Chapter 4

Immediate Issues

June 2016

This chapter should be cited as

ERIA Study Team (2016), 'Immediate Issues', in Nishimura, H., F. Kimura, M. Ambashi, and S. Keola (eds.), *Lao PDR at the Crossroads: Industrial Development Strategies* 2016-2030. ERIA Research Project Report 2015-2, Jakarta: ERIA, pp.43-59.

Chapter 4

Immediate Issues

Lao PDR's economic development faces many challenges, and some fundamental issues will need to be addressed sooner rather than later. This could have positive effects on the economy as a whole. This chapter focuses on the following issues: (1) extending the national electricity grid, (2) expanding trade and investment relationships beyond countries Lao PDR shares a border with, (3) mobilising manpower, and (4) managing the trade deficit.

4.1. Extending the National Electricity Grid

Modern economic activities cannot be carried out without electricity and water. Many factories in developing countries make use of groundwater, but self-sufficiency in terms of electricity is mostly impossible. The lack of a decent electricity supply has actually been a major reason why several designated special economic and border economic zones in Lao PDR did not progress as planned.

In some academic studies economic growth is measured from outer space, using satellite data on lights at night as a proxy (Henderson et al., 2012; Keola et al., 2015); economic development has not been achieved without electricity. Although electricity generated from hydropower is a major export item of Lao PDR, most of the country is still dark at night when observed from outer space. The share of lit-up areas in Lao PDR was only about 3 percent in 2013. This is extremely low compared with Thailand (36 percent) and Viet Nam (30 percent), and also even lower than Cambodia (4 percent) in the same year.

According to official statistics, nearly 90 percent of families in Lao PDR have access to electricity. However, this figure includes unstable off-grid electricity such as generated from diesel, solar, etc. Inclusion of such sources overestimates the rate of access to electricity, especially of economic activities; it is also an inadequate reflection of the availability of electricity for manufacturing. Both quality and quantity are of critical

importance for evaluating the availability of electricity used for manufacturing activities.

Table 4.1 shows that the majority of transmission lines in Lao PDR are of the 22 kilovolt (kV) type. Such transmission lines can transmit electricity only over short distances and are not suitable for large-scale manufacturing plants. Transmission lines of the 115kV type – which are suitable for large-scale manufacturing plants – have a total length of only about 4,500 km in Lao PDR, which is approximately twice the distance from the north to the south of the country. This compares very unfavourably with Thailand, for example, where in 2016 transmission lines with a capacity larger than 115kV total more than 32,000 km, of which 28,000 km has a capacity of over 230kV. In the context of the development of industrial clusters, the installation of transmission lines with higher capacity, from power plants to planned industrial and major urban areas, is an issue that Lao PDR needs to urgently address.

Table 4.1. Length of Major Transmission Lines in Lao PDR (km)

	500kV	230kV	115 kV	35 kV	22 kV
2011	54	406	3,343	188	17,127
2012	54	406	4,554	152	20,613
2013	54	406	4,357	199	22,474
2014	54	481	4,539	220	24,688

kV = kilovolt.

Source: Electricité du Laos.

4.2. Expanding Trade/Investment Relationships Beyond Immediate Neighbours

Lao PDR has trade relationships with more than 50 countries around the world, but a high share of its exports go to neighbouring countries, such as Thailand, Viet Nam, and China, as can be seen in Figure 4.1. The export share of these three countries accounted for 57.8 percent of Lao PDR's total exports in 1995 and this increased to 79.9 percent in 2013⁴. Exports to Thailand recorded remarkably strong growth during this period, from US\$83.30 million in 1995 to US\$1.63 billion in 2013, which was 47.5 percent of total exports in 1993. Geographical proximity and similarity of cultures and

⁴ ADB database, 2014.

traditions make Thailand Lao PDR's closest trading partner. Exports to Viet Nam remained almost constant from 1995 to 2005, but exports expanded strongly in 2006–2013, increasing from US\$151.45 million to US\$519.11 million. Total exports to China, which is regarded as a potentially huge market, were higher than exports to Viet Nam after 2008, reaching US\$595.75 million in 2013.

An increase in both bilateral and multilateral trade agreements may have been a significant factor explaining the rapid growth of Lao PDR's exports, from US\$330 million in 2000 to US\$2.59 billion in 2013. However, average exports under the preferential treatment of the Association of Southeast Asian Nations (ASEAN) Free Trade Agreement (AFTA) decreased slightly, from 8.77 percent in 2010 to 6.97 percent in 2013. Furthermore, Lao PDR's average exports to its ASEAN dialogue partners under the preferential tariff treatment in 2013 were diversified, for example, to ASEAN–Korea FTA (AKFTA) (37.32 percent), ASEAN–Japan Comprehensive Economic Partnership (AJCEP) (5.82 percent), and ASEAN–China FTA (ACFTA) (less than 1 percent).⁵

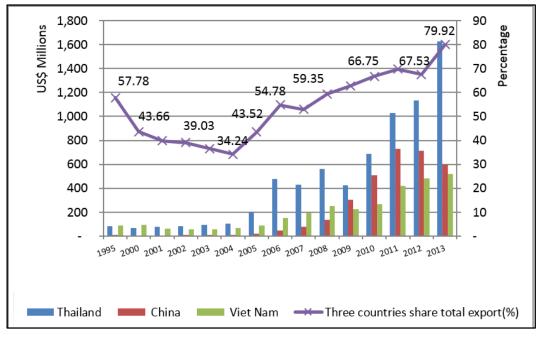


Figure 4.1. Lao PDR's Major Trading Partners

Source: ADB database (2014).

⁵ Author's (ERIT) calculation based on the MOIC database of 2014.

Lao PDR's main exports are still mostly made up of mineral products, which accounted for more than half of the country's total exports in 2005–2013, and they declined by 38.6 percent from 2010 to 2013. This is because the Lao PDR government suspended foreign direct investment (FDI) in mining development projects in 2011, which caused export of mineral products to fall sharply. Exports of industrial products increased from US\$126.17 million in 2005 to US\$1,092.34 million in 2013, and electricity exports rose from US\$101.19 million to US\$586.12 over the same period.

In summary, the national export strategy sets out nine main priority areas as follows:

- (1) Electricity
- (2) Tourism
- (3) Organic agricultural products
- (4) Mineral products
- (5) Garments
- (6) Lao silk and cotton handicraft
- (7) Wood products
- (8) Medicinal plants and spices
- (9) Products from local talent

It also formulates seven cross-sectoral strategies:

- (1) Export quality management
- (2) Trade finance
- (3) Trade information services
- (4) Competitiveness development
- (5) Marketing
- (6) Import for re-export
- (7) Concept note for drafting a strategy on export of Lao labour

The overall industry and trade strategies from 2016 to 2025 and the Vision 2030 will mainly focus on three priority strategic pillars to promote industry and trade activities in both the domestic and international dimensions. These three strategic pillars aim at deepening economic integration, improving the business environment, and enhancing the competitiveness of enterprises.

Economic integration will be utilised to gain the benefits from multilateral, regional, and bilateral cooperation. At the same time, the business promoting environments should be supported to assist private sectors by reducing the cost of doing business. The main focus in that regard remains on improving trade facilitation, simplifying business regulations, and improving access to finance and skilled labour. These efforts will also play a role in promoting investment in infrastructure as well as competition in service sectors. The policy will continue to support strengthening public—private dialogue on the business environment at the central and provincial levels. Moreover, the policy will focus on enhancing enterprise competitiveness through facilitating access to business advisory services and on supporting sector-specific, export-oriented, and non-resource sectors.

Overall, what the Lao PDR government will try to achieve from 2016 to 2020 is to completely solve cross-cutting issues regarding industrialisation and modernisation of industries and trade structures. This will enable the processing industries in agricultural crops, and the wood, rubber, textile, garment, auto assembly, and electronic equipment industries to integrate into regional supply and value chains, or to push the country's enterprises towards integration with global production networks. Finally, Lao PDR will utilise the available regional and global free trade agreements (FTAs) to promote trade of goods and services for the country's development.

Export promotion cannot be discussed without practical consideration of markets. Except for agricultural and mineral products, Lao PDR's neighbouring countries do not provide the significant volume of markets needed in relation to the above-mentioned nine priority areas.

Garment, for instance, is mostly exported to developed countries, such as those of the European Union (EU), Japan, and the United States. But the export value of garment products produced by Lao PDR remains small, in the order of hundreds of millions of US dollars, whereas in Cambodia it amounts to several billion US dollars. Hence, further tapping the garment product markets in developed countries could create a source of stable exports for Lao PDR. Considering the fact that the garment industry employs the largest number of regularly paid workers, this would also contribute to inclusive development. Diversification of exports traditionally going to its

neighbouring countries would also help reduce Lao PDR's risk exposure. The country was hit hard during the Thai Financial Crisis in 1997–1998, and it should be prepared for economic slowdown in any of its neighbouring countries.

4.3. Mobilising Manpower

The population of Lao PDR was less than 7 million in 2015, and it is the smallest country in the ASEAN region apart from the city-state of Singapore. It is quite small, compared with populations of about 14 million in Cambodia and 60–90 million in Myanmar, Thailand, and Viet Nam. As the segments of production networks in which Lao PDR and neighbouring countries try to participate require large numbers of low-wage workers, that bigger neighbouring countries such as Thailand and Viet Nam would have larger clusters is to be naturally expected. The large development gap of industries (e.g. garment industries) between Lao PDR and Cambodia, however, cannot be explained solely by Lao PDR's small population. Although Cambodia's population is only about twice that of Lao PDR, the garment industry in Cambodia employs more than 300,000 people, which is nearly 10 times more than in Lao PDR.

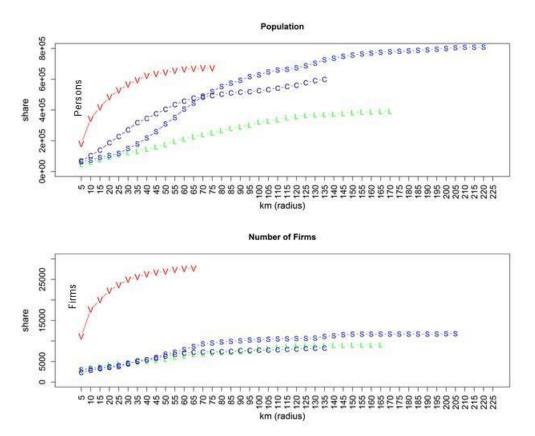
Figure 4.2 shows that population concentration could be a major reason for this large difference between the two countries. First, it is demonstrated that population size aggregated by administrative boundaries is not a good proxy of available labour force. This is because administrative boundaries are often subjectively defined, and can vary greatly in terms of size and shape. The populations of Vientiane Capital, Champasak, and Savannkhet in 2006 were about 600,000, 500,000, and 800,000 people, respectively.

But the number of people living away from the centre of urban areas provides a completely different picture. More than half of the population in Vientiane Capital lives within a 25 km radius from the city centre (Figure 4.2 upper). In contrast, this range extends to more than 60 km for Champasak or more than 100 km for Savannakhet. People in these provinces need to travel to work. In developing countries where transport costs are relatively high, it is difficult for people to commute tens of kilometres to work. A round trip bus fare from the capital city centre to the main

campus of National University of Lao PDR in Dongdok is about US\$1, which is more than one-fifth of the average daily wage.

In short, what is important is the absolute number of people living within a commutable distance. Because a large number of people live in the provinces, Vientiane Capital has the biggest concentration of available labour foce. This seems to be the reason for the large difference in the number of firms between the Vientiane Capital and the major provinces (Figure 4.2, bottom).

Figure 4.2. Share by Distances from the Centre of the Capital City and Major Provinces (2006)



Note: The centre is defined as the place with the highest number of firms. C, L, S, and V denote Champasak, Louangphabang, Savannakhet, and Vientiane Capital, respectively.

Source: Computed by the author (NERI) based on Economic Census 2006 and Population and Housing

Census for the locations shown.

4.4. Managing the Trade Deficit

As Lao PDR is closely integrated with global trade, the country has experienced an increase in trade volumes since the 2000s (Figure 4.3). Increased participation in international trade over the past decades led Lao PDR to higher and higher levels of trade (both imports and exports), from US\$262 million in 1991 to US\$5,284 million in 2013. Although 1992 saw strong trade growth (68.9 percent), it declined steadily from positive growth in 1993 to negative growth during and after the Asian financial crisis (1997–2002). Moreover, negative growth of total trade in 2013 was a consequence of decreases in both export and import values in 2013.⁶

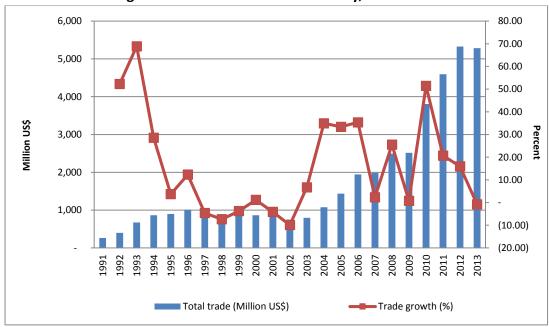


Figure 4.3. Lao PDR's Trade Tendency, 1991–2013

Source: Bank of Lao PDR.

Lao PDR's outward-led growth policy has brought great economic benefits over the past decades. Gross domestic product (GDP) grew constantly at an annual average 7 percent, with foreign investments playing a key role in Lao PDR's exports and imports. However, the influx of foreign investment into the country inevitably led to higher trade deficits at least in the short and medium term. The available statistical reports

⁶ The Annual Economic Report 2013 of the Bank of Lao PDR revealed that Lao PDR's export value in 2013, a large proportion of which was generated by mining exports, decreased due to falling prices of world mineral goods. In addition, the import value of consumer goods also declined in 2013.

from the National Statistics Bureau and international economic institutions (World Bank and International Monetary Fund) show that Lao PDR always had more imports than exports since the country started to engage in foreign trade in 1986. Figure 4.4 illustrates that Lao PDR's trade balance was negative every year from 1991 to 2013. The most significant features during those periods were observed in 2012 and 2013, with the trade deficit rising to US\$784 million in 2012 (the highest recorded level) and slightly decreasing to US\$756 million in 2013.

-100 -200 -500 -600 -700 -800

Figure 4.4. Lao PDR's Balance of Trade

Source: Bank of Lao PDR.

Trade deficits are likely to be the 'norm' for developing countries like Lao PDR where high economic growth resulted from strong growth of foreign investment in the resources sectors (hydropower and mining). In Lao PDR this started in the 1990s when large foreign investment projects were initiated, the most prominent being the Sepon gold mine in 2003 and the Num Theun II hydroelectric power project in 2005. However, many large foreign investments projects approved by the government of Lao PDR are in the early stages of operation or still under construction and thus the value of capital imports still far outweighs that of goods exports, which threatens to further increase Lao PDR's trade deficit.

⁷ According to the Bank of Lao PDR's annual economic reports from 2004 to 2013 and the World Bank's *Annual Economic Monitor* from 2013 to 2015.

Another reason for Lao PDR's trade deficits is that its domestic producers are less competitive than foreign suppliers. Lao businesses are mostly small production bases managed by small and medium-sized enterprises (SMEs) that are often reported to lack finance and production diversity. Hence, Lao PDR has to import capital and consumer goods it cannot purchase from local producers (Figure 4.5), which contributes to its negative trade balance.

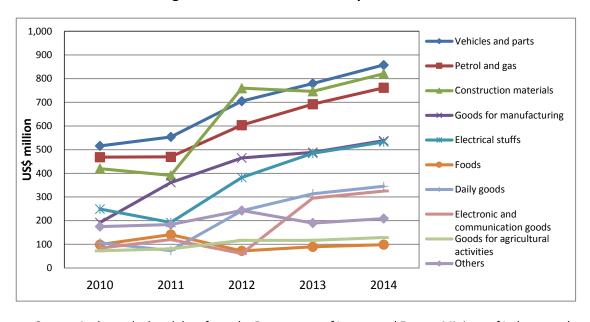


Figure 4.5. Lao PDR's Main Import Items

Source: Author-calculated data from the Department of Import and Export, Ministry of Industry and Commerce (MOIC).

Figure 4.6 provides a broader and longer-term view of the accumulated export and import values of Lao PDR, which were aggregated into three periods. It obviously depicts the two most significant sources of Lao PDR's trade deficit: imports of fuel and vehicles. If the trade deficits of these two items are not addressed, the problem of Lao PDR's large trade deficit will unlikely be resolved, or at least be reduced to a sustainable level. Industrial studies in Chapter 6 assess biodiesel as a potential solution to Lao PDR's present complete dependence on imported oil. This problem needs to be addressed urgently because the value of oil imports will increase dramatically in case of further steep price rises in the future. The impact of a sudden rise in the oil price on

⁸ This observation is extracted from 'Export Dynamics and Diversification in Lao PDR: An Analysis of the Product Space', conducted in 2010 by Record and Nghardsaysone of the World Bank research team.

the Lao PDR economy could be catastrophic. Of course, biodiesel alone will be far from sufficient. A diversification of energy sources to get away from Lao PDR's dependence on oil is highly necessary.

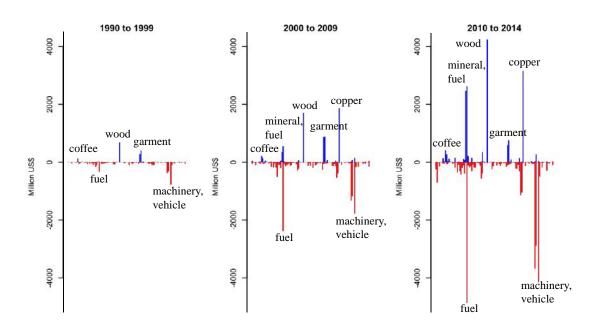


Figure 4.6. Lao PDR's Exports and Imports by HS 2-Digits

Source: Compiled by author based on COMETRADE.

4.5. From Tariffs to Taxes

Joining AFTA in 1997 (it is now the ASEAN Trade in Goods Agreement – ATIGA) and the World Trade Organization (WTO) in 2013 were Lao PDR's internationalisation milestones. Lao PDR's government enforced the amended laws on customs in 2011, on taxes in general in 2011, and on value-added taxes in 2012; these are highly consistent with international rules and regulations. The changes in customs law in terms of tariff rates can be seen in the Lao tariff nomenclature, which has been periodically updated. In fiscal year 2013–2014, Lao PDR practically applied tariff rates of 0–5 percent to 99 percent on all merchandise goods imported under ATIGA and had removed 203 items from the sensitive list to the inclusive list by the end of 2015.9 Under the WTO commitment, Lao PDR has already bound tariff rates on an average of

⁹ This information is reported on the ASEAN website (www. asean.org).

18.8 percent for all imported goods (10,696 items), 19.3 percent for agricultural goods, and 18.7 percent for industrial goods.¹⁰

Table 4.2 illustrates Lao PDR's customs history from 1993–2008. The tariff rates were reduced from the highest interval of 5–100 percent in 1993 to 0–20 percent in 2008. Imported agricultural and industrial materials for production purposes were free of duties, but for commercial purposes the rate is 5, 7, or 20 percent. All in all, Lao PDR's tariff rates have been reduced to the lowest level in line with the ATIGA schedule the country had committed to.

Table 4.2. Lao PDR'S Customs History

Post-1993 reform (%)	End 2000 (%)	End 2005 (%)	End 2008 (%)
(/-)	(1-1	(1-7	(, -)
20	5	n.a.	0
5	5	5	0
5–10	n.a.	n.a.	0–7
5	5	5	0
5–30	5-30	5-30	5
5–10	5–10	5	5
10–20	10–20	5	0
5–15	5–20	5–20	0–5
5–20	5–20	5–10	0–5
5–30	5–30	5–30	0–20
30–80	30–40	n.a.	n.a.
20–80	10-30	10-30	0–5
10-100	10–40	10–40	0–20
	reform (%) 20 5 5 5–10 5 5–30 5–10 10–20 5–15 5–20 5–30 30–80 20–80	reform (%) (%) 20	reform (%) (%) (%) 20

Source: Vixathep (2007) and Lao tariff nomenclature, Customs Department (2015).

In line with the reductions in tariff rates, tax rates have been raised, which has played an important part in the Lao PDR government's revenue increases. Currently, the government levies three types of tax – excise, profit, and value-added – on all imported goods, which has mitigated the loss of national revenue due to the reductions in tariff

¹⁰ The data cited is from Lao Economic Monitor in 2013, provided by the World Bank.

rates. The tax rates are broadly differentiated into two groups – indirect tax and direct tax. By comparing these two taxes, we can see that the indirect tax has an essential role in the government's tax revenue, in particular, the tax imposed on luxury goods (Table 4.3). Moreover, Figure 4.7 illustrates that the proportion of tax revenue in gross domestic product (GDP) has been much higher than that of tariffs in 2000–2014, and is expected to continue to increase in the projection period, i.e. from 2015 to 2019.

Table 4.3. Lao PDR's Tax Rates

		Interval tax rate (%)	Mean	S.D
Indirect tax				
1	Value-added tax	10	_	_
2	Excise tax			
	Goods:	5-150	31.59	32.42
	Services:	10-80	29.29	28.93
Dire	ect tax			
	Profit tax	5–24	14.80	7.60
	Income tax	5–24	14.33	6.89
	Lump-sum tax	3–7	5	1.22

S.D. = standard deviation.

Note: The highest tax rates are for cars – from 25–150 percent. Source: Author's (ERIT) calculation from tax law, MOF (2012).

Figure 4.7 also shows how tax revenue has increased steadily since 2000s, whereas tariff revenue has remained more or less the same in absolute terms. Apart from tax revenue from mineral and resource industries, most tax is collected from import goods at the point of import, and therefore its function is similar to that of tariffs. Although tariffs are also a source of revenue and protect local industries, they are by definition a barrier to the smooth movement of goods across borders called for by international production networks. For the benefit of countries, regions, cities, and clusters hoping to join and benefit from production networks, efforts should be made to avoid misuse of taxes as tariffs.

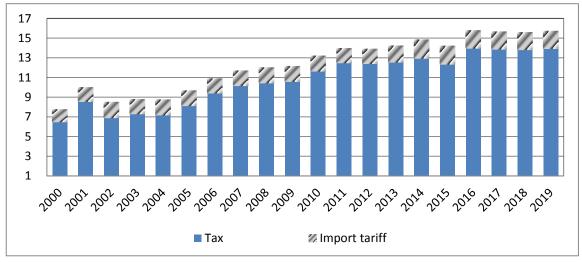


Figure 4.7. Proportion of Tax and Tariff in GDP (%)

GDP = gross domestic product.

Note: Data shown from 2013 to 2019 are projected values.

Source: Ministry of Finance, Lao PDR.

4.6. Expanding Trade/Investment Relationships beyond Immediate Neighbours

Lao PDR has been regarded as one of the high GDP growth countries in the region. Its annual average 7 percent GDP growth from 1991 to 2014 (Figure 4.8) was higher than other least developed countries (LDCs) that recorded average growth of about 6 percent over the same period. Lao PDR's GDP growth has seen strong fluctuations since the country's substantial integration into global trade. GDP growth dropped sharply in 1998 when the country was hit hard by the Asian financial crisis, and GDP growth fell to a record low of 4 percent. After 1998, GDP growth got back on track with growth rates of 6–8 percent from 1999 to 2014. Since 2005, the services sector has been the leading contributor to GDP growth, with an average annual of 3 percent growth, compared with 2.5 percent and 2 percent, respectively, for agriculture and industry. The IMF has projected average annual GDP growth of 7.5 percent from 2015 to 2020 for Lao PDR.

¹¹ Reported by World Bank data (www.worldbank.org)

¹² Reported by Bank of Lao PDR.

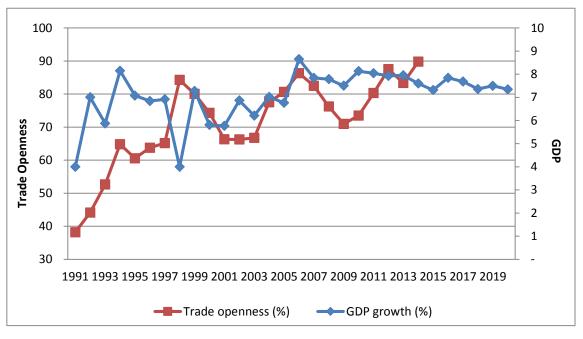


Figure 4.8. GDP Growth and Trade Openness of Lao PDR

GDP = gross domestic product.

Source: Bank of Lao PDR and International Monetary Fund (IMF) data.

Since Lao PDR's introduction of a market economy in the late 1980s, the country has eagerly participated in international trade forums, joining the AFTA in 1997 and the WTO in 2013. This gave Lao PDR access to wide global markets and enabled it to attract more foreign investment. According to the trade statistical reports of the Bank of Lao PDR, average annual trade growth from 1991 to 2013 was about 16.5 percent and trade openness increased from 38.2 percent in 1991 to 89.8 percent in 2014 (Figure 4.8).

FDI also showed an upward trend over the same period, even though it saw sharp fluctuations from year to year. Figure 4.9 shows that FDI inflows to Lao PDR were almost US\$32,000 million in 2013, which is 200 times higher than in 1991. Although annual inflows of FDI fluctuated, its pace of growth rose from 1991 to 2013. The Asian financial crisis seems to have had a long-term effect on FDI in Lao PDR, as it fell sharply in 1997–2002. After 2002, FDI inflow was back on track and reached new highs in 2006, 2009, and 2013. Furthermore, according to Figure 4.10, the industrial sector attracted most FDI from 2004 to 2013.

35,000 5,000 4,500 30,000 4,000 25,000 3,500 3,000 20,000 2,500 15,000 2,000 1,500 10,000 1,000 5,000 500 2006 2001 2002 2003 2004 2005 Accumulative data (US\$million) Total foregin investment (US\$million)

Figure 4.9. Lao PDR's Foreign Investment Inflows

Source: Bank of Lao PDR, Lao Department of Statistics, Ministry of Planning and Investment.

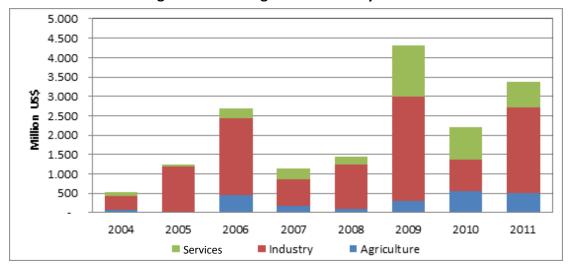


Figure 4.10. Foreign Investment by Sectors

Source: Lao Department of Statistics, Ministry of Planning and Investment

References

- Henderson, J.V., A. Storeygard, and D.N. Weil (2012), 'Measuring Economic Growth from Outer Space', *The American E20132conomic Review*, 102(2), pp.994–1028.
- Keola, S., M. Andersson and O. Hall (2015), 'Monitoring Economic Development from Space: using Nighttime Light and Land Cover Data to Measure Economic Growth', *World Development*, 66, pp.322–34.
- Vixathep, S. (2007), 'Trade Liberalization and Comparative Advantage Dynamics in Lao PDR', *Lao Trade Research Digest*, 2, pp.1–34.