Rapid Analysis of Macroeconomic Performance in Lao PDR

1. Introduction

This paper assesses macroeconomic performance in Laos over the period 2011-2015, with a view to inform DFAT policies and investments in Lao PDR. It provides an overview of Laos economic growth over the period, its trade performance with ASEAN countries and the linkages between growth and poverty dynamics. The paper was developed by LADLF based on a review of existing literature and analysis of national statistics (see References in Section 5).

2. Economic growth

Over the period 2011-2015, Laos has achieved rapid economic growth[1], but partially achieved inclusive economic growth[2]. Growth rate of the Lao economy, measured by the annual growth of real gross domestic product (GDP), recorded at 7.8% over the period 2011-2015, which was almost twice higher than the average growth rate of GDP (4.1%) for economies in East Asia and the Pacific over the same period. Sustaining rapid GDP growth raised the level of its real GDP per capita by 28%, increasing from US$1,216 in 2011 to US$1,557 in 2015 (World Bank, 2017b). This is an encouraging result for utilizing economic growth as an instrument to narrow income gap across countries in the region and to fight poverty in poor countries.

Recent GDP growth in Laos showed a downward trend, falling from 8.0% in 2011 to 7.3% in 2015. The downward trend of GDP growth was associated with lower inflation rate, lower credit growth, and higher fiscal deficit. Inflation rate fell from 7.6% in 2011 to 1.3% in 2015, resulting from the pass-through of lower international fuel prices and a strengthening of the currency (IMF, 2017, p.3). Monetary policy was directed to increase growth of bank credit to the economy by imposing the interest rate caps on kip deposit and lending rates (World Bank, 2017a, p.8). Lower interest rate was expected to improve access to finance by small and medium-sized enterprises. But the effect of interest rate policy on credit demand was offset by lower growth of domestic economic activities. According to IMF (2017, p.31), the growth rate of bank credit to the economy dropped from 45.8% in 2011 to 16.8% in 2015. Meanwhile, fiscal policy was directed to reduce fiscal deficit, but the trend was reversed due to revenue shortfall. The share of fiscal deficit in GDP rose from 1.7% in 2011 to 2.7% in 2015. The deficit was financed by public borrowing, which increased the share of public debt stock in GDP from 56.0% in 2011 to 65.8% in 2015.

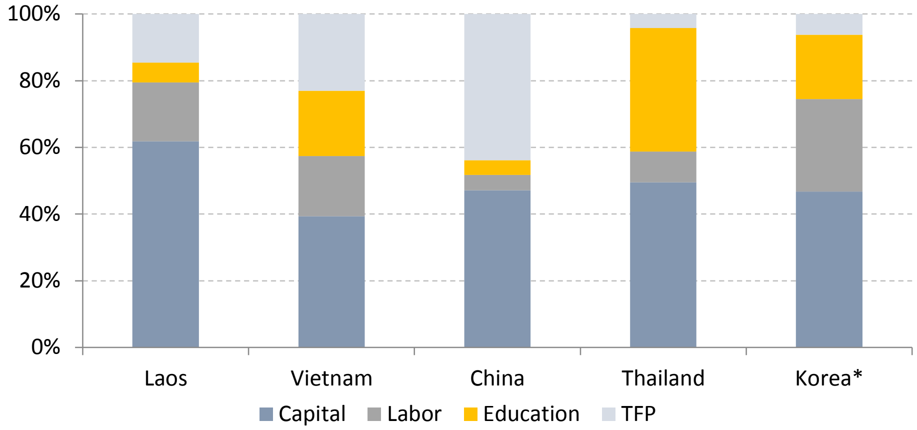
GDP growth in Laos has been mainly driven by growth in physical capital accumulation. Sources of GDP growth can be categorised into four factors: physical capital, education, labour input, and total factor productivity (TFP) based on the augmented Solow-growth model (Lee & Hong, 2012; Park, 2012).[3] ***Figure 1*** below illustrates the contributions of the growth of each factor to the growth of real GDP for Laos and some selected Asian countries over the period 2011-2015. It shows that the growth rate of physical capital accounted for 62% of GDP growth in Laos, which was higher than other Asian countries such as Vietnam, China, Thailand, and Republic of Korea. In contrast, education was the smallest contributor to growth in Laos, which accounted for only 6% of GDP growth.

[1] Rapid economic growth in Laos is achieved if its growth rate is higher than the average growth rate of economies in East Asia and the Pacific.

[2] Inclusive economic growth refers to the broad-based economic growth driven by the non-resource sector which shares benefits of economic growth to every segment of society.

[3] The level of TFP is determined by technical and allocative efficiency.

Figure 1: Sources of GDP growth for Laos and selected Asian countries, 2011-2015



Note: * Republic of Korea. TFP stands for total factor productivity.
Source: Author's calculation using data from World Bank's database, 'World Development Indicator', available at http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators.

The growth in physical capital accumulation has been driven by foreign direct investment (FDI) inflows. **Figure 2** shows the proportion of three types of investment in Laos during 2011-2015: FDI, domestic private investment, and government investment. FDI accounted for 75% of total investment, while domestic private investment accounted for only 19% of total investment (**Figure 2**). About two thirds of FDI inflows concentrated in electricity and mining sectors (**Figure 3**). It is still unclear whether rapid economic growth driven by FDI in Laos has resulted in the diversification of economic activities and generated sufficiently large number of jobs in the country.

Figure 3: Types of investment in Laos, 2011-2015

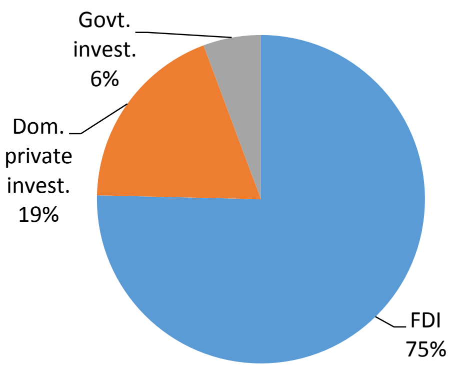
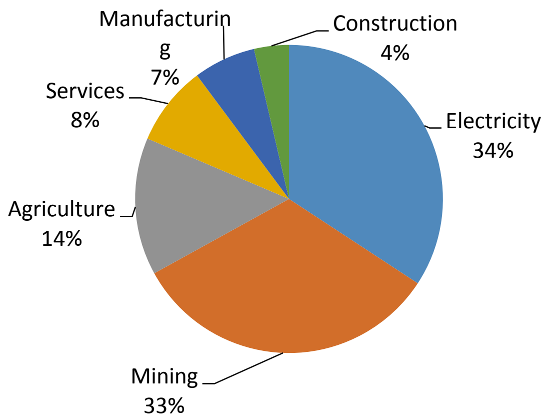


Figure 2: Sectoral distribution of FDI in Laos, 2011-2015



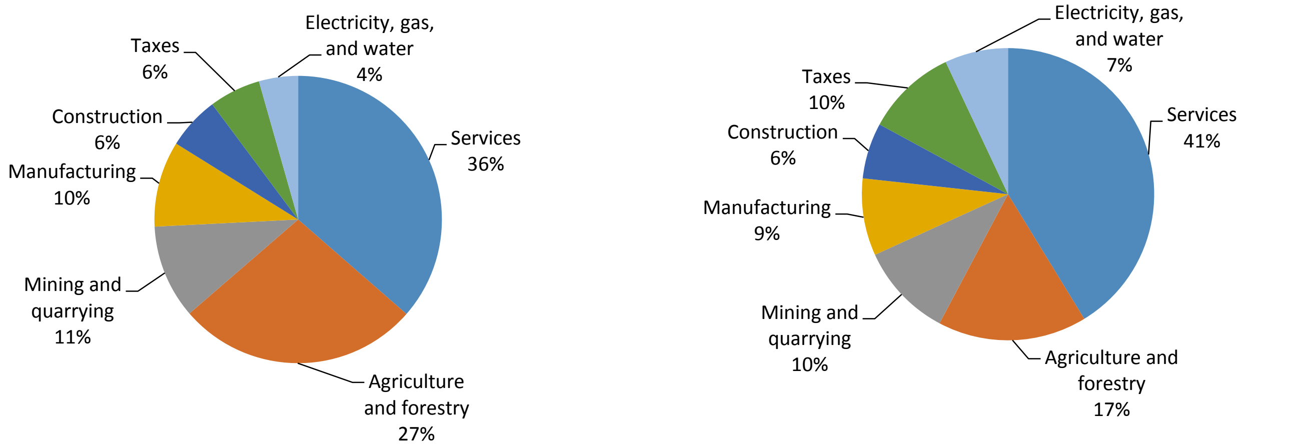
Note: 'Govt. invest.' stands for 'government investment'. 'Dom. Private invest.' stands for 'domestic private investment. Data on types of investment and sectoral distribution of FDI are based on value of approved investment projects.
Source: Author's calculation using investment data from Ministry of Planning and Investment (2017).

The services and electricity sectors have increasingly become the key driver of economic growth in Laos. The share of services in GDP increased from 36% in 2011 to 41% in 2015, while the share of electricity in GDP increased from 4% to 7% over the same period. Meanwhile, the share of agriculture and forestry in GDP reduced from 27% to 17% in the same period. The shares of manufacturing and construction in GDP remain unchanged or slightly decreased (

Figure 4). According to World Bank (2017a, p.14), the expansion of services has been resulted from the liberalization of trade, tourism, banking, and transport sectors, and spillovers from natural resource projects.

Figure 4: Sectoral distribution of GDP in Laos (%), 2011 and 2015

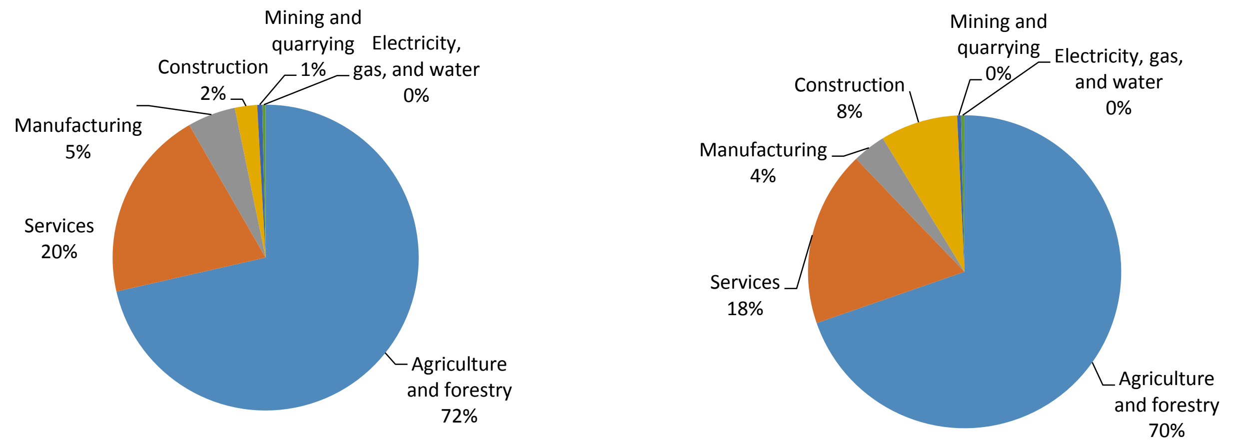
a. Sectoral distribution of GDP in 2011 ***b. Sectoral distribution of GDP in 2015***



Source: Data for 2011 were obtained from Lao Statistics Bureau (2012, p.28). Data for 2015 were obtained from Bank of Lao PDR (2016, p.20).

Figure 5: Sectoral distribution of employment in Laos, 2010 and 2015

a. Sectoral distribution of employment in 2010 ***b. Sectoral distribution of employment in 2015***



Source: Author's calculation using data from Lao Statistics Bureau (2010, p.79).

Source: Author's calculation using data from Lao Statistics Bureau (2015, p.81).

Significant changes in the structure of outputs have been associated with limited changes in the structure of employment for the period 2010-2015. The analysis of outputs in

Figure 4 and employment in **Figure 5** reveals three salient features of structural change in the Lao economy.

- Increased share of services in GDP was not associated with greater share of employment within the sector. The share of employment in the service sector fell from 20% of total employment in 2010 to 18% in 2015 (**Figure 5**). This may reflect productivity improvement in services, which could produce more outputs without hiring additional labours. Further expansion of the service sector is needed to absorb additional labour force.

*The agriculture and forestry sector has been characterized by low productivity. The share of employment in agriculture and forestry sector accounted for 70% in 2015 (**Figure 5**b), but it could generate real output for only 17% of GDP (*

- **Figure 4**b). This confirms the need for improving productivity and promoting investment in manufacturing and service sectors to absorb surplus labour in agriculture. Employment in the manufacturing sector, for instance, accounted for only 4% of total employment, but its real output accounted for 9% of GDP.

*The construction sector has become one of the key sectors for generating jobs. The share of employment in the construction sector rose from 2% in 2010 to 8% in 2015 (**Figure 5**) although the share of its real output in GDP remained unchanged (*

- **Figure 4**).

3. Trade between Laos and ASEAN

Bilateral trade between Laos and ASEAN has increased in absolute terms but decreased in its relative importance to each other's total trade. Parallel to the growth of Laos' total trade between 2007 and 2016 was the rise in its bilateral trade with ASEAN, which increased by almost five-fold from US$0.81 billion in 2007 to US$4.6 billion in 2016 (**Figure 6Error! Reference source not found.**). While ASEAN countries such as Thailand and Vietnam remain the key sources of Laos' imports, Laos has gradually exported more to rest of the world (non-ASEAN countries). In 2007, 61% of Laos' exports went to ASEAN countries (**Figure 7**). This changed since 2013, and in 2016, its exports to ASEAN was exactly equal to rest of the world. This indicates that the country has diversified its trading partners from ASEAN to rest of the world. The emerging export destinations for Laos include China, European Union, India, and Japan.

Figure 6: Laos' merchandise trade (exports and imports), 2007-2016 (US$ billion)

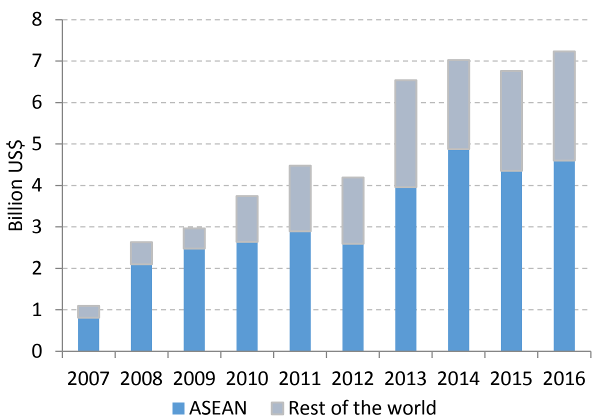
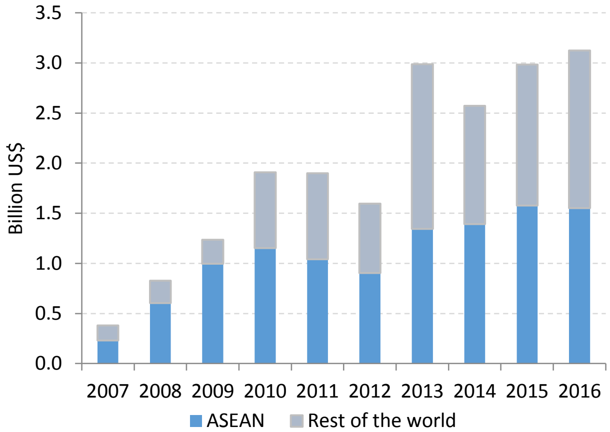


Figure 7: Laos' exports by destination, 2007-2016 (US$ billion)



Source: Author's calculation using data from ASEAN's online database, available at https://data.aseanstats.org/trade.php.

While Laos has made good progress in diversifying its trading partners, its exports are highly dependent on a limited range of products to earn foreign exchange. According to World Bank (2017a, p.28), mining, electricity and wood accounted for three fourths of total exports over the period 2012-2016. High export concentration could make the economy more vulnerable to sector-specific shocks and shifts in terms of trade. Low diversification of export products could be attributed to the low intensity of foreign trade in the private sector, inadequately educated workforce to produce new export products, and the lack of incentives for firms to invest in new products. According to World Bank (2016), number of exporting firms in Laos accounted for only 6% of total firms; and about 33% of large firms ranked the difficulty to recruit adequately educated workforce as the biggest business environment constraint.[4] Furthermore, a study by Richard Record & Konesawang Nghardsaysone (2010) reveals that the rate of new product discovery has been high, but this process has essentially been overshadowed by the natural resources export boom. This suggests the need for improving a regulatory environment which minimizes business transactions costs to attract new export-oriented firms and to keep existing firms in the market, developing sector-specific workforce in line with potential export-oriented industry, and strengthening the enforcement of law on intellectual property right to stimulate research and development of new products.

[4] The survey consisted of 368 firms, including 217 small firms, 104 medium firms, and 47 large firms.

4. Growth-poverty linkage

Rapid economic growth in Lao PDR have translated into slow rate of poverty reduction over the past decade. Average GDP growth rate recorded at 7.1% for the period 2003-2007 and at 8.0% for the period 2008-2012 (World Bank, 2017b). In contrast, poverty rate reduced by 1.18 percentage points per year for the period 2003-2007 (dropping from 33.5% in 2002/3 to 27.6% in 2007/8), about six percentage points less than the average GDP growth for the same period. The rate of poverty reduction reduced by 0.88 percentage points per year for the period 2008-2012 (dropping 27.6% in 2007/8 to 23.2% in 2012/13), about seven percentage points less than the average GDP growth for the same period (Pimhidzai, Fenton, Souksavath, & Sisoulath, 2014). It is important to note that annual rate of poverty reduction is lower in the high growth period (2008-2012) than in the low growth period (2003-2007).

In 2012/13, the majority of the poor were rural residents which accounted for 88% of total poor people. By ethnicity, the proportion of the poor remained highest in LaoTai (44.4% of total poor people), followed by Mon-Khmer (40.3% of total poor people) and Hmong-Lu-Mien (12.1% of total poor people). By gender of household head, poverty headcount rate was significantly lower among female headed (17%) than male headed households (24%) (Pimhidzai et al., 2014).

Poverty reduction in Laos is driven by improved skills and knowledge, increased access to land, and non-farm job creation (Pimhidzai, 2015). Improved skills and knowledge, proxy by the level of education, facilitate the transition into better rewarding non-farm economic activities, with the highly skilled moving out of agriculture completely and low skilled diversifying their income portfolio from agriculture. The analysis of poverty determinants by Pimhidzai (2015) indicates that an agricultural, non-LaoTai household with at least one person with post primary education was at least 80% chance to move out of poverty, compared to the 47% chance faced by a similar household without anyone with formal education. More broad-based economic growth is necessary to further reduce poverty across locations and socio-economic groups.

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