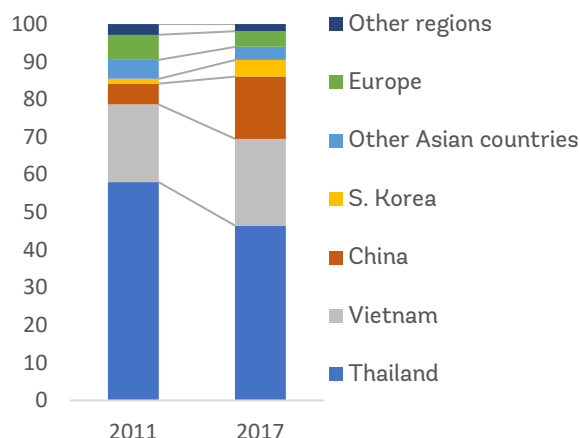


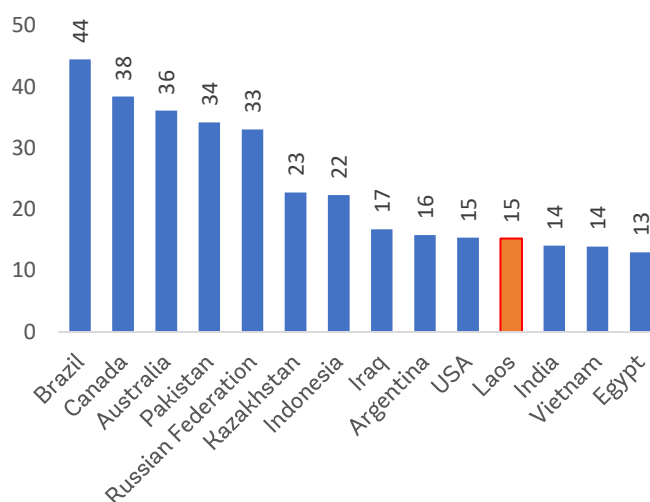
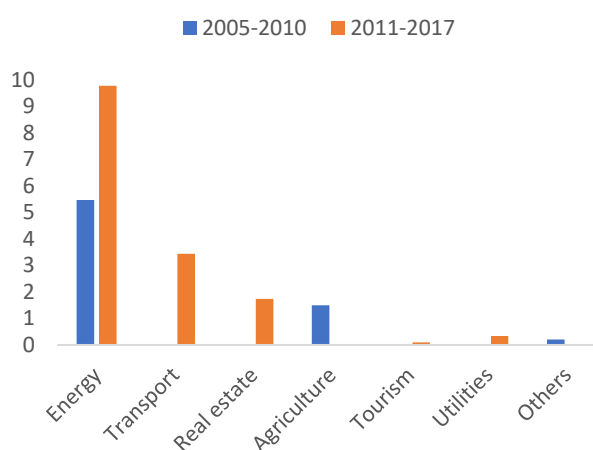
Figure 6: Tourists from non-ASEAN countries increased (percent share)



Source: Ministry of Information, Culture and Tourism

4. **On the expenditure side, stronger-than-expected investment and exports have led the economic growth.** Foreign direct investment rose by almost 70 percent in 2017 after contracting by 13 percent in 2016. China accounts for almost 80 percent of foreign investment inflows, followed by Thailand. The ongoing investment in power projects and the start of construction works on the Lao PDR section of the Kunming – Singapore railway played an important part in the rebound. Investments in the power sector remain robust, although moderating as construction of few major projects was completed. Most recently, investments in the transmission network have expanded. Accumulated Chinese investment in the energy sector in Lao DPR reached US\$15 billion by 2017, placing Lao PDR among the top 15 countries for Chinese outward investment in energy globally (Figure 7). Net investment inflows from Thailand also rose by 24 percent in 2017.

Figure 7: China investment in Lao PDR is largely concentrated in the energy sector (US\$ Billion)



Source: China Global Investment Tracker
<http://www.aei.org/china-global-investment-tracker/>

5. Investments were also registered in construction of new cement factories, production facilities in the Special Economic Zones (SEZs) as well as commercial real estate (shopping malls, commercial buildings etc.). Two SEZs, Savanh-Seno and VITA Park, have had some success in attracting companies helping increase investment and exports, especially of manufactured goods (see brief summary of SEZ development in Lao PDR in Box 1). However, a difficult business environment outside of the SEZs continued to hinder investment expansion in the non-resource sectors. Firms find informality, lack of skilled labor, long and cumbersome procedures among the top constraints to doing business in Lao PDR. Domestic private investment also faced a challenge with slowdown in credit growth.

6. Consumption is estimated to have remained stable last year. Public consumption is contained as the 7 percent increase in wages was offset by tight control on public recruitment as well as non-wage recurrent spending in response to the weaker-than-expected revenue performance. In addition, the continued slowdown in credit also hampered domestic consumption. On the other hand, growing employment opportunities in manufacturing and exports-led agriculture may have contributed to higher disposable incomes, while a stronger recovery in Thailand improving the prospects for remittances.

Box 1: Development of Special Economic Zones in Lao PDR

Lao PDR started promoting the development of Special Economic Zones in an effort to promote foreign investment and support growth since the early 2000s. However, the lack of necessary infrastructure and skilled labor contributed to the slow progress in their development until in the late 2000s. The legal framework allows for two types of investment in SEZs: 1) a general investment regime and 2) promoted. Under general investment, developers and investors can invest in all sectors except illegal trade, drug arms and hazardous chemicals. This type of investment follows the regular investment incentives. The promotional investment includes electronic industries, scientific and new technological researches in the production, tourism infrastructure, organic and agro-processing for exports, other services such as schools, hospitals, etc.

There are 12 registered zones across the country, of which five in Vientiane capital. The focus of each zone reportedly varies from export processing to tourism and logistic services and combination, depending on the potential of the areas and objective of development. There are about 350 business units registered in the zones to date, more than half are from China (181 businesses), followed by Thailand (38), Japan (30), etc. Some of the investors moved parts of their production facilities to Lao PDR. Pull factors such as political stability and low labor costs have played a role in attracting new investments, in addition to an improved business environment, including faster business registration, licensing, taxation and other procedures. New investments in 2017, almost half of investors are in services, followed by trading and industrial sectors. As a result, the reported cumulated investment significantly increased by 30 percent from US\$1.2 billion in 2015 to US\$1.8 billion in 2017.

The SEZs help generate jobs and income, with potential to increase opportunities for local workers. Total employment (foreign and local labour) in the zones was reported to increase by 60 percent, from 11 thousand workers in 2014 to about 17 thousand in 2017. Lao workers account for almost half of total employment in the zones. However, the two export processing zones, Savanh-Seno and VITA park, accounts for nearly 80 percent of total number of Lao workers. The existence of such zones and progress appears to provide options for local workers in provinces where labor migration across the border is common.

Development progress and performance SEZs varies. Exports from all the zones more than doubled to US\$350 million between 2014-2017, mostly digital camera parts, telecom equipment export to Thailand from

the two zones. This makes electronic parts exports become the second largest export to Thailand after electricity and illustrate that Lao PDR, under facilitating conditions, could become part of regional value chain. Having a one-stop service in the zones is reported to facilitate investment and trade flows. The two zones report using 5 days for application approvals compared to 16 days for obtaining an operating license outside of the zones, according to the enterprise surveys. However, contribution to fiscal revenue from the zones has been modest. While the revenue contribution to the budget doubled to about US\$20 million between 2015-2017, it still represents less than 1 percent of domestic revenues due to a combination of factors including the fiscal incentives and exemptions provided in the zones, many zones are still at an early stage of infrastructure development with only a few zones have started production and exports. In addition, a lack of representation of finance sector in the One Stop Service Unit prevents effective identification tax base and tax collection.

Despite some success stories, development of SEZs still faces challenges. First, the relatively small population does limit the ability to expand significantly into labor-intensive industries. Against this background, Lao PDR may want to target labor-intensive sectors that require certain niche skills. But, firms in the SEZs, and outside of the zones alike, find lack of skilled labor a critical constraint. Some firms face less difficulty in getting workers. Firms need to invest on-job training. According to the 2016 enterprise survey, 13 percent of firms reported the lack of skilled workforce as the biggest obstacles compared to 7.3 percent in EAP on average and 5.4 percent on average among lower middle-income countries. Furthermore, as the number of companies in the zones expand, they would require more reliable and more efficient trade infrastructure.

Figure 8: Most firms invest in services sector
(percent of firms in each sector)

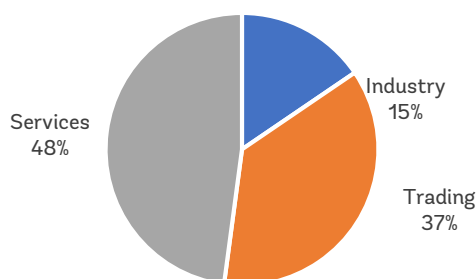
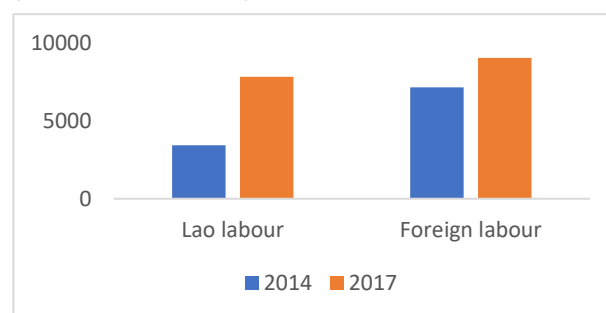


Figure 9: Increasing employment opportunities for local labor
(number of workers)



Source: Special Economic Zones Office, MPI.

7. Economic performance in early 2018 has been mixed. On the production side, growth in industry continues to be driven by the power sector also resulted in a 70 percent increase in reported volume exports to Thailand in the same period. The trends in manufacturing sector from previous years appear to have continued so far in Q1-2018 with electronic parts and components export increasing by 13 percent in the first four months. The work on the railway is expected to be the main push for construction this year compensating for the completion of some power projects. Mining output at the two large mines declined in Q1-2018 with copper production down by 8 percent and gold down by 24 percent due to lower ore grade and maturity of the major mines. However, continued recovery of the copper price is expected to help increase the nominal value of exports. Output in some agriculture produce slightly weakened in Q1-2018 (for example, rubber, which is mainly exported to China and vegetable and roots, which are largely sold to Thailand) partly in response to lower commodity prices this year. The service sector showed some sign of recovery. Tourist arrivals increased by 2.1 percent in Q1-2018, compared to the same period a year ago, partly promoted by the Visit Laos Year campaign. The number of arrivals from non-ASEAN countries, Europe, and America, who tend to spend more per stay, rebounded in Q1-2018 by 29, 9, and 43 percent y/y, respectively. These will partly compensate for

the continued tight control on public spending on goods and services and continued deceleration of credit growth in Q1-2018.

8. On the expenditure side, exports performed well in early 2018, while domestic demand may be also picking up. Strong foreign investment inflows last year are expected to support investment this year as well. Also, public investment rose significantly in Q1-2018 due to a significant increase in public investment in the power sector. In the absence of high-frequency data on consumption, electricity consumption suggests that total energy consumption slightly moderated in Q1-2018 at 5 percent y/y compared to 7 percent last year. However, rebound in vehicles imports, improved tax collection and higher oil import volumes (by 5 percent y/y in the first four months of 2018) suggest some pick up in consumption this year.

Good export performance helped narrowed the current account deficit.

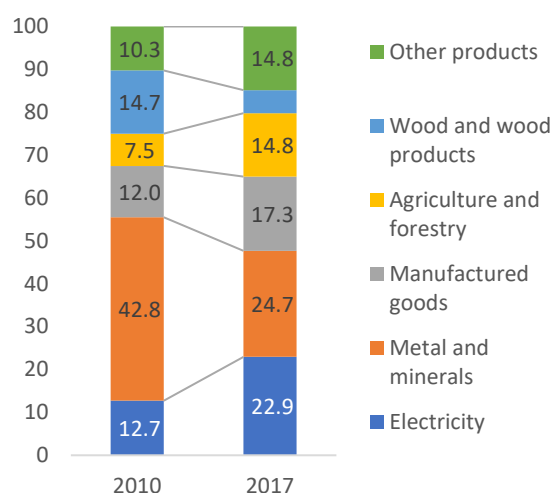
9. Exports continued to grow, driven by higher world commodity prices, a buoyant regional demand as well as some change in Lao PDR's export structure. Lao PDR exports are estimated to have reached US\$5.1 billion in 2017, up from US\$4.6 billion in 2016, boosted by electricity, manufacturing and agriculture exports. Power exports to Thailand rose by 20 percent from US\$1 billion in 2016 to almost 1.2 billion last year with the share of electricity exports increasing to 23 percent of total exports in 2017 compared to 13 percent in 2010 (Figure 12). Mining exports also increased to US\$1.2 billion last year from around US\$1 billion in 2016 due to copper price effect despite lower output. Manufactured goods climbed from 12 percent to 17 percent of total exports, whereas agriculture exports increased from 7 percent to 15 percent during the same period (Figure 11). This suggests signs of growing diversification recently.

Figure 10: Exports continued to grow fast
(Billion US\$)



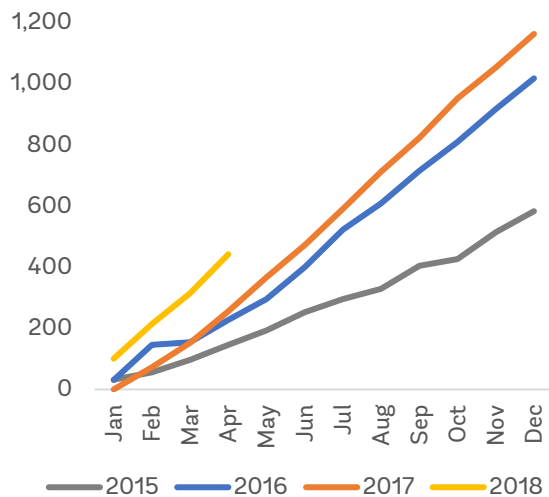
Source: Lao authorities (MPI/BOL), UNCOMTRADE and WB staff estimate

Figure 11: The share of non-resource exports increased
(percent share)



Source: Lao authorities (MPI/BOL), UNCOMTRADE and WB staff estimate

Figure 12: Power exports continue to increase
(US\$ Million)



Source: Thailand Ministry of Commerce

10. Recent investment in SEZs have facilitated manufacturing exports outside of garments. Total value of manufacturing exports soared nearly three folds in the last five years from about US\$270 million in 2013 to US\$780 million in 2017 (Figure 13) driven mainly by exports of electronics, telecommunication and electrical equipment from SEZs (Savanh-SENO and VITA Park) and food and beverages. While the manufacturing sector was traditionally concentrated around garment and food and beverage processing; electrical and electronic parts now account for around half of total manufacturing exports in 2017. This shows that Lao PDR, under an adequate business environment, can efficiently participate in regional value chain. Addressing constraints to doing business outside of the zones can create potential for further exports.

Figure 13: Rapid growth of electronic parts exports
(million US\$)

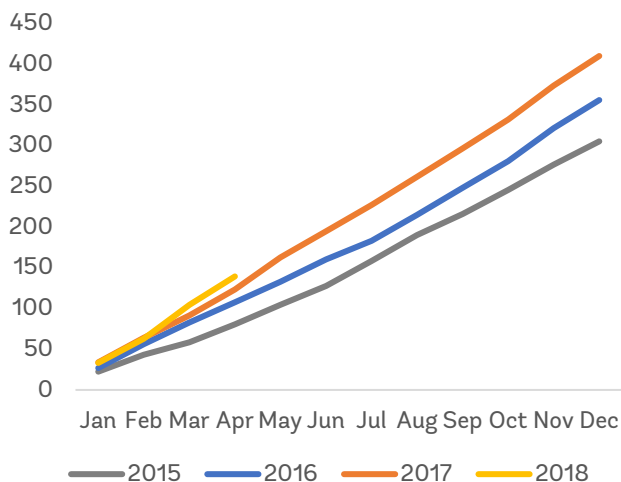
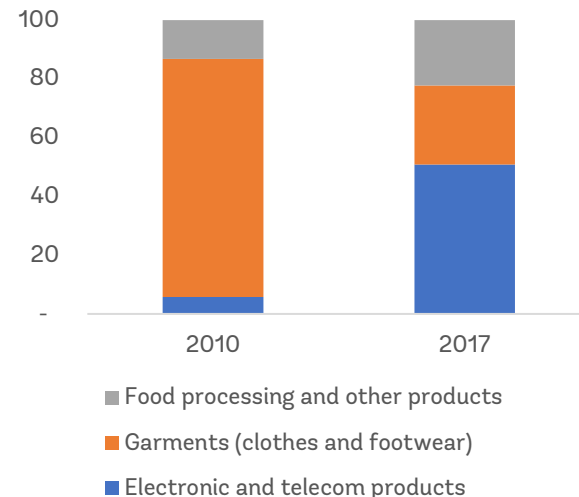


Figure 14: Rising export share of emerging electronic and telecommunication products
(share, percent of total manufacturing exports)



Source: Lao customs data, UNCOMTRADE, mirror statistics from Lao PDR major trading partners and WB staff estimate

11. Agriculture exports also performed well in 2017 supported by higher commodity prices and increased production of rubber and commercial cash crops, such as vegetables and fruits, coffee, sugar, cereal, cassava and other products. Total exports of the sector increased remarkably, from US\$160 million in 2010 to US\$750 million in 2017 (Figure 15). The top three export items (rubber, fruits and vegetables and coffee) accounted for 50 percent of total agriculture exports in 2017, owing also to some recovery in prices (Figure 16).

12. Export performance in Q1-2018 continued to do well. Exports to the main three destinations (China, Thailand and Vietnam), grew at 40 percent y/y in Q1-2018 reaching US\$1.3 billion. Electricity exports to Thailand increased to US\$315 million in Q1-2018 from US\$150 million in Q1-2017, while exports of electronic and electrical parts rose from US\$90 million to US\$104 million in the same period. Agriculture exports appeared to have stagnated as rubber export to China and vegetable export to Thailand moderated, partly due to falling rubber and coffee prices this year. In addition, exports of banana to China is also affected by tighter control on dangerous chemical use and suspension of new plantations. Services exports may slightly recover this year, if the increase in tourist arrivals registered in the first quarter of 2018 is extended..

Figure 15: Rubber and vegetables exports continued to grow fast in recent years (million US\$)

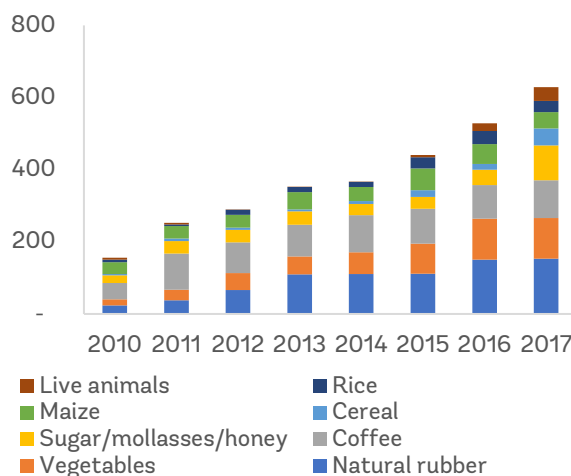
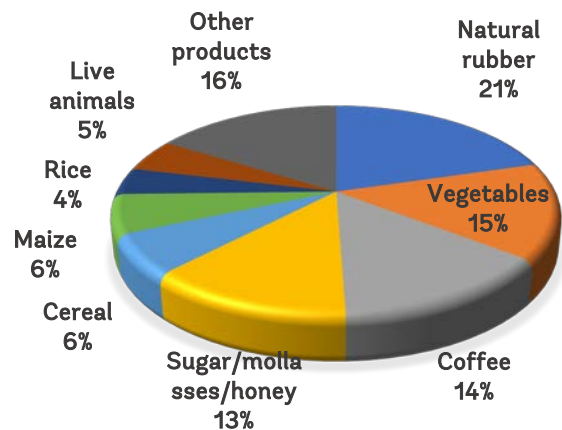


Figure 16: Top three products (rubber, vegetables and coffee) accounted for 50 percent of total agriculture exports (share, percent of total)



Source: Lao customs data, UNCOMTRADE, mirror statistics from Lao PDR major trading partners and WB staff estimate

13. The current account deficit narrowed in 2017 as an improving trade and transfers accounts helped off-set weaker services and income balances. While merchandise exports increased by 10 percent y/y in 2017, imports grew at a slower pace, at 7 percent y/y in 2017, reflecting slightly moderating domestic demand but also some import substitutions (for example, in cement production). Gradually recovering oil prices resulted in a higher oil import bill despite lower oil volumes imported last year, consistent with decelerating domestic demand. Vehicle imports also declined while consumption goods and intermediate products increased, some of which is related to the railway project. As a result, merchandise trade deficit fell last year; however, this was partly offset the by a fall in tourism revenue following the lower number of tourist arrivals. Net income outflows also rose due to higher profit repatriation as well as interest payments on foreign loans. At the same time, the transfers account improved as a result of higher budgetary grants and estimated remittances as the Thai economy accelerated. As a result, the current account deficit is estimated to have narrowed to 11.4 percent of

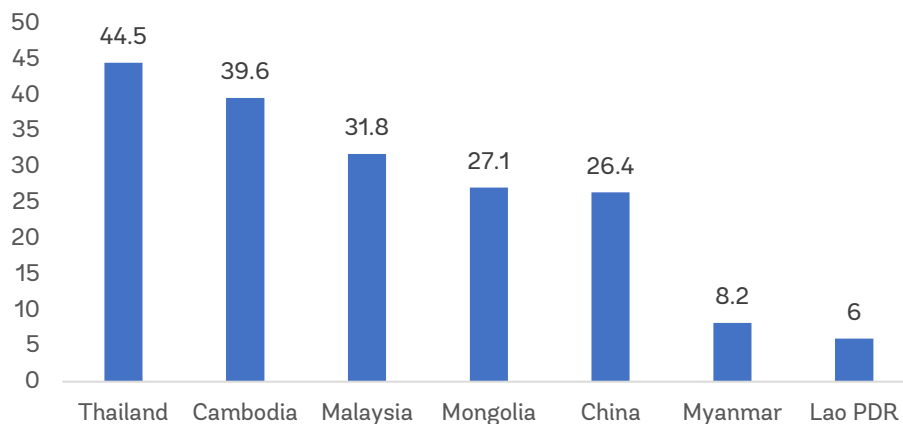
GDP in 2017, from 13 percent of GDP a year ago. On the financing side, FDI inflows recovered strongly (mostly on the account of the railway projects), and together with higher government borrowing financed the current account and allowed for some reserve accumulation.

However, the foreign reserves buffers remain low.

14. Despite reserves increasing in 2017, they provide a limited buffer in case of disturbances. Reserves increased to US\$ 1 billion in December 2017 and have remained largely stable early in 2018, partly due to the Government bond issuance in October last year. Nevertheless, despite this temporary increase, reserves buffer is still considered thin by most indicators. Reserves cover less than 2 months of imports, less than 30 percent of foreign currency deposits and 15 percent of broad money and only 6 percent of GDP, all significantly below regional peers (Figure 17).

Figure 17: Lao PDR has low reserves adequacy (data at end-2017)

(percent of GDP)

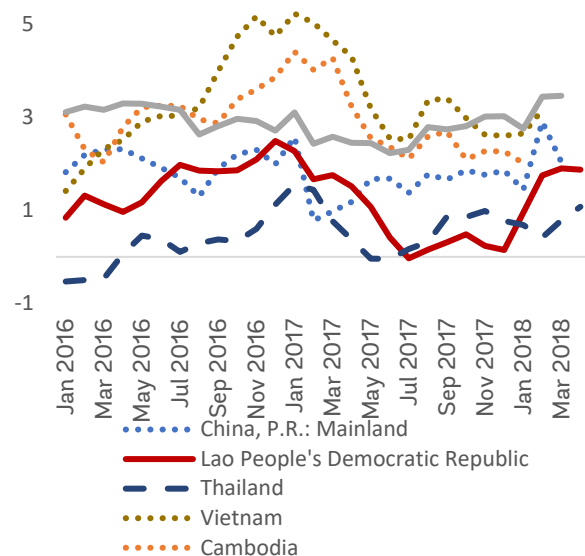


Source: IMF, WB staff inputs

Inflation remains low, but started to pick up reflecting recovery of the oil price.

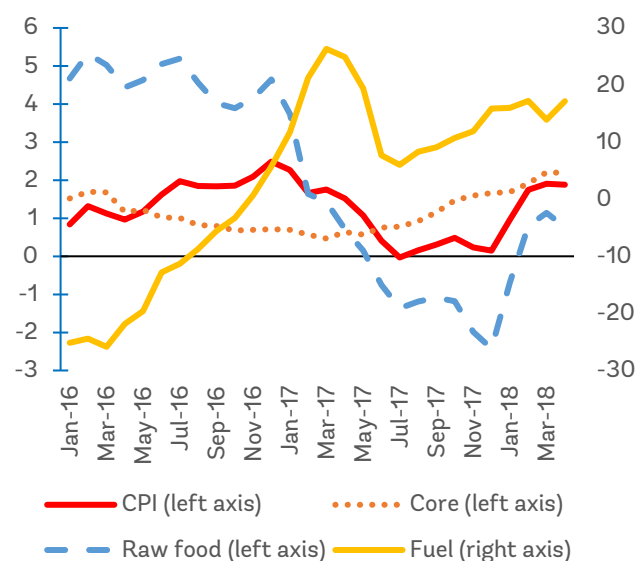
15. The gradual recovery of oil prices and low food inflation keep inflation pressures low. The headline inflation started to rebound since the end of last year but still remained below 2 percent (y/y) in April. In general, despite the pick up, inflation remains low in both Lao PDR as well key trading partners (Figure 18). Food inflation remained below 1 percent (y/y) in April due to well-stocked food markets and administered prices of key staples, including rice and meat. On the other hand, fuel price continued to rise by 17 percent y/y in the same period, following movements in international oil prices (Figure 19). Retail fuel prices are likely to continue being affected by upward movements in the global oil prices, although not by a full scale due to price adjustment mechanism. The authorities may consider revising the pricing mechanism to avoid such large fluctuations in retail fuel prices. This will help consumers when prices are increasing, but also support the budget when prices are declining. The depreciation of the Lao kip against Thai baht by 11.3 percent in April also added to higher prices for imported products such as food items, households items, etc. as most of the consumption goods are imported from Thailand. Core inflation slightly picked up to 2.2 percent (y/y) in April compared to below one percent a year ago partly due to higher prices for household furnishing, clothing and footwear, as well as restaurants and hotels. Overall inflation in 2018 is likely to pick up further reflecting the expected rise in the oil prices.

Figure 18: Headline inflation remains low
(percent y/y)



Source: LSB and IMF IFS database

Figure 19: Inflation, by component
(percent y/y)



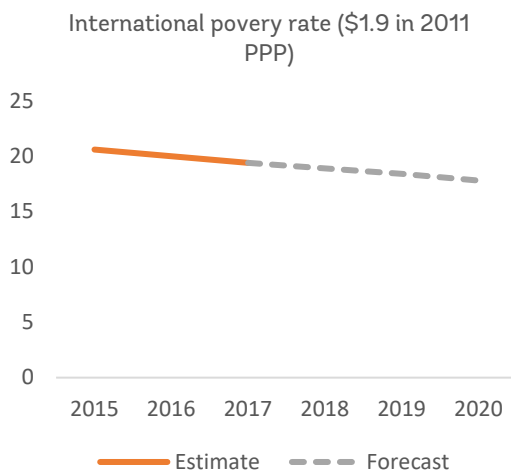
Manufacturing and agriculture growth is expected to benefit the poor

16. Past growth patterns, where growth was largely driven by natural resources, had a limited impact on poverty reduction and job creation. Data from the 2007 and 2012 Lao Expenditure and Consumption Surveys (LECS) show that consumption growth was modest and that the worse-off benefited less. In fact, the consumption of the bottom 40 percent grew by only 1.5 percent, compared to almost 3 percent in the Philippines and almost 5 percent in Vietnam and Thailand. Poverty in Lao PDR, based on the international poverty rate of US\$1.9 in 2011 PPP fell to 23 percent in 2012. Therefore, opportunities in labor intensive industries such as agriculture, manufacturing and services coupled with redistribution of benefits from resources will be key to improving consumption and making the growth process more inclusive.

17. The shifting sources of growth could be strengthening the link with poverty reduction. Based on earlier trends patterns, the poverty rate is estimated to have declined to about 19 percent by 2017. However, recent developments in the labor market are more encouraging, with improving agriculture commercialization and manufacturing activities expected to have facilitated a stronger link between growth and poverty reduction. Growth in agriculture exports, the sector that engages two thirds of labor force, reflects increased participation of traditionally small-scale farming households in more commercialization. For instance, the recent increase in rubber and vegetable yields together with improved commodity prices may have generated more income for farmers and laborer. In addition, the growth in manufacturing sub-sectors, albeit from a low basis, have created more job opportunities. For instance, the expansion of a few export oriented Special Economic Zones (SEZ) created almost 8,000 jobs for local workers in 2017 compared to only 3,400 in 2014, pointing to better economic opportunities and some improvements in household welfare. The increase in the number of insured in the social security system for private sector enterprises by 13 percent, albeit from a low base, from 88 thousand

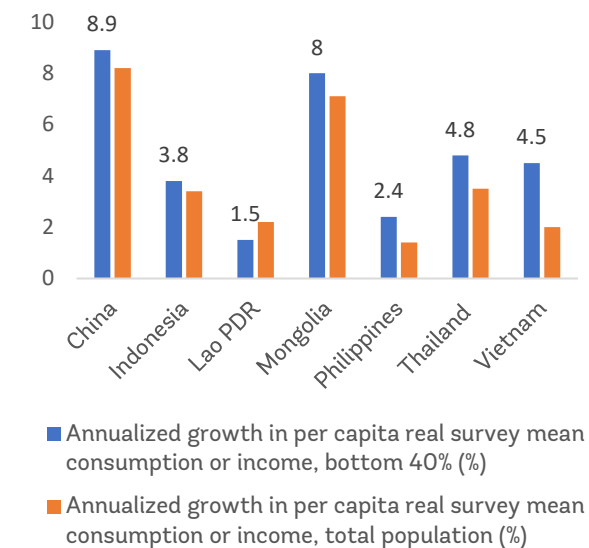
in 2015 to almost 100 thousand in 2017 also signals increasing participation of labor in more formal paid jobs. The 2018 Lao Expenditure and Consumption Survey was recently launched and the results are expected in early 2019.

Figure 20: Poverty continued falling
(percent of population)



Source: EAP Economic Update, April 2018

Figure 21: Addressing inequality remains a challenge
(percent)



Source: World Bank,
<http://povertydata.worldbank.org/poverty/region/EAS>

Macroeconomic management is gradually improving, but risks remain high

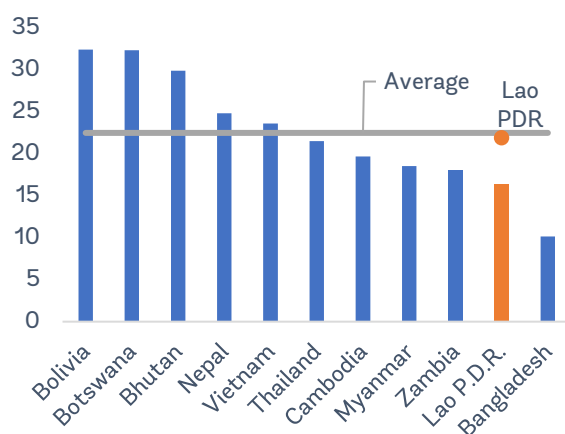
The fiscal deficit widened in 2017 due to strong public investment and some arrears clearance.

18. Revenues fell below target in 2017⁸. Total revenue reached approximately US\$2.7 billion in 2017, representing a 5 percent increase compared to the previous year. The below-target performance reflects moderation of economic activity and weak planning processes resulting in ambitious targets. Total revenues as ratio to GDP fell to 16.1 percent from 16.6 percent a year earlier, with Lao PDR lagging regional and structural peers (Figure 22). Value added tax collection rose by about 5 percent due to efforts to expand the tax base and improve administration while excises tax remained stable in nominal term, but fell as ratio to GDP (Figure 23). Recovering copper prices and tighter control on timber exports resulted in higher royalties from natural resources. On the other hand, foreign trade taxes declined due to lower fuel and vehicle imports. Non-tax collection increased due to higher dividends, interest earnings and fees. Grants increased compared to a year ago reflecting the strong inflows of non-project grants in the last quarter.

⁸ The budget year changed from fiscal year (October-September) to calendar year in 2017

Figure 22: Revenues in Lao PDR lag regional and structural peers

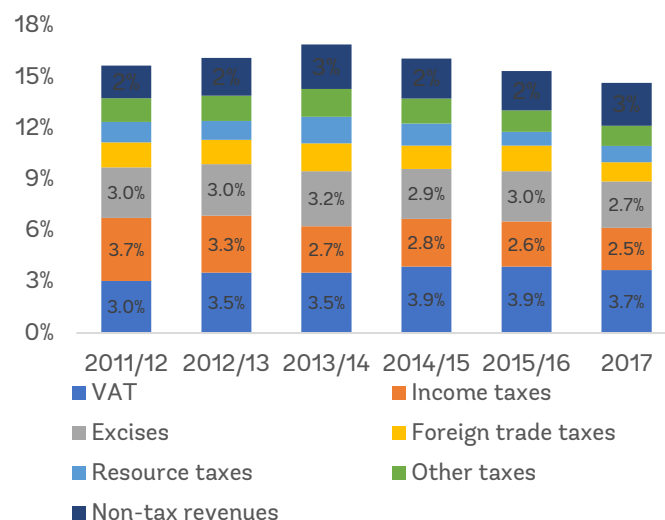
In percent of GDP, average 2016-2017



Source: IMF WEO Database and Lao PDR MOF

Figure 23: Domestic revenues declined as a share of GDP

In percent of GDP



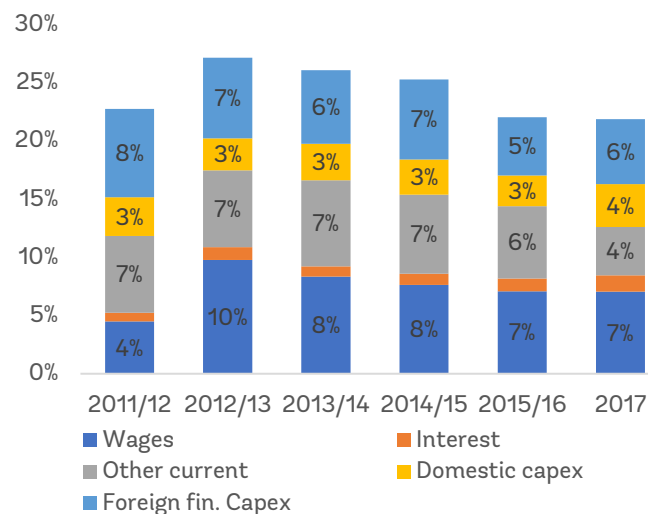
Source: Staff calculations based on data from MOF

19. Recurrent spending was tightly controlled. In response to continued fiscal difficulties, the authorities contained the wage-bill growth by keeping staff intake to 5,000 positions in 2017, most of which as replacement for retirees, helping offset the 7 percent increase in the wage index at the start of 2017 (following 3 years of wage freezes). Still, with a wage bill at 7 percent of GDP and the number of civil servants above 5 percent of the total population, Lao PDR ranks high compared to the average for lower middle-income countries. Continued tight management of the wage-bill will be needed, including carefully considering new hiring and redeploying existing staff rather than new hires to meet demand in underserved areas. At the same time, non-wage recurrent spending and transfers were cut, putting further pressures on already underfunded service delivery. As a result, current spending, excluding interest, as a share of GDP declined from almost 13 percent to 11 percent of GDP. Interest spending increased to 1.4 percent of GDP in 2017 from 1.2 percent in 2016, reflecting a growing public debt burden.

20. However, the gains from controlling recurrent spending were offset by acceleration of public investment projects and stronger efforts to clear arrears. Domestically financed capital spending increased by 55 percent, reflecting the government's contribution to large infrastructure projects but also arrears clearance. Most of the increase was recorded in the last quarter of the year, also reflecting the improved Budget liquidity following the issuance of the government bonds at the Thai capital market in October 2017. The increase in foreign loan financed investment spending were largely directed to the power sector (generation and transmission capacity). Total spending is estimated to have increased to 21.4 percent of GDP in 2017 compared to almost 21 percent in the previous year.

Figure 24: Non-wage recurrent expenditures accounted for most of the expenditure adjustment

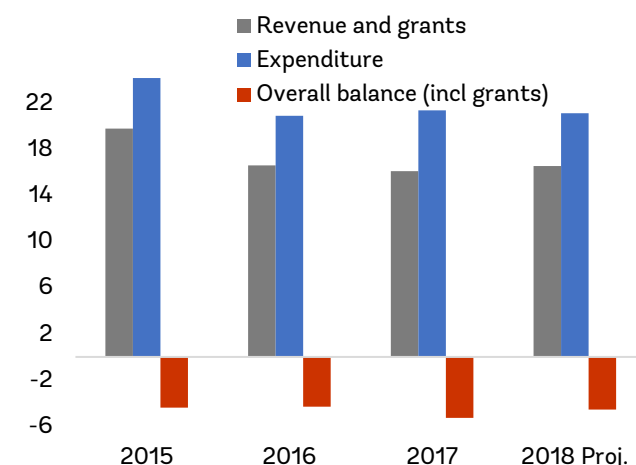
(percent of GDP)



Source: Staff calculations based on data from MOF

Figure 25: Fiscal deficit remains high, but expected to decline in 2018

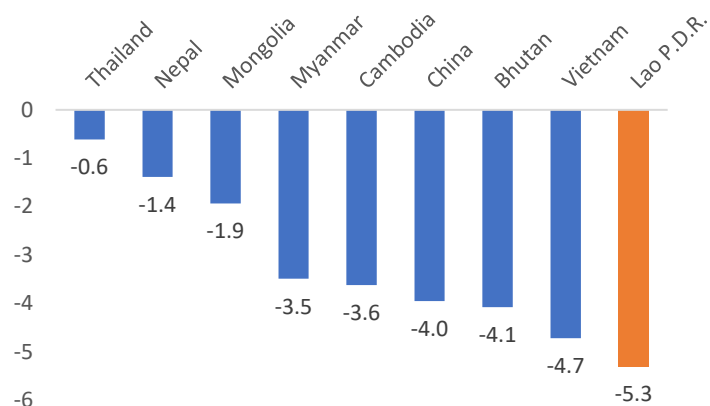
(Percent of GDP)



21. As a result, the fiscal deficit widened to 5.3 percent of GDP in 2017, compared to 4.3 percent in 2016. This puts Lao PDR's fiscal deficit among the highest compared to regional and structural peers (Figure 26). The deficit was mostly financed by the foreign loans, including the bonds issuance in the Thai capital market worth around US\$420 million in October 2017 and borrowing from the banking sector.

Figure 26: The fiscal deficit remains high compared to regional peers in 2017

(percent of GDP)



Source: WEO April 2018

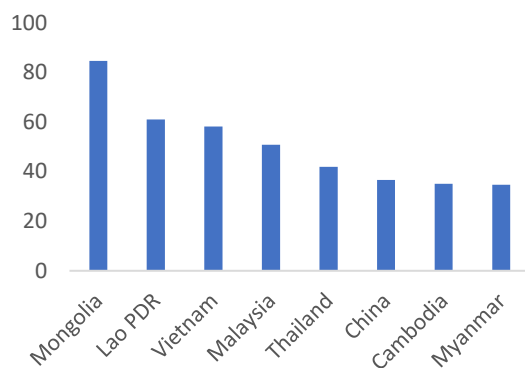
22. The 2018 budget plans a reduction in the fiscal deficit; the revenue performance in the first quarter of the year is encouraging, however, there is a need to remain vigilant on monitoring public investment spending. The deficit is expected to decline from 5.3 percent in 2017 to 4.9 percent in 2018. Revenues are expected to start recovering reflecting the increase in excise tax rates for alcohol, tobacco and fuel, improved revenue administration (including facilitating electronic revenue collection), while commodity prices preserve their recent gains. Total revenue is expected to increase to 16.5 percent of GDP. The authorities plan to contain spending growth by keeping new recruitment low (further reducing the intake of staff to 3,000), containing non-wage recurrent spending and new investment. Total expenditure is expected to remain stable at 21.3 percent of GDP. Early results on the revenues side are encouraging with revenues increasing by 25 percent in Q1-2018 driven by improved

profit taxes, excises, VAT and dividends. On the other hand, spending surged by 33 percent in Q1-2018 due to a significant increase in loan financed public investment, mostly in the power sector, as well as higher domestic spending. As the implementation in Q1-2018 already accounted for 43 percent of the annual plan on externally financed investment, it also raises concerns about the ability to meet the annual budget spending and deficit target. To maintain the deficit within the planned target without compromising service delivery, it is necessary to scale down some public investment, particularly in the energy sector, and ensure that projects not included in the budget not financed (for example, more than 50 percent of all loan-financed spending in the first quarter of 2018 came on a project that was not included in the initial Budget).

Persistently high fiscal deficit resulted in high public debt level

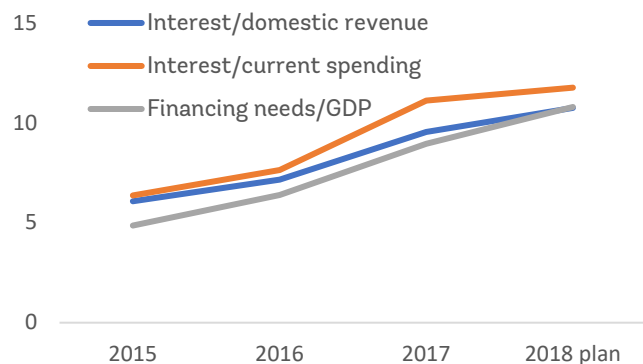
23. The increasing financing needs led to higher public borrowing, further increasing public debt and keeping the risk of debt distress elevated. A growing fiscal deficit, growing amortization on maturing loans and increased borrowing on less concessional terms are resulting in higher borrowing needs. The financing needs, defined as the fiscal deficit and the amortization on public borrowing, almost doubled from around 5 percent in 2015 to 9 percent of GDP in 2017 and are expected to rise to 11 percent with the 2018 budget plan. The total public and publicly guaranteed debt (PPG) is estimated to increase from 59.5 percent of GDP in 2016 to about 61 percent in 2017, which is high compared to regional peers, except Mongolia (Figure 27).

Figure 27: Lao PDR's public debt is on the high side compared to regional economies (percent of GDP)



Source: WB staff inputs

Figure 28: Financing needs and debt service are growing (percent)



Source: WB staff calculation based on MOF data.

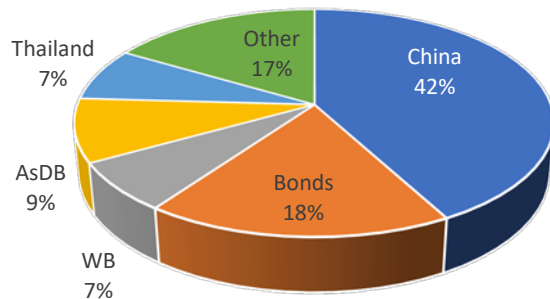
Note: Financing needs are the sum of the fiscal deficit and principal repayment on public borrowing

24. Public debt is mostly external. External debt accounted for about 80 percent of the total public debt in 2017. About two thirds of the borrowing is in US dollar, followed by special drawing rights (SDR), Chinese yuan, Thai baht and other currencies (Figure 30). This makes sudden/significant depreciation of the Lao kip one of the key risks to public debt sustainability. The rest is domestic debt, including Treasury-bonds and bills, capitalization bonds and direct loans from the previously committed loans to local authorities to finance infrastructure projects by the Bank of Lao PDR.

25. The proportion of borrowing from bilateral and commercial sources has increased notably, with less degree of concessionality. About two thirds of external public borrowing is from bilateral

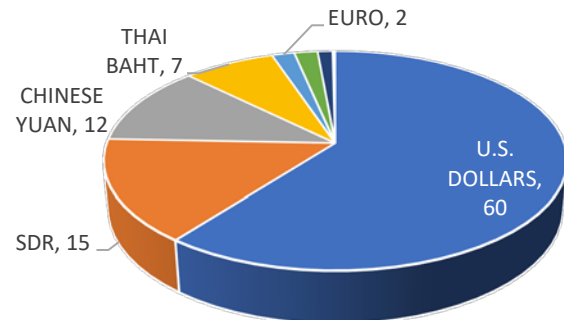
sources, mostly from China, followed by Thailand, Japan, Korea and others. In addition, the Government has resorted to bond issuance in the Thai capital market to finance the budget. The bond issuance in October 2017 accounted for most of the new borrowing last year. The stock of outstanding bonds in 2017 is estimated around US\$1.5 billion.

Figure 29: Lao PDR increasingly resorts to bilateral and commercial loans^{1/}
(percent of total external debt)



Source: WB calculations based on MOF data
Note: 1/ preliminary data as of end 2017

Figure 30: Lao external debt mostly comprises of US\$-denominated debt^{2/}
(percent of total external debt)



Source: WB calculations based on MOF data
Note: 1/ data as of end 2016

26. More than half of public external debt commitments finance public investment in the power sector, with the rest to other infrastructure projects and general budget support. Power infrastructure financing is mostly in the form of on-lending to state enterprises to invest in selected power projects and transmission line projects. Risks are expected to be mitigated by the increased revenues expected from higher future energy exports. However, this will depend on the ability to secure markets and set prices above cost-recovery level (World Bank, 2017). Otherwise, the sector could create liabilities that the Budget will not be able to absorb. Reconsidering investment in some pipeline power and transmission projects of public utility will help reduce the debt burden to the public utility, EdL, and contingent liabilities to the budget.

27. The lower level of concessionality has added pressure on debt services. Interest payments, as a share of domestic revenue, increased from 6 percent in 2015 to 9.5 percent in 2017 and are expected to rise to 11 percent in the 2018 budget plan. Interest payment rose by more than 40 percent y/y in Q1-2018, accounting for 11 percent of domestic revenue in that quarter. To illustrate the trade-offs that this is creating; this amount exceeds planned public spending on health and is equal to about 60 percent of planned education spending. This underscores the importance of lowering the debt burden, improving public debt management (*Box 2*) and fiscal consolidation through stronger revenue collection and improved efficiency in spending.

At the core of public debt management is the development and implementation of a debt management strategy. Public debt management, while having close link to fiscal and monetary policy, has separate objectives and instruments. The process of developing a debt management strategy involves developing a sound legal and institutional framework, establishing debt management objectives, understanding the cost and risk implications of different strategies, and having in place a strong governance framework, including ensuring that debt managers are accountable for implementing the strategy efficiently. As important is recognizing that a strategy cannot be developed in isolation: the macroeconomic framework and the level of development of the domestic market have implications for which strategies are feasible and can be implemented in practice.

In Lao PDR, public debt management is characterized by having few borrowing choices. A substantial part of the external debt is project-based loans from the multilateral banks, but also increasingly from bilateral creditors in recent years. The Government has issued medium- and long-term bonds in the Thai capital markets while it is not yet common to issue long-term debt domestically.

Lao PDR's public debt is relatively high, with a high foreign exchange component and exposing the country to significant foreign exchange rate risk. According to the Debt Sustainability Analysis, February 2018, the outstanding public debt to GDP as of end 2017 was 60 percent, with the share of external debt approximately 80 percent. Such a large share of external debt exposes public debt to exchange rate risk. In fact, the most recent Debt Sustainability Analysis finds that a large and sudden exchange rate depreciation could place debt dynamics on an unsustainable path. Interest rate risk and refinancing risk are modest, but subject to risk: the share of debt with variable interest rates and maturing loan with fixed interest rates after one year was around 20 percent of the outstanding debt. A risk of global interest rate increase could lead to higher cost of borrowing for renewed loans.

Domestic borrowing allows reducing foreign currency risk, and an active domestic government securities market provides a pricing reference for other issuers and supports monetary policy implementation. At this stage, the efforts to facilitate the development of the domestic debt should focus on primary issuance and establishing and strengthening the market infrastructure. This would require continued dialogue with market participants, adapting the issuance strategy over time (for example, focus initially on short-term instruments) and, importantly, moving towards market-based borrowing.

Important debt management reforms are undertaken in Lao PDR, but they require continued commitment to maintain the momentum. A draft Public Debt Law that considers international sound practice was presented to the National Assembly at the end of 2017 and the revised version will be submitted to the NA in June 2018. The approval of the Law will be an important milestone as it will provide guiding principles for debt management and strengthen the role of MOF as well as regular reporting on debt and risks indicators to the National Assembly and the public. Importantly, the Law requires the development of a 5-year Strategy that will provide broad guidelines for debt management, cost-risk tradeoff, and a 3-year Borrowing Plan that will be updated annually. Secondary legislation on key principles in the law will be developed in secondary legislation. In the meantime, MOF has undertaken organizational reform by consolidating debt management function, external and domestic, under one department, External Finance and Debt Management Department. Building specialized capacity on debt management and retention of skills in the department will be critical.

Source: WB staff based on inputs from Ministry of Finance

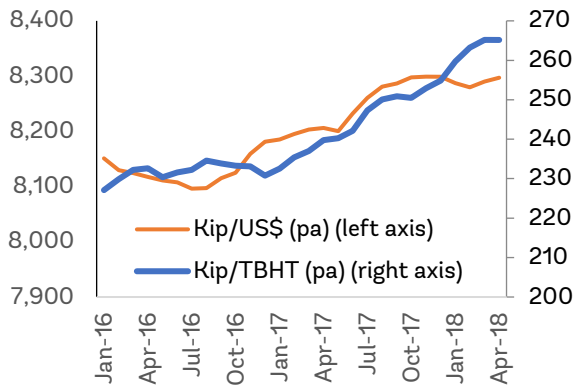
Greater flexibility in the exchange rate helped reverse some of the earlier appreciation.

28. The authorities allowed greater flexibility in the exchange rate. The kip depreciated by 1.9 and 7.9 percent y/y against the US dollar and the Thai baht in May 2018, respectively. Such movements helped reverse part of the strong appreciation in recent years. The real effective exchange rate of the kip depreciated by 8 percent in 2017, and it is expected to have further depreciated so far in 2018 given

the continued depreciation of the nominal effective exchange rate in a relatively low inflation environment and small inflations differentials in Lao PDR and its main trading partners. This also helped to bridge the gap between the official and the parallel rate in the foreign exchange market, which narrowed below 1 percent in 2017 and early 2018 from above 3 percent at the start of last year.

Figure 31: The kip recently depreciated against the US dollar and Thai baht

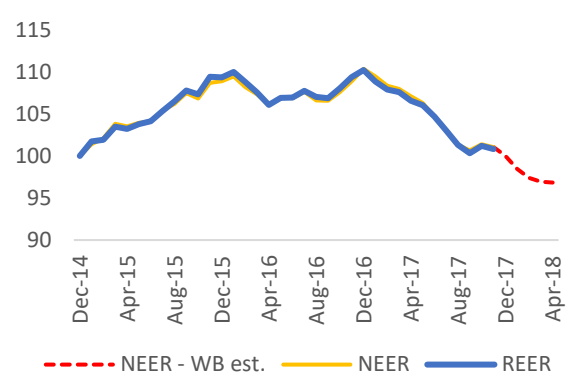
(kips per one unit of foreign currency)



Source: Bank of Lao PDR

Figure 32: The effective exchange rate also depreciated

(Index Dec 2014=100)

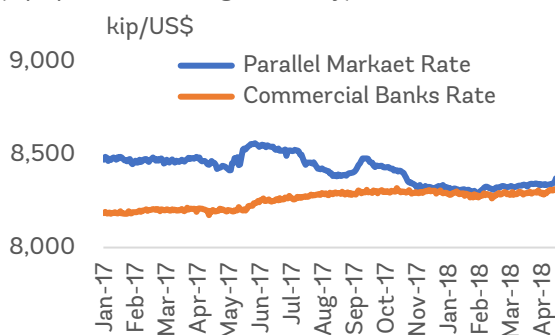


Source: <http://bruegel.org> and WB staff estimate

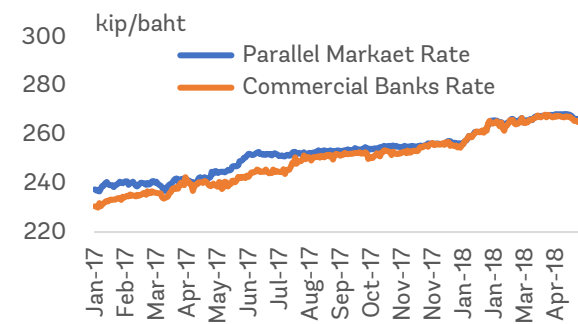
Note: a decline in the index indicates depreciation of the home currency against the basket of currencies of trading partners

Figure 33: The gap between official and parallel exchange rates narrows

(kips per unit of foreign currency)



Source: Bank of Lao PDR

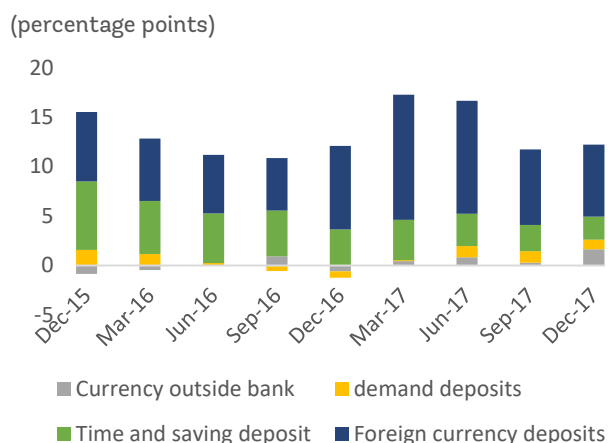


Credit growth continued to decelerate, despite a slight monetary loosening

29. After accelerating in the first half of 2017, broad money growth moderated towards the end-2017 to 12.2 percent y/y. Narrow money (M1) expanded by 19 percent y/y during 2017, largely reflecting higher amounts of currency outside banks. At the same time, the deposits in commercial banks increased by LAK 2.9 trillion in the second half of 2017, below LAK 3.5 trillion increase registered in the previous six months. This resulted in annual deposit growth slowing down to 11.1 percent y/y by the end of 2017. Deposit data from financial statement of commercial banks suggest that the growth rate of deposits may have further stabilized in the first quarter of 2018. The trend of increasing dollarization of the deposit portfolio continued with foreign currency deposits growing by 15.3 percent, compared to 6 percent for local currency deposits. This reflects the continued implementation of the interest rate caps on kip deposit and lending rates as well as some currency substitution following the adjustment in the effective exchange rate of the kip. As a result, foreign currency deposits at the end

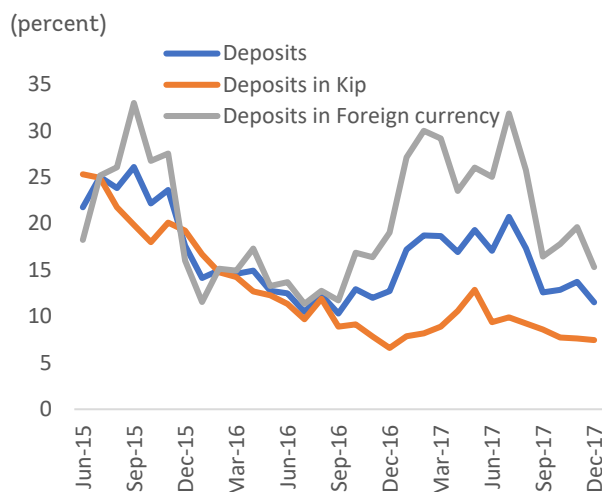
of 2017 accounted for 54 percent of total deposit the banking sector compared to 52 percent a year earlier. Such rates of dollarization are quite high, though well below Cambodia's rate of dollarization of liabilities.

Figure 34: Broad money growth was driven by growing foreign currency deposits



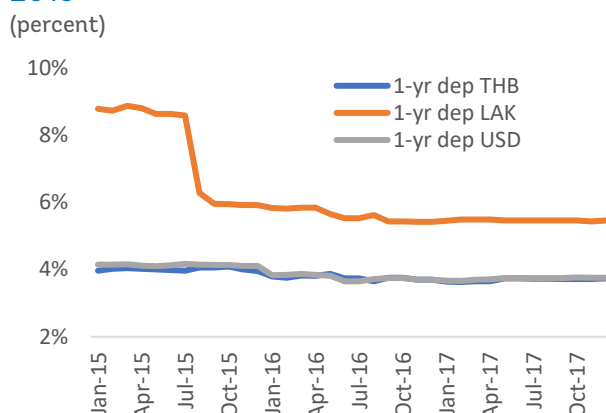
Source: Bank of Lao PDR

Figure 36: Growing foreign currency deposits



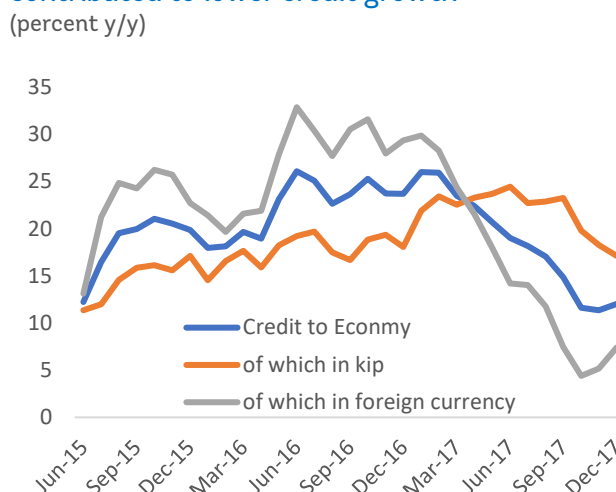
Source: Bank of Lao PDR

Figure 35: The kip deposit interest rate declined since introduction of an inflation linked cap in end 2015



Source: Bank of Lao PDR

Figure 37: Restriction on foreign currency lending contributed to lower credit growth



Source: Bank of Lao PDR

Note: CB refers to commercial banks

30. Monetary conditions were slightly loosened; however, the monetary policy transmission mechanism is weak. In December 2017, Bank of Lao PDR (BOL) adjusted slightly the policy rates with the one-week rate reduced by 25 basis points (bps) to 4 percent.⁹ The one-week policy rates was previously changed in mid-2016 (by 25 bps) and mid-2015 (by 50 bps). Still, a weak monetary policy transmission mechanism (World Bank, 2017), including due to high dollarization and informality, limits the effectiveness of policies.

⁹ The two-week rate was lowered from 5.31 percent to 5 percent while the 1 year rate was reduced from 10.63 percent to 10 percent.

31. This is further exacerbated by existence of caps on banks' kip deposit and lending rates introduced in 2015.¹⁰ Under this policy, commercial bank's deposit rates on one-year deposits are capped at 2 percentage points above a measure of core inflation (other maturities are also capped). As of January 2018, the cap is set at 5.6 percent, slightly down from 5.7 percent earlier. Next, bank's average weighted lending rates are capped at 3 percentage points above the lending rate. While other countries have also used caps, their levels in Lao PDR could be especially restrictive. The application of the cap on the average weighted lending rate of commercial banks (meaning that individual loans could carry higher interest rate as long as the average rate for the bank is below the cap) provides some opportunity to price-in different levels of risk-exposure; however, this is unlikely to be sufficient. For example, caps are also applied in Cambodia; however, these are set at around 20 percent, providing sufficient room for banks to adequately price risks.

32. Regulations limiting banks' exposure in foreign currency also constrain lending activity. BOL policies restrict lending in foreign currency only to business that have inflows in foreign currency (exporters) and a relatively short list of important sectors (mostly, importers of basic necessities)¹¹. While this measure is helpful in better managing exchange rate risk in the system, without an efficient interbank market and with the available BOL instruments only for emergency lending, commercial banks that have foreign exchange asset base have challenges finding Lao kip liquidity to fund their lending. The upcoming amendments to the BOL provide an opportunity to modernize the BOL's instrument set.

33. The interest rate and lending restrictions, combined with continuation of fiscal restraint and weakening of the loan portfolios of some commercial resulted in further deceleration of credit growth. By end-2017, growth of credit to the economy moderated to 11 percent (y/y), compared to 21 percent (y/y) a year earlier, in line with trends in other countries in the region (except Vietnam and Philippines). Quarterly financial reports from reporting banks suggest continued moderation of credit growth to single-digit levels in the first quarter of 2018. In fact, eight out of 25 banks that published financial statements for the first quarter of 2018, reported a contraction in the loan portfolio (up from six banks a year earlier). In addition to the interest rate and lending policies discussed earlier, the slow down also reflect tighter fiscal conditions (non-loan financed government spending was up 8 percent in the first quarter of 2018 compared to the same period in 2017, but a full 25 percent below levels recorded in 2015 and 2016). At the same time, credit activities of some banks are also affected by growing non-performing loans. In fact, while BOL has reported only a small deterioration in the NPL ratio, six of fourteen banks that have published their audited financial statement for 2017 reported increases in their NPLs.

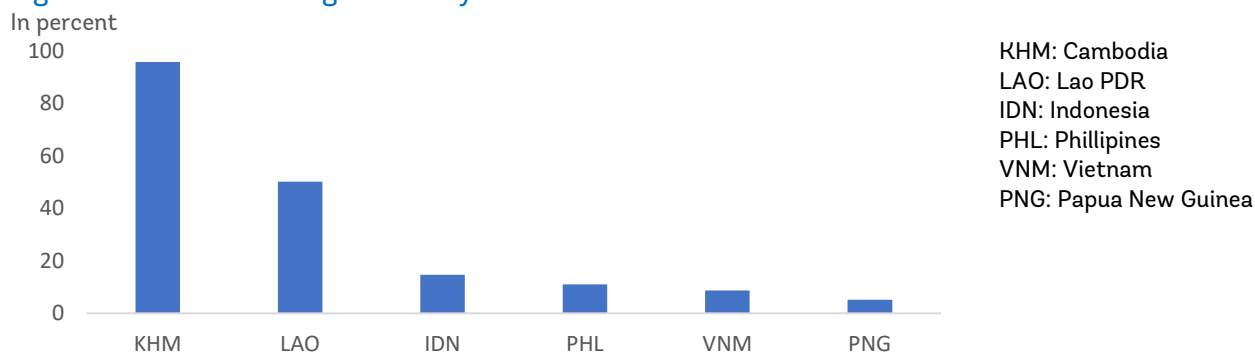
34. The restriction on foreign currency lending resulted in some de-dollarization of the loan portfolio; however, it remains substantial. Kip denominated loans expanded by 17 percent (y/y), compared to 7 percent growth rate for foreign currency loans. This helped to slightly lower the dollarization of the commercial banks' lending portfolio with Lao kip loans accounting for 49.8 percent of total loans at the end of 2018, compared to 47.7 percent a year earlier. While significantly below the

¹⁰ While there is no cap on foreign currency deposit rates, as of late 2017 lending rates in foreign currency are capped at 3 percentage points above the respective deposit rate. Earlier, the spread was 4 percentage points.

¹¹ The BOL issued a decision on foreign currency credit from commercial banks on November 17, 2016. The decision limits lending in foreign currency to borrowers who have sufficient foreign currency income and importers of products such as such as agriculture inputs, materials and equipment for industry sectors, medicine and medical equipment and fuel. Proper documentation on the needs to settle in foreign currency needs to be presented to the BOL. Commercial banks will settle directly with suppliers, discouraging cash disbursement. Commercial banks can issue letter of credits and bank guarantees in foreign currency importers, but they have to put in place risk management mechanism to ensure sufficient repayment.

level of dollarization of the loan portfolio in Cambodia (above 95 percent), the share of foreign currency loans in the total loan portfolio of the banking sector in Lao PDR is higher compared to a number of regional peers (Figure 38).

Figure 38: Share of foreign currency loans in total loans

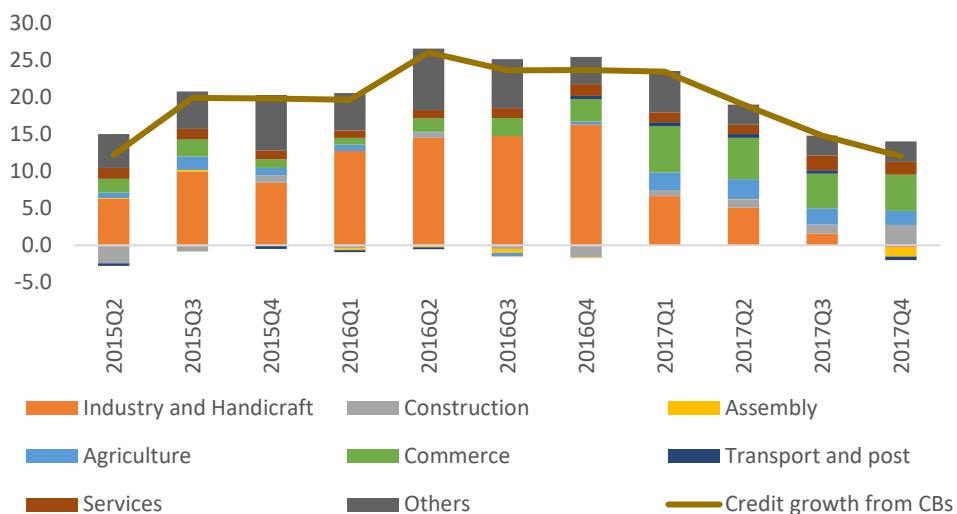


Source: BoL for Lao PDR, IMF Financial Soundness Indicators for the rest; all data for end-2017 (except Vietnam for end-2016)

35. By sectors, commercial banks continued to increase their exposure to commerce and, after a few years of stagnation, also provided more loan to construction. Lending to the trade (commerce) sector accounted for 40 percent of total credit growth in 2017, increasing its share in the loan portfolio to 19 percent (compared to 17 percent at the end of 2016). Importantly, lending to the construction sector picked-up more vigorously in the second half of 2017 and reached 14 percent of total loans (up from 12 percent a year earlier). This could also reflect the intensified process for clearing up arrears in the public sector. Industry continues to absorb most of the lending portfolio (29 percent), while credit to agriculture also continues to increase (up 13 percent y/y to reach 9 percent of total loans).

Figure 39: Lending to commerce sector continued to increase while other sectors borrowing moderated

(percent and percentage points)



Source: Bank of Lao PDR

36. Moderating credit growth and slower entry of new banks resulted in more modest expansion of the banking sector. Banking sector assets at the end of 2017 reached around 87 percent of GDP (LAK 122 billion or US\$14.8 billion), similar to a year earlier (87.5 percent) and ending a period of rapid deepening of the sector (for example, banking sector assets were 62.3 percent of GDP in 2012). No new banking institutions entered the market, while slowing deposit growth and low profitability limited the ability of the banks to increase their assets' size. Still, compared to other countries in the region and at similar level of development, Lao PDR's banking sector is substantial. State-owned commercial banks (SOCBs) continue to dominate the sector, with their share increasing slightly to 43.5 percent of total assets since mid-2016 as one bank was recapitalized. Still, taking a longer-term perspective, the share of SOCBs has been declining (from 55.6 percent of total assets at the end of 2012), largely reflecting a growing share of foreign branches whose share reached 28.3 percent by the end-2017. Private banks and joint-venture banks (banks owned by SOCBs and foreign banks) have maintained their shares of around 18 percent and 10 percent, respectively.

37. Microfinance institutions (MFIs) continued to expand rapidly, albeit from a low base. Total assets of MFIs reached about US\$450 million in July 2017, up by 11 percent y/y and reaching almost 3 percent of GDP. According to the UNCDF, the proportion of adults using at least one regulated financial service in Lao PDR was 47 percent in 2014, higher than Myanmar at 30 percent, but still lower than Nepal at 61 percent in the same year. Despite the expansion of the bank and non-bank financial institutions, informal financial services also exist, but often with higher interest rates with fewer procedural requirements. Reported proportion of adults using unregulated financial services was as high as 60 percent compared to 33 percent in Myanmar and 21 percent in Nepal in 2014.¹²

38. However, the financial sector still faces challenges. While capital levels overall are adequate, pockets of the banking sector have weak buffer. In addition, non-performing loans (NPLs) are a growing problem for an increasing number of banks while profitability is low. More specifically:

- a. *Capital levels:* Overall, according to reports from the BOL, the banking sector is well capitalized with a capital to risk-weighted assets ratio of 15.8 percent at the end of 2017 (and tier 1 capital at 12.5 percent of risk-weighted assets), well above the minimum required level of 8 percent and in line with levels seen in other countries in the region (Cambodia – 22 percent; Thailand – 17.9 percent; the Philippines – 14.4 percent, and Vietnam – 12.4 percent). Importantly, the loan-deposit ratio remains below 1. Still, parts of the banking sector, including some state-owned commercial banks (SOCBs) and some private banks, do not meet the minimum regulatory level of 8 percent. In response, the authorities are planning to restructure two SOCBs and the largest commercial bank, BCEL (public listed bank with dominant state ownership) was recently recapitalized; though, additional resources may be required.
- b. *Quality of the portfolio:* Nonperforming loans (NPLs) have been edging upward, with some concerns that the official figure of around 3.1 percent at the end of 2017 understates the actual NPLs, including due to a 2017 regulation that loans related to public investment projects should not be treated as NPLs. Four of the 14 banks that had published their audited annual reports as of Q1-2018 reported NPLs in excess of 10 percent of their portfolio. While the extent of NPLs due

¹² UNCDF Making Access Possible Program. <http://map.uncdf.org/lao-peoples-democratic-republic>

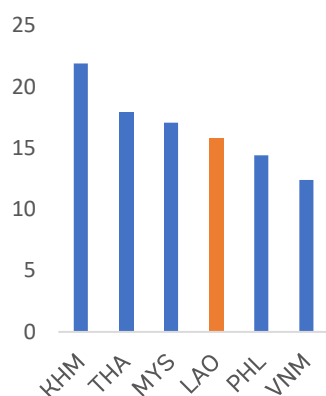
to arrears on government projects is unclear, the authorities recently authorized issuance of LAK3,250 billion in 10-year bonds to settle these liabilities.¹³

- c. **Profitability.** The profitability indicators for the sector are low. According to BOL reports, return on assets in the sector was only 0.5 percent in 2017, slightly lower than Vietnam (0.6 percent), but significantly below levels observed in Cambodia (1.5 percent), Malaysia (1.4 percent) and the Philippines (1.3 percent). Return on equity was 7.7 percent, again, on par with Vietnam (8 percent), but below Cambodia (8.7 percent), Thailand (9 percent), Malaysia (13.1 percent) and the Philippines (13.6 percent). More worryingly, data from quarterly commercial banks' financial reports show that nine of the 29 banks that publish reports made losses in the year up to the first quarter of 2018 (up from five a year earlier) with the number of banks having return on assets of around 2 percent and above declining from five to four.

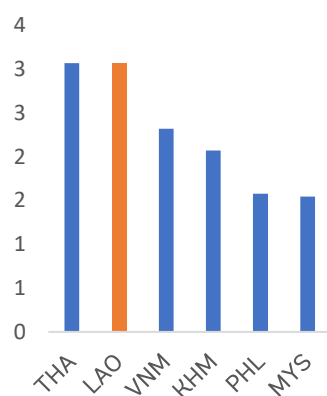
Figure 40: Financial Soundness Indicators

In percent

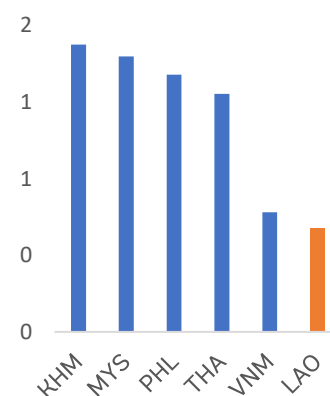
Capital levels are comfortable ...



... NPLs are edging up ...



... while profitability is low



Source: BOL for Lao PDR, IMF Financial Soundness Indicators for the rest; all data for end-2017 (except Vietnam for end-2016)

Note: KHM: Cambodia, THA: Thailand, MYS: Malaysia, LAO: Lao PDR, PHL: Philippines, VNM: Vietnam.

39. In response, the BOL is in the process of improving the regulatory and supervisory framework. BoL is moving towards risk-based supervision with risk profiles of most banks already being completed. The laws on the Bank of Lao PDR and Commercial Banks are also being revised which is a good opportunity to take into account good international practices, including on management of BOL, relations with market participants and the Government, modernizing the instruments of the central bank, ability to regulate banks etc. There has been progress on the developing a payment system with the Automated Clearing House, a cost-efficient payment system, expected to be introduced during 2018. Reflecting anti-money laundering effort during 2017, Lao PDR was delisted from the grey list and in the process of preparing a national risks assessment.

¹³ To qualify, the projects should be on-budget, approved by the National Assembly; certified to be fully completed; and pre-financed by loans from commercial banks certified by the commercial banks and BOL.

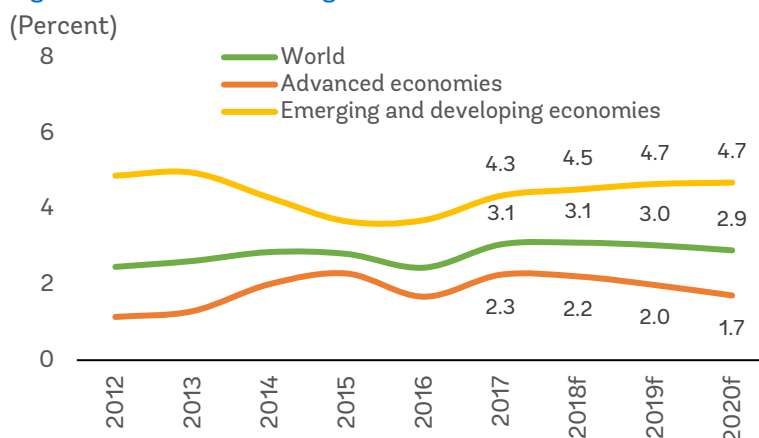
Outlook and Risks

Box 3. Global and Regional Outlook and Risks¹

Global growth has eased, but remains robust, and is projected to reach 3.1 percent in 2018 (WB GEP June 2018). It will then slightly moderate to an average of 3 percent in 2019–20, reflecting a gradual slowdown in advanced economies (Figure 41). Following a broad-based recovery in 2017, growth in advanced economies is projected to inch down slightly to 2.2 percent in 2018, and moderate thereafter toward an average of 1.8 percent in 2019–20, as labor market slack diminishes and monetary policy accommodation is gradually unwound.

Growth in emerging market and developing economies (EMDEs) is expected to reach a five-year high 4.5 percent in 2018, and stabilize at an average of 4.7 percent in 2019–20. This mainly reflects a further cyclical pickup of growth in commodity exporters as the effects of the earlier commodity price collapse dissipate. A gradual slowdown in China is expected to be partly offset by a modest pickup in partly offset by a moderate pickup in other large economies, including India and Mexico reflecting the diminishing role of idiosyncratic factors weighing on activity in these economies in 2017.

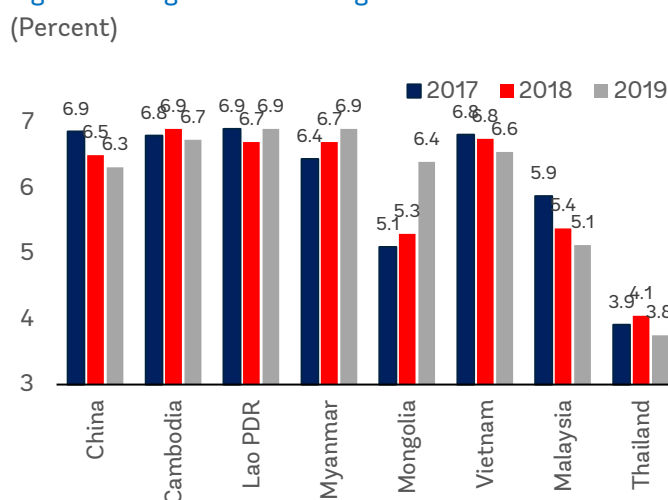
Figure 41: Global Real GDP growth



Source: Global Development Finance, June 2018

Growth in the East Asia and Pacific region is expected to gradually moderate from 6.3 percent in 2018 to 6.1 percent on average in 2019–2020 (Figure 42). The modest slowdown in regional growth is largely due to the gradual and planned structural slowdown in China. Activity in the rest of the region is expected to peak at 5.4 percent in 2018 and remain steady, around its potential rate in 2019. The outlook is predicated on broadly stable commodity prices in the next two years, strong but gradually moderating global demand, and a

Figure 42: Regional Real GDP growth



Source: Global Development Finance, June 2018

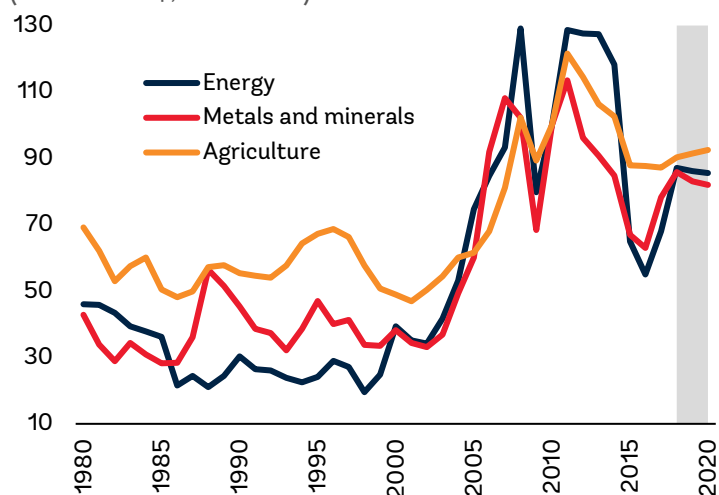
gradual tightening of global financing conditions. Despite the projected robust activity in the region in the near term, underlying potential growth—which has fallen considerably over the past decade—appears to have declined over the long term, reflecting increasingly adverse demographic patterns and projected slowing pace of capital accumulation, which is needed to rein in credit growth.

Global trends are expected to become less supportive over the forecast period. Global trade, which accelerated sharply in 2017, benefiting from a cyclical upturn in global manufacturing, is expected to remain strong in 2018, but to moderate thereafter, as global investment growth eases. Overall, growth in global trade of goods and services is expected to moderate from 4.8 percent in 2017 to 4.3 percent in 2018, and ease further to about 4 percent by 2020.

Global financing conditions are expected to tighten over the forecast horizon more rapidly than previously envisioned, along with the possibility of faster normalization of monetary policy in major advanced economies. Following a prolonged period of stable and exceptionally favorable global financing conditions, prospects of a faster withdrawal of monetary policy accommodation in advanced economies have led to rising global borrowing costs since the start of 2018. This reassessment—along with fears of escalating trade tensions and rising geopolitical risks—contributed to bouts of volatility in global equity markets in the first half of 2018. A rise in global interest rates, combined with U.S. dollar appreciation, have contributed to tighter external financing conditions for EMDEs in 2018. Capital inflows to EMDEs have decelerated and some EMDE currencies have fallen sharply.

Looking forward, global interest rates are expected to rise at a faster pace than previously predicted, as upward revisions to the U.S. growth outlook lead to a somewhat steeper pace of U.S. interest rate hikes in 2019-20. Above-trend growth and narrowing economic slack will also lead to further monetary policy normalization in other advanced economies. As global interest rates continue to increase, EMDE external financing conditions could become increasingly challenging in 2018 and 2019 leading to further deceleration of capital flows to EMDEs. Investors are also likely to increasingly differentiate among countries, depending on their exposure to rising interest rates and currency pressures.

Figure 43: World Commodity prices forecast
(Nominal US\$, 2010=100)



Source: Global Development Finance, June 2018

Oil prices are substantially higher than previously expected, and other commodity prices have also risen. While near-term projections for commodity prices have been revised up, they are expected to level off later in the forecast horizon (figure 3). Oil prices are expected to average US\$70 per barrel in 2018 and US\$69/bbl in 2019, up from an average of \$53 a barrel in 2017. Metals prices rose modestly in the first quarter of 2018; however, prices posted gains in April, after the imposition of sanctions on a large aluminum producer. Metal prices are expected to rise 9 percent this year, reflecting strong demand, but then moderate in 2019. Agricultural prices have increased slightly in the first half of 2018, following three years of stability. Stocks-to-use ratios for grains—a measure of global supply availability relative to demand—remain high for most grains, which will continue to put downward pressure on prices.

Risks to the outlook remain tilted to the downside. They include the possibility of disruptive financial market developments and escalating trade protectionism amid elevated policy uncertainty. The impact from a sudden tightening of global financing conditions could be particularly severe in an environment where debt levels have reached record highs, refinancing needs are mounting, and credit quality has deteriorated in a number of EMDEs. An escalation of trade restrictions among major economies is also a major threat to the outlook, as it could derail the recovery in global trade and dampen confidence and investment worldwide. If a combination of downside risks were to materialize, it could trigger a sharper-

than-expected slowdown in global growth, with particularly negative effects for countries with depleted policy buffers and sizable vulnerabilities. There is also the possibility that growth in major economies may surprise on the upside, with positive spillovers to trading partners. In the longer run, EMDEs need to tackle ongoing structural challenges and boost potential growth by promoting competitiveness, adaptability to technological change, and trade openness.

Prepared by Ekaterine T. Vashakmadze, Senior Country Economist, World Bank Group.

The near-term outlook still remains broadly favorable, but risks are growing

40. Growth in 2018 is projected to slightly ease at 6.7 percent¹⁴ before picking up slightly in 2019-2020 in the baseline. Slight moderation in 2018 is projected as strong export performance and investment, is expected to be offset by continued control on public spending and moderation of credit growth. The start of commercial operation of a few power projects, with a total installed capacity of about 2,200MW by 2019-20 is expected to offset the possible impact of the fiscal consolidation. While Chinese growth could be moderating, the ongoing rebalancing also opens up opportunities for Lao PDR exporters of agriculture and consumer products. The power sector continues to expand with the installed capacity expected to reach about 11,000MW by 2021, helping economic activity by bringing investment during the construction phase and by generating exports once being commissioned. A few large projects are on schedule and are expected to come on stream in the next few years, including Xepian-Xenamnoi (410 MW, commissioning date (COD): 2019), Nam Ngiep 1 (270 MW, COD in 2019), Don Sahong (260MW, COD: 2019) and Xayabury power project (1,287MW, COD in 2019). In addition, greater ASEAN integration opens opportunities, especially in agriculture, tourism, retail trade as well as some manufacturing as part of regional value chains. These sectors have significant potential to create jobs and lower poverty further. The pick-up of the construction of the railway project, which is reported to progress 33 percent in mid-2018 compared to plan, will boost foreign investment and also support the construction sector in the next few years. However, the possible cancellation of the Kuala Lumpur-Singapore section of the railway project could have affect the expected traffic volumes on the corridor and affect the viability of the investment. The contribution from the mining sector is expected to gradually decline as the current investments mature¹⁵ while the moratorium currently in place limits investments in new deposits. The increase in the minimum wage may also add to economic activity.

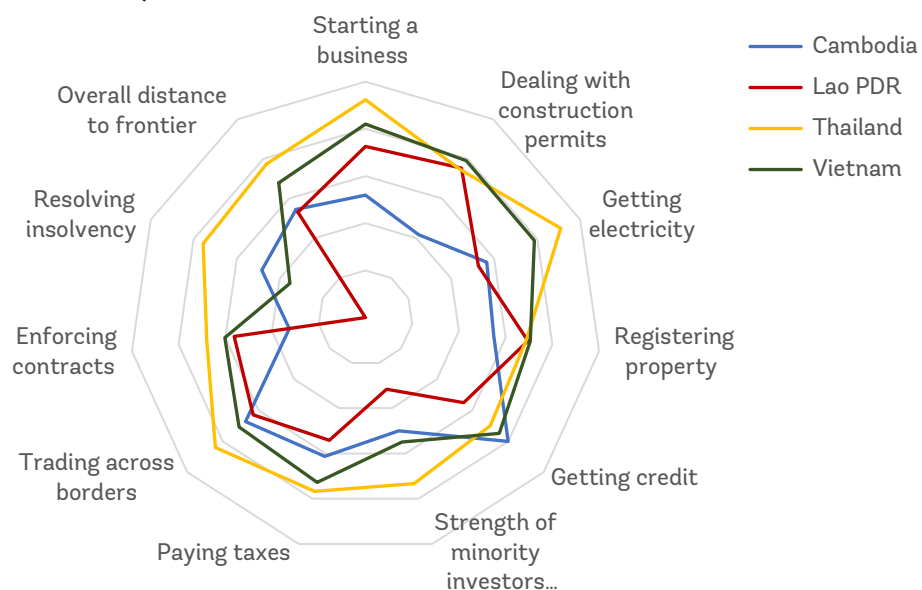
41. Increasing regional integration and broadly favorable commodity price outlook provide an opportunity for the non-resource sectors. Greater ASEAN integration and favorable external environment opens up opportunities for tourism, manufacturing and agro-processing. A readily available and affordable electricity, combined with relative easy access to Thailand's infrastructure could be helpful in attracting investment. However, boosting growth outside of the resource sector will need improvement in business environment. Lao PDR dropped to 141 in the 2018 Ease of Doing Business rankings from 139 in 2017 and still lags regional peers, particularly on starting a business, getting credit and electricity, protecting minority investors, and resolving insolvency. For instance, time to start a business in Lao PDR takes 8 procedures in 67 days; while this is better than in Cambodia, it is still much longer than in Thailand (5 procedures within 4.5 days) and Vietnam (9 procedures within 22 days). In addition, most firms in the enterprise survey report that informal practices are the biggest obstacle. Informality involves unevenly enforced regulations and inadequate business registration to avoid costs

¹⁴ This was revised slightly upward to reflect the better than expected outcome for 2017 reported by the Lao Statistics Bureau and trends are expected to continue in 2018.

¹⁵ The two larger mines are exploring options that would extend the productive lives of the mines beyond 2020-2021, though, if these materialize they are likely to be smaller scale operations.

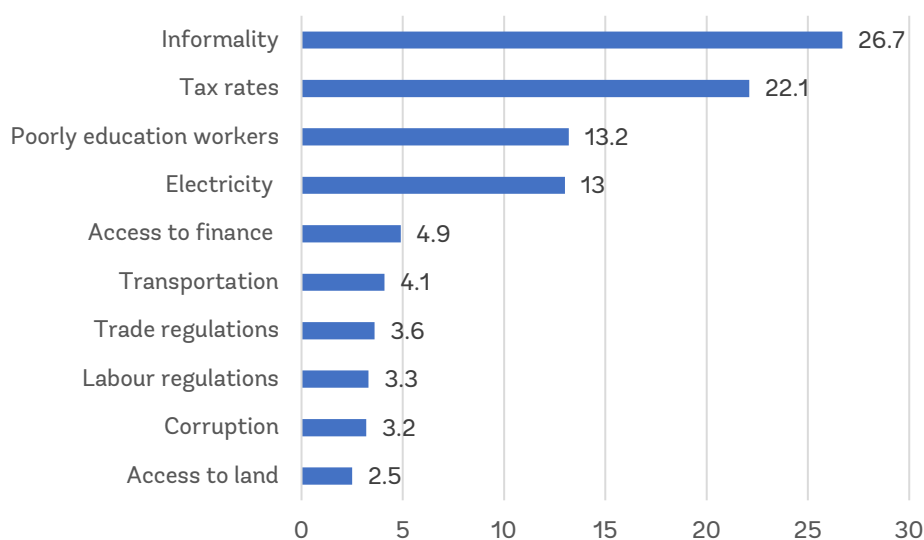
and complexity of the formal system, tax evasion, and a culture of non-compliance¹⁶ or bypassing the regulations. In response, a PM Order was issued on improving business environment and coordination mechanism; MPI has a central role in coordinating with line agencies who will lead reform planning and implementation related to each DB indicator. Success of this effort will depend on the concerted efforts in designing and implementing the reform plan.

Figure 44: Lao PDR still lags regional peers in doing business indicators
(Distance to frontier)



Source: Doing Business 2018

Figure 45: Most firms find informal practices the biggest obstacles



Source: <http://www.enterprisesurveys.org/data/exploreeconomies/2016/lao-pdr#informality>

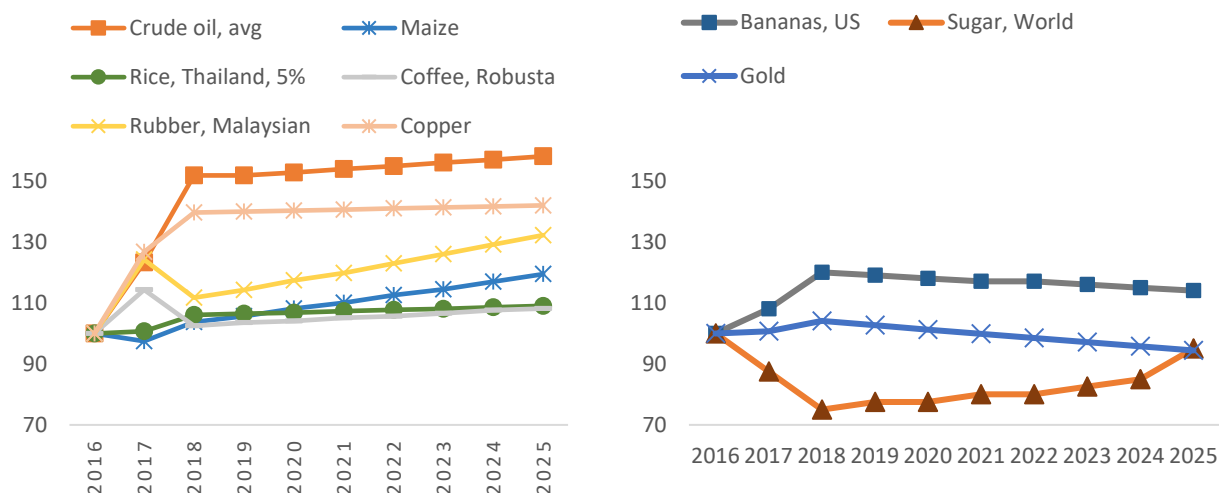
42. In the near-term, prices for key export products are generally expected to be supportive of economic activity, while the increase in oil prices will support government revenues; however also

¹⁶ World Bank (2017). "Formal Formality: Informal practices of formal firms as a key business constraints",

increase the import bill. Prices of main agriculture produce are expected to increase, with the exception of coffee and rubber which are expected to temporarily dip in 2018 before recovering over the medium term. This outlook should provide favorable prospect for Lao PDR's agriculture. Copper prices are expected to preserve their recent gains. However, reversal of these trends, natural disasters and weather shocks could be a key downside risks. Oil prices, major import item, are projected to continue rising after bottoming at US\$43/barrel in 2016 and reach US\$65/barrel in 2018, and gradually rise after that. The increase can lift the import bills, but could also affect government revenues. The increase in oil prices is expected to impact domestic inflation, but the impact on consumers is expected to be more moderate due to price adjustments while there could be fiscal costs.

Figure 46: The outlook on key commodities prices generally look favorable

(Index 2016=100)



Source: World Bank Commodity Markets Outlook, <http://www.worldbank.org/en/research/commodity-markets>

43. The National Assembly approved medium-term fiscal plan envisages a gradual reduction of the fiscal deficit helping to stabilize and eventually put public debt on a sustainable path by 2020. The revenue improvement is expected to come from planned increase in excise tax rates (2019), strengthened revenue administration (including a new Law on Tax Administration planned for 2019), improved tax-payer services and the launch of modern revenue management information system (expected in 2018). The authorities, with support from development partners, recently completed a tax policy review and are finalizing a plan for tax administration improvement. Building on these efforts, during 2018, the authorities plan to revise the Law on VAT and the Tax Law (to improve the collection of excises), and adopt new law on Income Taxation and on Excises. At the same time, spending growth will be controlled through continued strong control over the wage bill and public recruitment (intake of new staff is further reduced to 3,000 in 2018), cancelation of some public investment projects as well as cuts on non-essential spending. Public debt level is expected to remain high in coming years if fiscal consolidation plan does not materialize and may continuing to pose a high risk to fiscal sustainability.

44. The external deficit is expected to widen slightly in 2018 reflecting the large import content of the infrastructure projects, including the railway, and higher oil prices. Exports are expected to benefit from more power generation capacity coming on stream and continuation of recent trends in manufacturing. However, this is unlikely to off-set fully the increasing imports and prevent a widening of the current account deficit. Still, the current account deficit is projected to return to a

declining trend after 2018, as import growth retreats. Gradual recovery of agriculture commodity and metal prices will support export earnings. The current account will continue to be financed by FDI and external borrowing, the latter increasingly on less concessional terms.

45. Major changes in monetary and exchange rate policies are unlikely. The authorities will continue to manage the exchange rate within the +/- 5 percent band; using the full band should provide the authorities with greater flexibility and lower pressures to intervene in the market to stabilize the kip. It is appears that the recent reduction in the policy rate and application of interest rate caps has limited positive impact on stimulating credit growth and lending to small and medium size enterprises (SMEs). Given recent trends in lending and weakening loan-portfolio, credit growth could further ease. Inflation is expected to pick up; however, further fiscal consolidation, moderate credit growth and gradual recovery in commodity prices are likely to keep inflationary pressures moderate and within the Government's target of less than 5 percent.

46. This outlook is subject to growing downside risks. Steeper than expected adjustment in China or a reversal in recent trends in Thailand could depress demand for Lao exports and put pressure on reserves and macroeconomic stability. The performance in Q1-2018 weakened in advanced economies and had spillover to some developing economies. Similarly, greater global financial and exchange rate disturbances could undermine capital inflows to Lao (bonds for public and private sector financing, loans etc.) and add to debt service costs with negative implications for growth and stability. Slippage from the fiscal consolidation plan could push up risk to public debt. The rapid expansion of public investment in the power sector in Lao PDR resulted in buildup of significant liabilities which could threaten its sustainability, if the supply is not met with well-paying market demand. The recent increase in the minimum wage by 22 percent to LAK1.1 million (equivalent to US\$132), although still lower than regional peers, if not met by productivity improvements, could undermine the nascent growth of non-resource sectors. On the other hand, the authorities have recently shown greater commitment to improving the business environment and facilitating private sector development. Genuine efforts in this direction could unlock opportunities for Lao PDR and boost growth. Failure or delays in implementing the PM order could prevent robust development of the private sector.

Policy Considerations

Addressing risks to macroeconomic vulnerabilities is a key priority

47. Taking bolder steps on the fiscal consolidation plan and fiscal discipline remains a priority.

The fiscal plan for 2018, with a deficit of 4.9 percent of GDP, proposes a slower pace of deficit reduction than envisaged with the October 2016 revision of the 5-year plan. Furthermore, the developments on the capital spending side in the first quarter of the year may suggest difficulties in the ability to meet the deficit target. It will be important to carefully monitor the budget execution in 2018 and make adjustment to ensure that the spending and deficit target is met. Revenue over-performance, if any, should be used to lower the deficit or clear arrears. Looking towards the 2019 Budget, it should be based on realistic assumptions about growth and inflation and confirm the commitment to stronger consolidation efforts. Adopting a Budget that will yet again fall short of the expected fiscal consolidation, will put in question that the credibility of the commitment to lowering the risks to public debt sustainability.

48. On the revenue side, there is scope to improve collection from income taxes, both corporate and personal, but also explore other revenue sources. Lao PDR currently collects only 2.6 percent of GDP in income taxes, one of the lowest collection rates in the region (for example, in Myanmar it is 2.9 percent of GDP, in Cambodia 3.6 percent of GDP and 6.2 percent of GDP in Thailand). While the statutory rate is not low (24 percent), the low collection reflects the structure of economy (small, subsistence and largely informal businesses), but also the generous exemptions (to new businesses, listed companies, businesses in special zones and so on). A detailed review of exemptions and the foregone revenues (a tax expenditure study) need to be undertaken as a priority and should guide reform efforts. Completing updated tax payer registries can help monitor and plan revenue collection. Introducing an environment tax (already envisaged in the current tax law as a direct tax, based on polluter-pays principles), can help secure revenues but also provide incentives for adoption of clean technologies and lowering environmental damages. Also, a well-functioning property taxation (currently generating only around 0.1 percent of GDP in revenues, compared to 0.3 percent of GDP in low-income countries and 2 percent of GDP in OECD countries) would also be another opportunity to generate revenue while improving equity as the better off own more and more valuable property¹⁷.

49. On the expenditure side, controlling spending growth should focus on curbing foreign loan financed public investment as well as strengthening the project selection processes. Given the current public debt dynamics, borrowing decisions need to be significant scale back and strengthen project selection process. Only the most needed and viable projects should be financed. The wage-bill is an area that can produce some savings, through continued tight management of the employment – this can also provide some fiscal room for wage adjustment to keep pace with inflation developments. At the same time, there are a few areas where Lao PDR could spend additional resources; for example, non-wage service delivery costs in education and health (and probably other sectors) are underfunded. Still, increased allocations should go in parallel with reforms in the financing of activities that would ensure greater efficiency in spending.

¹⁷ For more on this and other reasons why developing countries should focus more on property taxation, please see: <https://www.cgdev.org/blog/equity-friendly-property-tax-time-developing-countries-invest>

50. On debt management, given the elevated debt and growing reliance on market-based financing, continued efforts on strengthening public debt management is equally important. As the Public Debt Management Law is expected to be adopted in 2018, it is essential to advance the preparation of the necessary secondary regulations and institutional setup to properly support its implementation. This would include the development and publication of a Debt Management Strategy and regular reporting on debt and risks, and the Medium-term Borrowing Plan, to operationalize the implementation of the Strategy. Institutional reorganization within the Ministry of Finance (domestic and external debt management are to be integrated into one department), is now taking place, but this needs to be accelerated, while taking into account good practice on division of responsibilities, combined with capacity building efforts.

51. Advancing reforms in the financial sector can reduce risks. It is important to ensure that the planned restructuring of the weaker SOCBs is done in line with good practices and that measures are taken to deal with identified weaknesses in the sector. As the authorities are revising the legal framework, such as the Laws on the Bank of Lao PDR and Commercial Banks, it is a good opportunity to consider good practices, including on the management of the BOL, relations with market participants including the Government and commercial banks, timeline for lending to the budget, and supervision authority, etc.

Achieving more sustainable and stable growth will require a genuine and vibrant private sector

52. Boosting growth outside of the resource sector will need improvement in business environment. More employment opportunities could be created if diversification to non-resource sectors, which are more labor intensive, is promoted underpinned by strong commitment on doing business reforms. Addressing informality, which is viewed as the top constraints by businesses, could be done through prioritizing a functional and efficient “one-stop window” for business registration, improving consistency and level playing field for regulation implementation, strengthening the tax system for consistency and transparency are some of the critical pre-condition for the private sector growth. Investing in human capital and infrastructure services will help improve productivity and competitiveness of firms. Under facilitating business environment, Lao DPR could attract investment including in manufacturing and services, that could link it to regional supply chain and create more value added. Importantly, a better business environment will ensure more competitive markets and has the potential to lower prices for consumers.

53. Lao PDR’s comparative advantage over the medium-term will clearly lie in resource sectors; however, their sustainable expansion will also require sector-specific interventions. Carefully manage borrowing to invest in the power sector and redistribution of benefits from resources will be key to improving consumption and making the growth process more inclusive. Tourism has significant potential. Reforms to improve tourism services, transport services, competitiveness and branding are crucial to promote the sector development. Forestry is another area with strong potential in Lao PDR, reflecting the availability of land and favorable climatic conditions. The authorities have recently been able to effectively control illegal logging; however, stronger expansion of the sector will also depend on putting in place adequate systems for certification and ensuring timber legality, which are increasingly being required by high-end markets. Successful development of production forests will also provide opportunities for moving up the value added, into industries like wood processing. Reforms that can ensure that the agriculture sector, more specifically rice production, has a stronger contribution to inclusive growth are identified in the thematic note of this Report, and include measure

to overcome the problems of highly fragmented producers and markets, improving the quality of produce as well as simplifying regulatory and administrative procedures for exports.

Table 1. Key Macroeconomic Indicators and Projections

	2014	2015	2016	2017	2018	2019	2020
				Est.	Proj.	Proj.	Proj.
Real sector							
GDP, in US\$ billion	13.3	14.4	15.8	17.1	18.5	20.2	21.9
GNI per capita, in US\$	1,840	2,000	2,150	2,270
GDP growth, in percent	7.6	7.3	7.0	6.9	6.7	6.9	6.9
Fiscal account	Percent of GDP, unless otherwise indicated						
Total revenue and grants	20.9	19.8	16.6	16.1	16.6	17.2	17.7
Tax revenues	13.6	14	12.7	12	12.4	12.7	13.3
Non-tax revenues	2.5	2.5	2.4	2.5	2.4	2.4	2.4
Grants	4.9	3.3	1.5	1.6	1.8	2.1	2.0
Total expenditure	24.3	24.2	20.9	21.4	21.5	21.2	20.9
Current expenditure	12.8	13.3	13.1	12.5	12.5	12.3	12.3
Wages	8.1	7.5	7.1	7	6.9	6.8	6.6
Transfers and subsidies	2.3	2.0	2.4	1.9	2.0	1.9	1.9
Interest	0.8	1	1.2	1.4	1.5	1.6	1.8
Purchases of goods and services	1.6	2.5	2.2	2.0	2.1	2.0	2.0
Capital expenditure and net lending	8.4	9.3	5.5	9.0	8.6	8.5	8.2
Other, including arrears clearance	3.1	1.6	2.4	0.0	0.4	0.4	0.4
Overall balance	-3.4	-4.4	-4.3	-5.3	-4.9	-4.0	-3.2
Balance of payments	Percent of GDP, unless otherwise indicated						
Exports of goods and services	41.0	36.1	34.1	35.4	36.5	38.0	40.0
Imports of goods and services	58.3	52.6	44.8	44.3	45.0	46.0	47.0
Current account balance	-16.2	-16.8	-13.1	-11.4	-13.0	-12.8	-11.6
External debt	100.1	102.7	104.5	113.7	119.8	122.1	120.0
Gross reserves, in US\$ million	816	985	817	1,018	1,134	1,299	1,436
In months of imports	1.3	1.6	1.4	1.6	1.6	1.7	1.7
Prices and exchange rates							
Inflation, period average	4.2	1.3	1.6	0.8	3.0	3.0	3.0
Exchange rate, kip/US\$	8,035	8,117	8,198	8,244	8,326

Source: Lao Authorities, trading partners' data, staff calculations and projections.

Part II: How can farmers get more for their rice and consumers pay less¹⁸

Summary

1. Rice is Lao's biggest agricultural commodity in terms of farmers involved in production, cropland area allocated, and food consumption. Although improved agriculture commodity prices and external demand has promoted commercialisation, crop diversification and exports of non-rice crops such as vegetables, fruits and rubber to neighbouring countries, rice still remains critical to Lao farmers. Almost all farmers in Lao PDR are still involved in paddy production and 75 percent of Lao's arable land is used for paddy, with little changes over time. On the consumption side, glutinous rice constitutes about 70 percent of households' caloric and protein intake. Farmers generally complain about low paddy prices while consumers about high rice prices. Indeed, rice prices in capital Vientiane are among the highest in Asia. In 2017, the average retail price of second-quality rice in Vientiane was US\$0.85/kg¹⁹ compared to US\$0.42/kg in Phnom Penh, US\$0.38/kg in Hanoi, US\$0.40/kg in Bangkok, US\$0.44/kg in Yangon, US\$0.50/kg in New Delhi, US\$0.73 /kg in Manila, and US\$0.80/kg in Jakarta.²⁰ Why are rice prices in Lao PDR so high, what explains this situation? Do farmers benefit from it? How rice prices can be reduced for consumers while increased for farmers (to generate economic gains), using market-friendly incentives along various stages of rice value chain?

2. To shed light on these questions in supporting the Lao PDR Government's recent efforts to increase competitiveness of rice value chain, the World Bank studied the cost build-up along the value chain from paddy production areas in Khammouane province to retail outlets in Vientiane capital in 2017. This study is unique for Lao PDR in estimating a cost build-up at each stage of the value chain, using primary data, and applying a consistent methodology.

3. **In summary, high cost of paddy production and operational inefficiencies among multiple players in the value chain are responsible for high consumer rice prices.** The study finds that Lao farmers receive relatively high farm-gate price, yet high production cost eats their profits (Figure 47) (not low farm gate prices as often perceived). The high production costs are pertained to low productivity and quality management at the farm and immediate post-farm level. However, the share of farm-gate prices in wholesale and retail prices in Lao PDR is the lowest among its peers. As a result, supply responses by farmers to changes in consumer prices are dampened. This dampens the farmers' supply response. In addition, the issues holding back the rice sector in Lao PDR pertain to: (i) a fragmented milling sector dominated small operators with old technology; (ii) an overall market system that fails to provide incentives for product quality; and (iii) a lack of significant consumer class with high purchasing power and economies of scale that could foster consolidation of wholesale and retail sectors and reduce their costs.

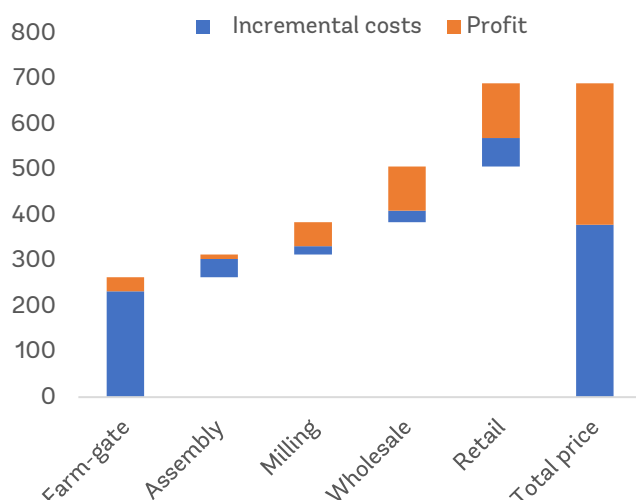
¹⁸ This Part 2 is based on World Bank (2018), "Commercialization of Rice and Vegetables Value Chains in Lao PDR: Status and Prospects" carried out in 2017 and 2018 by the team led by Mombert Hoppe (Senior Economist, GMTP1) and Sergiy Zorya (Lead Agricultural Economist, GFA02), both from the World Bank, with a significant contribution from Anke Reichhuber and Kenekeo Sayarath from the UNIQUE forestry and land GMBH.

¹⁹ The first-quality glutinous rice fetched \$1.0/kg in Vientiane in 2017, according to FAO GIEWS.

²⁰ FAO GIEWS dataset.

Figure 47: High production costs leave farmers with low profit margin

(US\$/ton)



Source: World Bank (2018)

4. These constraints are largely structural and they require public investments in: (i) facilitating value chain linkages between farmers and millers through productive partnerships and contract farming; (ii) enhancing access to finance of farmers and millers; and (iii) improving quantity and quality of public services critical to reduce the currently high production costs and enhance commercialization, e.g., seed, applied research, mechanization, cooperatives, and good agricultural practices. Reduction of farm production costs is probably the most important challenge and opportunity at this point of time for Lao PDR.

5. **While regulatory or administrative barriers were not found to currently play a major role in directly inflating cost structure of the rice value chain, cumbersome regulations do limit investment entry, affect market structure, and reduce competition.** The recent efforts by the Lao authorities to encourage private sector investments in value chains, promote contract farming, and limit the use of distortive trade instruments such as export or cross-provincial bans/roadblocks for movement of rice practiced in the past therefore seems to generate first results. Yet, there is still some room for regulatory improvements. Lowering regulatory costs for businesses, strengthening enforcement of contracts and product labelling, and removing price regulations for paddy and rice would induce greater investment interest, competition, incentives for efficiency improvement and further reduce costs along the value chain. This would also include eliminating the occasional threat of export restrictions, which can deter new investment decisions as they limit the predictability of returns.

Rice production exceeds domestic consumption, allowing for limited exports

6. **Lao PDR is one of the most agrarian economies in East Asia, with 64 percent of the workforce engaged in agriculture.** Rice remains the main crop and almost all 783,000 farm households produce paddy on 75 percent of the arable land. Between 2015 and 2016 Lao PDR produced 4.1 million tons of rice, and by 2020 the rice output is projected to increase to 5 million tons. Most paddy is produced during the wet (or monsoon) season, partly due to lack of irrigation required for production during dry season. Between 2000 and 2010, average paddy production grew by 1.8 percent per year, largely due to the increase in rice land area and cropping intensity. Between 2010 and 2017, the growth

in paddy production accelerated to 5.3 percent per year, due to the increase in cropping intensity (1.4 percent) and yields (3.7 percent).²¹

7. **Despite the recent growth acceleration, rice produced is mainly used for domestic consumption (about 95 percent).** Laotians eat predominantly glutinous or sticky rice. It accounts for 92 percent of rice production area and constitutes 70 percent of households' caloric and protein intake. Most rice consumed is a second-quality rice costing about US\$0.85/kg in Vientiane; yet, the first-quality rice costing US\$1.0/kg is increasingly demanded by wealthier consumers in Vientiane. A large consumption of glutinous rice is a unique feature of Lao PDR. Most Asian people eat non-glutinous rice, and besides Lao PDR, only Thailand produces a large quantity of glutinous rice for domestic consumption and exports. This makes Lao PDR vulnerable to weather variations affecting production and price fluctuations in Thailand.

8. **Exports accounts for only five percent of rice production.** Almost all of it is glutinous rice and it goes to Vietnam during the Tet Lunar New Year period when demand is high. Lao sticky rice farm-gate price account for lower share in wholesale and retail prices compared to that in other regional peers, allowing it to compete in Vietnam and Thailand. Improved road connectivity between Lao PDR and Vietnam also helps increase Lao rice competitiveness. In the last few years, Lao PDR entered in bilateral agreements on export quotas with China and Vietnam and Lao PDR can also benefit from the Everything but Arms arrangement, which grants the country full duty-free and quota free access to European markets for all products except arms and ammunition. Benefiting from these market access arrangements, however, would require a substantial increase in production quantity and quality of rice, and reduction in non-tariff barriers (including reducing regulatory requirements for export, obtaining authorizations, threat of export prohibition, inefficient processing of documents, and informally paying officers to speed up the process).

The rice value chain is highly fragmented, weakly coordinated and expensive

9. **From production to processing and trading, the rice value chain in Lao PDR follows traditional ways rooted in trust relationships.** The following description of market actors in the chain shows where opportunities for increased efficiency and competitiveness might exist. This value chain structure entails several complex relations between the stakeholders involved.²²

Box 1: Rice Value Chain Structure



The structure of the traditional rice value chain in Lao PDR is configured as many small- and medium scale farmers on one end, many small mid-market actors including assemblers, collectors and traders, larger millers in the midstream, and many small wholesalers and retailers at the other end.

Production

10. **Two main production arrangements exist for rice farmers: i) production under contract with millers and ii) production by individual farmers.** The clear majority of paddy production is done by individual farmers and does not involve any kind of contracts or cooperative arrangements. Yet, in Khammouane province, many farmers increasingly produce under some form of contract for the leading modern mills, which provide them with good quality inputs and training at the beginning of the season.

²¹ According to the US Department of Agriculture Global Database.

²² Inputs trade is not studied in this work in detail, and thus it is not reported here.

However, there are some cases of non-compliance with contracts by farmers, aggravated by weak dispute resolution mechanism. Millers also buy rice from farmers, who are not under contract. Once they have met the agreed volume or paid back their loans amount in the contracts, farmers under contract can also sell outside of the contract if the mill is in oversupply or if farmers can get a better deal elsewhere. For example, traders from outside the province sometimes offer higher paddy prices.

11. **Average yield of 3.5 tons/ha is lower than in peer countries, partly reflecting average levels of use of nitrogen fertilizers which is well below the recommendations.** In addition, production is very labour intensive as mechanization of land preparation and harvesting is still rare. Although productivity gains have been achieved in the past, major constraints continue to exist, including poor seeds, weak extension services²³, and difficulties in accessing credit. Quality of paddy is reported to be low. Important criteria for the quality of paddy are head rice, variety, moisture content, proportion of whole grains and freedom of foreign material. If the paddy falls below a certain standard it negatively affects the milling process and causes further costs. According to key informants currently 80 percent of paddy sourced fall below that standard.

12. **Low productivity, high production costs, and low quality of paddy lead to low farm profits despite relatively high farm-gate prices.** With profit rates of 12 percent, the profit value of the wet season paddy production was US\$109/ha in 2017. Based on these estimates, for example, a farmer owning 3 ha of rice in Lao PDR would earn about US\$330 per season, which is hardly enough to have an incentive to engage in production. According to PhilRice and IRRI estimates from 2016, farmers in India and Vietnam achieved profits of US\$193/ha and US\$246/ha during low-yielding (wet) season, respectively. Relative profit margins at the farmer level in Lao PDR are also low compared with other countries in the wider region (Table 2). Farmers in the neighboring China, Thailand, and Vietnam, as well as in India, receive a much larger share of total value chain profits compared with those in Lao PDR.²⁴ In China and Thailand, this is partially a result of higher farm-gate paddy prices, but in India and Vietnam the farm-gate prices are lower than that in Lao PDR, which does not prevent their farmers to generate higher profits. It seems that high production costs put pressure on Lao farmers, not low farm-gate prices as often perceived in the country.

Table 2: Rice profitability: cross-country comparisons

	Lao PDR	Thailand	Vietnam	India	China
Ratio of net profit to total costs, In percent	12	59	48	21	44
Price of paddy in US\$/ton, (14 percent moisture content)	290*	332	227	254	476

Note: * Average moisture content of Lao wet paddy is 22 percent. Farm-gate price of wet paddy is US\$264/ton. For international comparison, wet paddy is converted to dried paddy equivalent with 14 percent moisture content.

Source: F. Bordey, P. Moya, J. Beltran, and D. Dawe (2016): Competitiveness of Philippine Rice in Asia. PhilRice and IRRI, Philippines, and own estimates for Lao PDR.

²³ Extension services refer to actions or services that facilitates farmers' and other rural actors' access to knowledge, information and technologies, and their interactions with other players; and assists them to develop their own technical, organizational and management skills and practices, so as to improve their productivity, livelihoods and well-being (www.fao.org)

²⁴ This comparison needs to be made with a caveat. In contrast to Lao PDR, where sticky (or glutinous) rice, is mainly produced, other countries produce largely non-sticky (ordinary) rice. Sticky rice is usually more expensive than non-sticky rice, but the benchmark data for sticky rice produced in other countries is not available.

13. **Very few farmers deliver paddy directly to rice mills.** Instead, they are selling paddy to small assemblers, who deliver it to rice mills. Farmers do not negotiate directly with rice mills. In the case of contract farming, the miller may arrange its collectors hired on a flat rate basis. Farmers closer to the mill can also deliver harvested paddy directly to the mill. Medium sized mills with more modern equipment rely more on collectors as they depend on larger catchment areas to fill their capacities. There are no warehouses at the local level which would allow farmers to store and manage their rice stock in a central location. Few regulatory controls and restrictions exist at that assembly stage and compliance costs remain small. However, price control at milling, as well as at retailing stage, could send a signal on regulated profit margin and reduce incentives for new millers to invest. Together with cumbersome entry processes, the price regulation could deter new entry and prevent more competition, which would benefit consumers and farmers.

14. **Assemblers do not face large cost; however, collection practices are highly inefficient.** Costs for assemblers are mostly from fuel and maintenance of their own truck (1.5 ton), packing materials and hired labor for loading. They drive themselves and their profit is their own return to labor. Instead, assemblers drive up to 3 days from farmer to farmer buying here and there a few bags (50kg) of paddy to fill their truck. With some farmers they have made agreements via phone, others they visit unsolicited. After the main harvest season, farmers only agree to sell small portions of their remaining stock whenever they need cash. Assemblers therefore need many stops before they leave the rural areas and drive back to the mills to empty their truck.

Processing

15. **Most mills in Lao PDR are family-owned businesses and they operate on a rather informal basis.** They are small to medium sized operations which can process from 5 tons/day to around 50 tons/day. There are also many small rice mills with production capacities not exceeding 1 ton per day. Most of them are not in the provincial database of business operators. They are located further away from the main transport lines and markets, operate at a much lower standard, efficiency and volume. As a result, they generally incur high processing costs. They only process paddy for local demand and sometimes sell to modern mills, where the paddy is graded, sorted and further processed to obtain grade A Rice (first-quality rice).

16. **Rice mills face significant difficulties in accessing financial services and improving their business.** Their difficulties are partly due to limited business and communication skills. They also lack confidence, which prevents them from approaching banks and government agencies. Only 4-6 medium-sized mills have managed to invest over the years in modern infrastructure and upgraded their equipment, using short- and medium-term (1-3 years) working capital loans.

17. **Some efforts to better organize the market have been initiated, with good initial results.** To facilitate working with farmers and create a stable environment, some of the larger rice mills in Khammouane province have organized the paddy market. The leading mills in the five districts of Khammouane formed so-called development rice miller groups to promote cooperation and agree on minimum paddy prices or discuss export opportunities. Overall, millers and farmers benefit from these contract arrangements. Working with farmers allows mills to improve the quality of the paddy and as a result they can increase their milling efficiency. Farmers benefit from support which is provided in terms of seeds, fertilizer and training. It helps them raise their yields and quality. In addition, they benefit from relatively predictable paddy demand.

18. **The distribution sector is also very fragmented.** Wholesaling is mostly performed by small traders with typical annual turnover of less than 50 tons a year, who supply the retailers on a real time per-order basis. The main retailing outlets are comprised of many traditional small shops outside of wet markets, which are typically owner-operated and characterized by very low turnover (1 ton per month). Because of the fragmented demand and small purchases by consumers, transaction costs at the wholesale stage are high. Like assemblers, wholesalers pay unsolicited visits to retailers hoping for business. They spend a lot of time driving around markets trying to sell the rice on their truck. If there were large orders, wholesalers could further significantly reduce handling cost and fuel cost per ton by investing in larger trucks. However, most traded quantities are small. A typical order from a retailer has the size of 10 bags of 50 kg. Given their business model and the small quantities these wholesalers drive their own truck and it is not economical to hire transport companies. Moreover, large trucks are not allowed to enter market areas during day time due to the small roads and large traffic. Wholesalers therefore need many stops before they empty their truck. The report finds that the absence of effective dispute resolution mechanisms discourages the development of more professional and expansive buyer-seller relationships beyond established networks that could increase efficiency through economies of scale and reduce costs. The reliance on trust-based relationships also acts as a barrier to entry for new operators which do not have such networks.

19. **Supermarkets emerge, but these appear to be still marginal in terms of importance to retail in the rice sector.** To date, a larger supermarket with foreign ownership has opened in Vientiane, but the emergence of larger number of retail outlets will be important to generate economies of scale in the distribution sector and reduce costs. Development of modern food retails (supermarkets, hypermarkets, convenience store chains, neighborhood chain stores, and discount and club stores) could grow in Lao PDR displacing the traditional retailers. Yet, it will take some time. Supermarkets can use economies of scale in procurement and marketing to reduce costs of staples to consumers and can use economies of scope to differentiate quality and thus appeal to different segments of consumers, so they will be able to offer lower prices than traditional stores. Important conditions for modern retail are a stable and favorable business environment, a growing middle class, and access to affordable and well located real estate. While a growing middle-class exists in Lao PDR, the business environment remains cumbersome and anecdotal evidence indicates that informal restrictions to accessing prime real estate exist.²⁵ While there do not appear to be legal barriers to entry for supermarkets, the minimum capital (investment) requirements are very high and informal barriers may exist.

High production and transaction costs drive consumer prices

20. **The cost and profit breakdown at various stages of value chain between Khammouane and Vientiane are presented in Table 2.** Farm production costs explain 29 percent of final consumer price. They are mainly driven by high costs of hired labor, lacking mechanization, and low yields. The rest is explained by high profits at wholesale and retail segments, which are largely a reflection of high transaction costs that are associated with each on the spot business deal and very small quantities as described above rather than a result of government-induced barriers at entry leading to monopoly rents. Note that translating profits into income per day, for a wholesaler, a profit of \$97/ton of rice equals a daily income of \$13 assuming 7 working days per week. For retailers, net profits are estimated at

²⁵ For a detailed discussion of challenges in the Lao business environment and the role of discrete decision making, see World Bank (2018): *Doing Business in Lao PDR: Constraints to Productivity*, <https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=29579731>; and Imboden and Hoppe (2017): *Formal Informality: Informal Practices of Formal Firms as a Key Business Constraint*, <https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=28129110>.

\$120/ton results in a daily income of \$6 from rice. To a certain degree, it is likely that high reported profits at these stages reflect high opportunity costs of labour that result from the overall small level of transactions. The lack of an effective dispute settlement mechanism that discourages the establishment of larger distribution networks in turn contributes to the small transaction levels?

Table 3: Lao PDR rice value chain: costs, prices, profits
In US\$/ton

	Farm-gate	Assembly	Milling	Wholesale	Retail
Price	264	284	355	608	791
Costs:	233	273	302	511	671
Purchase of intermediate product		233	284	486	608
Incremental costs	233	40	18	25	63
Profit	31	11	53	97	120

Source: WB Staff.

21. **Despite the relatively high farm-gate price (Table 3), Lao farmers do not fully benefit from high consumer prices.** In many countries, the ratio of farm-gate to wholesale prices range from 34 percent to 51 percent (Table 3). Yet in Lao PDR this ratio is only 27 percent. The share of farm-gate to retail prices is also low in Lao PDR.

Table 3: Share of farm-gate prices in wholesale and retail prices:
cross-country comparison
In percent

Countries	Ratio of farm-gate to wholesale prices,	Ratio of farm-gate to retail prices,
China	51	
Indonesia	45	39
Philippines	34	33
India	46	39
Thailand	46	
Vietnam	44	
Lao PDR	27	21

Note: Price ratios for Lao PDR is for 2017. For other countries is 2013.

Source: WB Staff estimates based on FAO GIEWS price data and PhilRice/IRRI study 2013.

22. **Most costs leading to the high wedge between producer and consumer prices in Lao PDR are a result of structural problems; yet, there are also regulatory and administrative costs that still need to be addressed.** The key among the structural problems is the low farm productivity. Yet, there are also regulatory and administrative costs that still need to be addressed to enhance efficiency along the value chain and crowd in private investments. Currently, these costs do not seem to directly inflate the cost structure of the value chain, but the report finds that cumbersome regulations still matter as they limit entry, affect market structure, and reduce competition, and they require attention. Among the most prominent are related to difficulty of accessing capital, price regulations, and the lack of an efficient conflict resolution mechanism for commercial disputes.

23. **Regulatory controls and policies in the banking sector have had an adverse impact on rice mills' access to affordable investment capital, leading to underinvestment in the sector, lack of modernization and low efficiency gains.** In Lao PDR, the banking sector is dominated by state-owned commercial banks, which control a large share of the market and 80 percent of total lending is geared

towards production, leaving few financing options for other value chain activities such as trade and processing. Given the lack of investment capital, rice mills often use medium-term (1-3 years) working capital loans to finance investment activities. Financing to the agriculture sector is almost exclusively dominated by the Agricultural Promotion Bank and to a lesser extent the Lao Development Bank²⁶. On top of that, collateral requirements for banks' lending activities are prohibitively high, in some cases as high as 70 percent for extending credit, and collateral requirements come exclusively in the form of immovable assets (land and real estate). Additionally, some of the key constraints reported by the state banks in lending include the fact that most rice mills lack the proper accounting and record-keeping to enable banks to perform adequate due diligence. Interest rate subsidies exist but are very cumbersome while, on the other hand, some farmers also pose high risk of default due to poor yields, disasters impact, etc.

24. Rice mills are also subject to price controls, which may reduce interest from investors and could prevent entry of newcomers who might feel they would face higher scrutiny on prices they pay and receive and would therefore have lower profit expectations. The price controls are meant to cap the gross margins for processors. A price floor for purchasing glutinous rice paddy from producers at the farm gate or village level is currently set at 2,500 LAK/kg (US\$300/ton).²⁷ The regulation also sets a price ceiling at no more than 3,000 LAK/kg (US\$360/ton) for rice sold by rice mills and rice mill associations, and for the purposes of stockpiling. The actual farm-gate prices found in this study are much lower than a regulatory price (~US\$264/ton), while the milled rice price is close to the regulatory price (US\$355/ton). Government representatives at the district and provincial level are heavily involved in setting and negotiating prices along with the rice mills and farmers' cooperatives. However, these prices disregard differences in paddy quality and actual paddy buying prices paid at farm gate or village level were consistently below the official price, while selling prices for milled rice reported by mills and wholesalers were consistently above the official price.²⁸ These differences between official and actual prices are consistently observed. More transparency of prices in the country by regular publication of market prices that consider quality differences and phasing out price controls for paddy and rice would improve incentives for all stakeholders throughout the chain to improve quality.

25. Mechanisms for contract enforcement are inefficient in Lao PDR, limiting the appetite for risk, consolidation and the creation of new business opportunities throughout the entire rice value chain. The strong reliance on trust-based relationships in business development and the absence of a cost-effective out-of-court dispute settlement mechanisms for commercial conflicts creates disincentives for investors at all stages of the value chain, reducing the impetus of value chain actors to form more professional and longer-term contractual relationships and enter into deals with business partners outside of their trusted comfort zone. For example, at the farm level, this affects the appetite of millers to expand extension services and input supplies, while at the retail and wholesale level it affects the scope for consolidation as operators continue to work only within their trusted relationships, keeping transaction volumes low (and required profits per transaction high). Furthermore, evidence suggests that inefficiencies in the country's judicial processes and arbitration system for resolving commercial disputes diminishes private banks risk appetite for lending to the sector. Traders and

²⁶ A third bank, Nayoby Bank also has a lending portfolio in rural markets however it is a specialized policy lending bank that target lending to poor income family in the country's urban centres and rural markets.

²⁷ Titled: "Average price for buying glutinous paddy (paddy and irrigated rice field) from October to December 2016 and all-round year 2017.

²⁸ Lower prices at farm gate reflect the low quality of the paddy as an estimated 20 percent of farmers produce the required standard in terms of variety, moisture content, mixing of different varieties and foreign matter. Prices at mills are explained by the fact that the mills in the study sample belong to the medium sized mills, which have, to some extent, upgraded their facilities and can charge higher prices for their rice.

processors are also reluctant to enter into long-term contracts with business partners because they face the risk of default, reinforcing an inefficient and costly system based on small transactions.

Policy Considerations

26. There is an important role for government to play in building a more cohesive value chain to create efficiencies and improve competitiveness. The following recommendations could help.

Improve value chain linkages

27. **Farmers and traders need stronger coordination along the supply chain to agree on joint systems and standards.** Stronger vertical linkages between different stages of the chain and horizontal consolidation via marketing and contractual arrangements would reduce losses and price fluctuations. The government can assist in this task by enabling the following processes:

- **Facilitating closer interaction between producers, processors, assemblers, and traders.** This could take the form of business incubators for farmers and rice mills, productive partnerships between farm groups and rice mills, and other business platforms in order to help reduce costs, and inefficiency.
- Providing extension services to producers and processors to offset high production and labour costs. Improved access to knowledge and technical expertise can contribute to an overall increase in productivity, and can indirectly increase farmers' profit margin.
- **Enhancing contract enforcement and alternative dispute resolution mechanisms for timely resolution of commercial disputes.** This will increase the appetite of value chain actors to form longer-term contractual relationships and enter into deals with business partners outside of their trusted comfort zone which could bring larger volumes, better quality and better risk management. This would contribute to fostering consolidation and economies of scale at milling, wholesaling, and retailing stages.

Improve the regulatory environment

28. The regulatory environment provides challenges for non-farm businesses to invest and grow. In this case, government can assist by rolling back certain practices and removing some of the red tape to create a more business-friendly environment. The government could assist by:

- **Streamlining and simplifying business compliance processes to reduce transaction costs associated with bureaucracy.** This might include speeding up processing times at licensing offices, reducing processes for export authorization, or improving transparency in providing public services including through publication of all fee schedules, permits and licensing requirements.
- **Strengthening enforcement of regulation on price labeling and display and phase out price controls for paddy and rice.** Setting price guidance infers regulating on potential profits, which in turn could undermine interest from new investors. Increasing transparency of price information can help to curb monopolistic behavior as it allows buyers to compare prices and increases competition. The establishment of a Business Competition Control Commission and Secretariat as outlined in the country's new Business Competition Law to address business competition violations and ensure compliance is an important step towards increasing transparency in retail markets. Abolishing the current system of minimum and maximum prices and replacing it with increased transparency for prices which reflect quality differences would improve incentives for all stakeholders throughout the chain to improve quality and would

remove potential entry barriers for new investors. This could for example be achieved by publishing quality-adjusted, and location-specific actual market prices on a weekly basis on the MAF website.

Create an environment that engenders more and better public and private investment.

29. There is significant scope for enabling more investments to unlock efficiencies at all stages of the rice value chain, especially to reduce farm production costs, which are a large contributor of the inflated cost structure of the rice value chain. This can be achieved by:

- **Adopting a more balanced approach in public expenditures** by ensuring that the existing budgetary allocation for agriculture is administered more efficiently in support of production enhancing investments (quality of research and extension services, seeds, mechanization, cooperatives), as opposed to irrigation and large infrastructure investments which currently predominate.
- **Prioritizing attention of extension and other services to adoption of good agricultural practices by farmers.** This will allow improving quality of paddy, reducing production costs, and reducing environmental footprint of paddy production.
- **Providing capacity-building** in accounting, book keeping, and communication skills for rice mill owners and farmers to modernize their operations, improve their business, their access to finance and increase their profitability.
- **Reviewing indirect regulatory controls and policies** that impedes on agribusiness' ability to access affordable credit and benefit from state budget allocation for their investment capital needs.

References

- Electricite du Laos (EDL) annual statistics report and the annual reports. <http://edl.com.la/>
- EDL Generation Public Company Annual reports, <https://www.edlgen.com.la/index.php?lang=en>
- IMF-WB. 2017. Debt Sustainability Analysis
- Lao Statistics Bureau, www.lsb.gov.la
- Ministry of Information, Culture and Tourism. 2016. "Tourism Statistics Report 2016"
- UNCDF. 2017. <http://map.uncdf.org/lao-peoples-democratic-republic>
- World Bank Enterprise Surveys, <http://www.enterprisesurveys.org/>
- World Bank Group. 2016. EAP Economic Update: Reducing Vulnerabilities. World Bank. Washington DC.
- World Bank Group. 2017. EAP Economic Update: Balancing Act. Washington DC.
- World Bank. World Development Indicator Database. available at: <http://data.worldbank.org/data-catalog/world-development-indicators> and <http://data.worldbank.org/country/lao-pdr>.
- World Bank Group. 2017. Formal informality: informal practices of formal firms as a key business constraint. <http://documents.worldbank.org/curated/en/979281509632059588/Formal-informality-informal-practices-of-formal-firms-as-a-key-business-constraint>
- World Economic Forum. 2017. "The Travel and Tourism Competitiveness Report 2017: Paving the Way for a More Sustainable and Inclusive Growth", <https://www.weforum.org/reports/the-travel-tourism-competitiveness-report-2017>
- World Bank (2018); *Doing Business in Lao PDR: Constraints to Productivity*, <https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=29579731>
- Imboden and Hoppe (2017); *Formal Informality: Informal Practices of Formal Firms as a Key Business Constraint*, <https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=28129110> .