

Unraveling the Current Economic Downturn in Laos: A Study of Factors and Implications

Worrawoot Jumlongnark

Received: February 1, 2024/ Revised: March 5, 2024 / Accepted: March 14, 2024

Abstract

Laos was previously a country that enjoyed relatively high economic growth. However, at present, Laos is facing economic challenges. The objectives of this study are twofold: 1) to analyze the current state of Laos' economy from 2010-2022, and 2) to identify the factors contributing to the current economic downturn in Laos spanning from 2001 to 2023. These objectives are achieved through qualitative study methods, including literature survey and content analysis of statistical documents on economic indicators, as well as analyzing academic articles from the Scopus database and Web of Science. A total of 62 documents were considered. This article has examined the economic aspects of Laos during and post the COVID-19 period. The findings of the study reveal two key aspects. Firstly, several economic indicators of Laos today indicate that the country is undergoing an economic crunch. Secondly, scholars have primarily focused on the influence of Lao government policies in shaping the country's economy. Considering these findings, this article suggests that the Lao government should consider revising its current economic policies to address the ongoing economic crisis in the country. The economic downturn in Laos is primarily due to a lack of domestic industrial development policies and an overreliance on investment from a single country, namely China. To address this issue, Laos should implement policies aimed at achieving self-reliance in developing its own industries rather than depending on imports. Additionally, Laos should diversify its foreign investment strategies to avoid dependence on any one country. This approach would provide Laos with greater flexibility to adapt to economic changes.

Keywords: Lao Economy, Economic Growth, Economic Factors, Economic Crisis, Economic Policy

¹College of Politics and Governance, Mahasarakham University, Thailand.
E-mail: worrawoot.j@msu.ac.th

Introduction

Laos has witnessed remarkable economic growth over the past few decades. However, the current state of the Lao economy seems to be struggling (Rehbein, 2022). With a population of approximately 7 million people (Great Mekong Subregion, 2023) and a land area of 236,800 km² (Worlddata, 2023), Laos is 333 times larger than Singapore. The country is blessed with abundant natural resources, including vast forests and mountain ranges. However, since 2019, Laos has encountered challenges in restoring its economy from the COVID-19 pandemic.

As of 2021, Laos' GDP stands at approximately 2.5%, with foreign exchange reserves of only USD 1.2 billion, which are sufficient for reserving essential goods for merely three months (Asiatimes, 2022; International Banker, 2022). The country is grappling with a high inflation rate of 40 percent, while its exchange rate and currency have experienced significant depreciation (Radio Free Asia, 2023). Despite the efforts of Laos' leaders to reform the economic structure and attract foreign investors in 2023, aiming to transform the country into a newly industrialized nation and leverage its abundant natural resources (Radio Free Asia, 2023), the current situation remains challenging.

Laos has positioned itself as Asia's battery, utilizing its geographical advantage of numerous mountains and rivers to attract foreign investors for dam construction and electricity generation (Douglas, 2023). The country envisions exporting energy by supplying electricity to neighboring countries such as Thailand, Cambodia, China, and Vietnam. Furthermore, Laos has established special economic zones to attract foreign investors, such as in Bo Kaeo province, where China's Ngiu Kham business group operates hotels and casinos adjacent to Thailand's territory. Other areas serve as special economic zones leased by Chinese capitalists for agricultural purposes, including banana and rubber tree plantations, as well as gold mining concessions in Sepon, Savannakhet, and border regions with China (Asiatimes, 2022). Chinese capital groups have also taken over logistics for importing and exporting goods to China. Chinese investors are the largest contributors to the Laotian economy, followed by Thai and Vietnamese investors, respectively (Vientiane Times, 2022). The Lao government expects these special economic zones to drive economic growth and attract foreign investment.

Major investments, predominantly from China, have been made in key infrastructure projects, including the construction of a high-speed rail linking Vientiane to China's Kunming. Funding for these projects comes from construction and loans provided by China (Sims, 2023). Another project, the construction of a highway from Vientiane to Vang Vieng, has been completed and is set to be extended to Luang Prabang and eventually to Bo Ten, near China's border. The Lao government believes that investing in high-speed rail infrastructure and road connectivity with China will transform Laos from a landlocked country to a land-link nation. This initiative aligns with China's Belt and Road Policy and aims to connect ASEAN countries with China, the region's largest economy (Jiang, 2023).

However, despite the efforts of the Laos government to address its economic downturn, the current economic situation in Laos has not improved as anticipated. Academic writings raise questions about the country's failure to achieve desired economic growth and the major factors contributing to the current economic downturn. In light of these concerns, this article aims to address the following study objectives.

Research Objectives

1. To examine the present condition of the Lao economy by analyzing key economic indicators, including GDP growth, unemployment rate, inflation, public debt, and international exchange rates.
2. To investigate the factors that influence the current state of the Lao economy.

Literature Review

Previous studies have conducted various analyses of Lao economic development. This issue has been addressed in recent works by Langbein et al. (2021), who examined the impact of trade liberalization. Laos heavily relies on the viability of the existing coalition of political and economic leaders in its exporting industries. Cohen (2009) also pursued similar research, exploring alternative Western and Chinese development models, as well as the post-opium future and rubber industry in northern Laos. The rubber boom in northern Laos represents a clash between Western drug-oriented alternative development and China's opium-replacement policy, resulting in socioeconomic and environmental effects that pose a threat to the principles and goals of alternative development. This paper draws upon ethnographic and agro-economic research, as well as reports from international development organizations operating in Laos. Li and Wang (2021) conducted more recent research, examining the efficiency and changes in land use within Laos' special economic zones (SEZs). Due to their ability to attract foreign investment, promote industrialization, and drive economic globalization, SEZs play a significant role in Laos. This study focused on land-use intensity, structural changes, and land-use efficiency within Laos' SEZs. While the land dedicated to infrastructure declined, the area used for production systems experienced the highest increase. The Golden Triangle SEZ and Dongphosy SEZ were found to be relatively more successful. The effective use of land in Laos' SEZs was closely linked to the fundamental elements of industrial space and factors reflecting international collaboration.

Phimmavong et al. (2020b) examined the impact of forest plantation development in Laos using a dynamic general equilibrium analysis. Their paper assessed the economic effects of forest plantation development through a recursive dynamic computable general equilibrium model. Simulation results indicated that this policy is likely to have a positive impact on the Lao economy by increasing the production of forestry and forestry-related industries, stimulating exports and household income, and generating higher government tax revenue. Phimmavong and Keenan (2020a) conducted a study on forest plantation development, poverty, and inequality in Laos using a dynamic CGE microsimulation analysis. They employed a macro-micro economic modeling framework to assess the effects of plantation development policies on poverty and inequality in Laos. The study revealed that while welfare and inequality increases, poverty incidence would decrease. Zheng, Xiao, You, and Feng (2022) studied the evaluation of resources and environmental carrying capacity in Laos, utilizing a three-dimensional tetrahedron model. Laos' human settlement environment is primarily characterized as moderately suitable, with over 90% of the area in good condition, but with a low level of social and economic development.

Wang et al. (2019) investigated the impacts of economic globalization on the ecological environment of inland developing countries, focusing on Laos as a case study from the perspective of land use/cover change. The study found that economic globalization has significantly influenced the ecological environment of inland developing countries like Laos. Land use/cover change data, as well as exports and imports data, indicated a substantial conversion of natural forest to

plantation forest in Laos between 2000 and 2017, along with a degradation of 5.94% of natural forest to shrubland and grassland. Topographic analysis revealed that natural forest degradation primarily occurred in high-altitude and large-slope areas, increasing the potential for natural hazards.

Sims (2022) analyzed the Belt and Road Initiative (BRI) as a cognitive empire, focusing on epistemic violence, ethnonationalism, and alternative imaginaries in the Zomian highlands. This article critically examines BRI discourse, arguing that it risks perpetuating new forms of epistemic violence against marginalized populations. It specifically explores China-Laos relations and the epistemic positioning of highland ethnic minority groups in northern Laos, providing a valuable case study for understanding BRI discourse. Kyophilavong et al. (2019) researched the expansionary effects of currency devaluation in Laos, examining whether devaluations are expansionary for the country. The study found that currency devaluation has an expansionary impact on Laos, with cointegration and VECM Granger causality analysis supporting the link between currency devaluation and economic growth. For the study on the rise of impervious surfaces in the China-Laos border area, Li and Xiao (2022) utilized the Mohan-Boten Economic Cooperation Zone as a case study. They found that geo-economic cooperation among neighboring nations has led to landscape modifications across borders, such as the growth of impermeable surfaces or the conversion of agricultural fields to forests. Sentinel-2 A/B 10 m images and the Continuous Change Detection and Classification algorithm were employed to identify, correct, and reconstruct monthly time series of impervious surface area (ISA). The results indicated that ISA in the ECZ nearly doubled in five years, with ISA on the Boten side expanding faster than on the Mohan side in the first half of the study period. The study recognized three expansion patterns within the ECZ. Sims (2017) explored the development of casino enclaves, and their role in poverty alleviation in Laos. The study investigated how casino development in Laos is informed by the logic of expulsion and the establishment of new predatory formations. It relied on fieldwork visits, desk-based research, and interviews with local residents, casino staff, and members of the Government of Laos. Kyophilavong et al. (2017) examined the nexus between electricity consumption and economic growth in Lao PDR. They employed the ARDL bounds testing approach and confirmed a long-term relationship between electricity consumption and economic growth in Laos.

Kyophilavong et al. (2018) investigated the relationship between trade balance and exchange rate in Laos' trade with Thailand. The study analyzed how Laos' trade balance and its actual exchange rate with Thailand are related. The findings showed a combination between the trade balance and the actual exchange rate, using a combined co-integration technique. The study revealed that Lao Kip devaluation improves the trade balance, although the J-curve phenomenon is not present. Laos' trade balance worsens as a result of its economic expansion, while the trade balance improves with the increase in Thai wealth. The study provides new perspectives for decision-makers aiming to maintain commerce with Thailand through the formulation of a comprehensive trade policy. Barney and Souksakoun (2021) stated that the Lao PDR has pursued massive infrastructure-led economic growth by relying on a high level of financial leverage and increased government debt obligations. Currently, the government faces the risk of a sovereign default.

Overall, these studies contribute to our understanding of various aspects of Lao economic development, including trade liberalization, special economic zones, forest plantation development, the impact of economic globalization, epistemic violence the Belt and Road Initiative, currency

devaluation, land use/cover change, the rise of impervious surfaces, casino enclaves, electricity-growth nexus, trade balance, and exchange rate relationships, and the challenges associated with infrastructure-led growth.

Methodology

The process of this study involves qualitative research through literature reviews and content analysis.

1. A literature review is a form of research that gathers and analyzes academic work such as research papers and articles. Academic papers and textbooks relevant to the research topic provide an overview of the current knowledge and concepts. Research methodology addresses the research question before conducting a study and, in some cases, may undergo further review once the study is completed.

2. Content analysis is a research technique that focuses on the substance of a message, aiming to derive conclusions and interpretations about its characteristics, the sender, and the recipient. By examining communication contexts, it reveals the social behaviors manifested in the content and helps to test various hypotheses mentioned in the theory.

Data Collection

The timing for studying changes in the Lao economy is crucial. It opted to focus on the period during the global spread of COVID-19, which marked a significant turning point for the Lao economy. Objective 1 involves analyzing economic data from 2010 to 2022 to understand the evolving trends in Laos. Objective 2 entails examining a broader timeframe, spanning from 2001 to 2023, to gain insights into issues impacting the Lao economy. The data collection period specifically falls on March 28-29, 2023. The data sources are categorized into two groups:

1. Scopus: 18 documents
2. Web of Science: 44 documents

There are a total of 62 documents as data sources.

Despite the reviewed works, a significant gap remains in studies, particularly in the analysis of economic factors in Laos during and post the COVID-19 era. This study delves into crucial aspects of the Lao economy, including economics, electricity, hydropower, political policy, and land management.

Data Analysis

Once the information from various sources has been gathered, the authors utilized Viva Coding to categorize them based on the given topic. Viva Coding was employed to explore the factors contributing to the economic recession in Laos. Following viva coding, the analysis results will be categorized into the most studied themes and arranged accordingly, highlighting the key issues that academics are most interested in. These findings will then be linked to identify relationships with the economic indicators of Laos during that period. The presentation focuses on economic indicators such as GDP growth, unemployment rate, inflation, public debt, and international exchange rates. Subsequently, a content analysis was conducted to identify the primary causes of the economic recession and to determine their relative significance compared to other factors.

Research Results

1. Current situation of the Lao Economy

The analysis of Laos' economic status index encompasses the following factors: GDP growth, unemployment rate, inflation, public debt, and international exchange rates.

1) GDP Growth

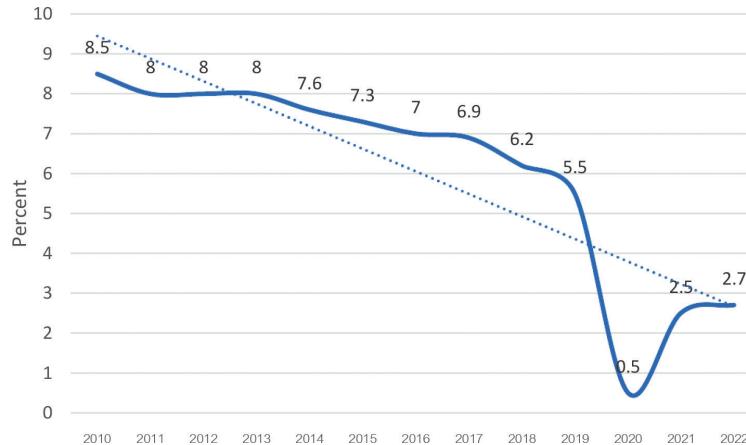


Figure 1 GDP Growth from 2010 to 2021 (Annual %)

Source: Adapted from The World Bank (2023a)

Figure 1 depicts Laos's GDP growth rate spanning from 2010 to 2022. It's evident that since 2010, Laos's GDP growth has consistently declined. In 2010, growth peaked at 8.5 percent, whereas by 2022, it had dwindled to a mere 2.7 percent, marking a significant downturn in the country's economic expansion. Notably, the period encompassing 2019-2020, coinciding with the COVID-19 pandemic, witnessed the lowest economic growth rate. Specifically, in 2020, GDP only saw a 0.5 percent increase, underscoring the profound impact of COVID-19 on Laos's economic trajectory.

2) Unemployment Rate

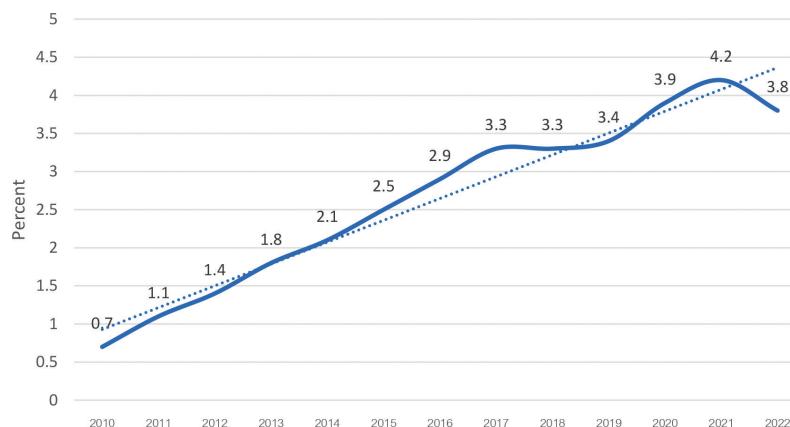


Figure 2 Unemployment, Total (% of the total labor force) from 2010-2022
(Modeled ILO Estimate)

Source: Adapted from The World Bank (2023d)

Figure 2 illustrates the unemployment rate of Laos's overall population spanning from 2010 to 2021. Notably, since 2010, Laos has witnessed a consistent rise in unemployment. In 2010, the unemployment rate stood at a mere 0.7 percent, but by 2022, it soared to 3.8 percent among citizens, marking a significant increase of 5.4 times compared to 2010. This underscores the critical importance of monitoring Laos's population unemployment rate. Remarkably, the period from 2010 to 2020, coinciding with the COVID-19 pandemic, recorded the highest unemployment rate among the population. In 2021, this rate peaked at 4.2 percent, highlighting the profound impact of the COVID-19 outbreak on Laos's population unemployment rate.

3) Inflation

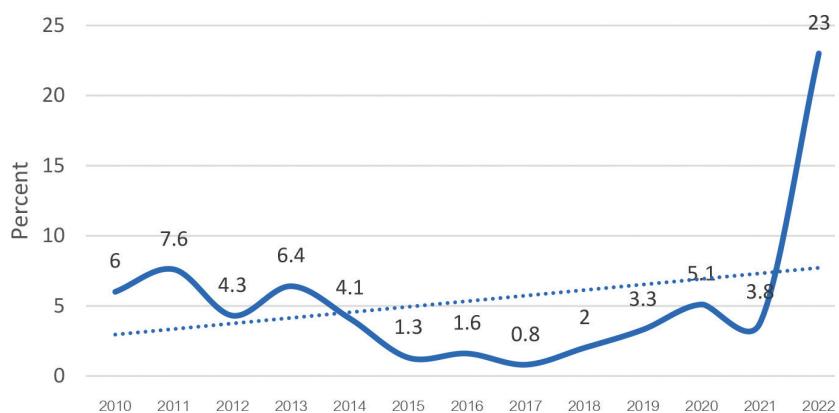


Figure 3 Laos Inflation from 2010-2021 (Annual %)

Source: Adapted from The World Bank (2023b)

Figure 3 displays Laos's inflation rate from 2010 to 2022. Notably, from 2010 to 2020, Laos experienced stable inflation with minimal fluctuations. However, a significant shift occurred in 2021-2022, with the country's inflation rate skyrocketing from an unusually high 3.8 percent in 2021 to 23 percent in just a single year, marking a more than 6.1-fold increase and highlighting a crucial turning point in Laos's inflationary trends. Interestingly, this surge coincides with the period following the COVID-19 outbreak, underscoring the substantial impact of the epidemic on Laos's inflation rate.

4) Public Debt

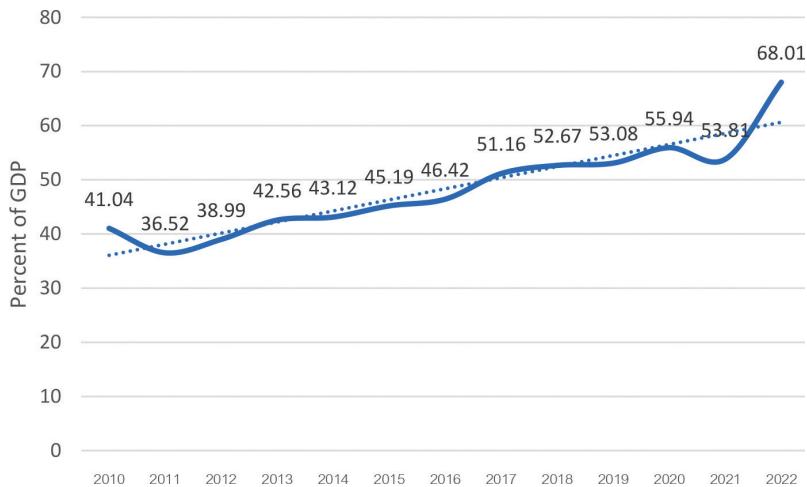


Figure 4 Laos' External Debt (% of GDP)

Source: Adapted from CEIC Data (2023)

Figure 4 illustrates Laos's public debt from 2010 to 2022. Throughout this period, Laos's public debt has consistently risen, indicating a high reliance on foreign capital. In 2010, the public debt stood at 41.01 percent of GDP. However, by 2022, it had surged to 68.01 percent of GDP, marking an increase of over 50 percent and highlighting a significant turning point in Laos's public debt trajectory. Remarkably, this escalation aligns with the period following the COVID-19 outbreak, emphasizing the substantial impact of the epidemic on Laos's public debt level.

5) International Exchange Rates

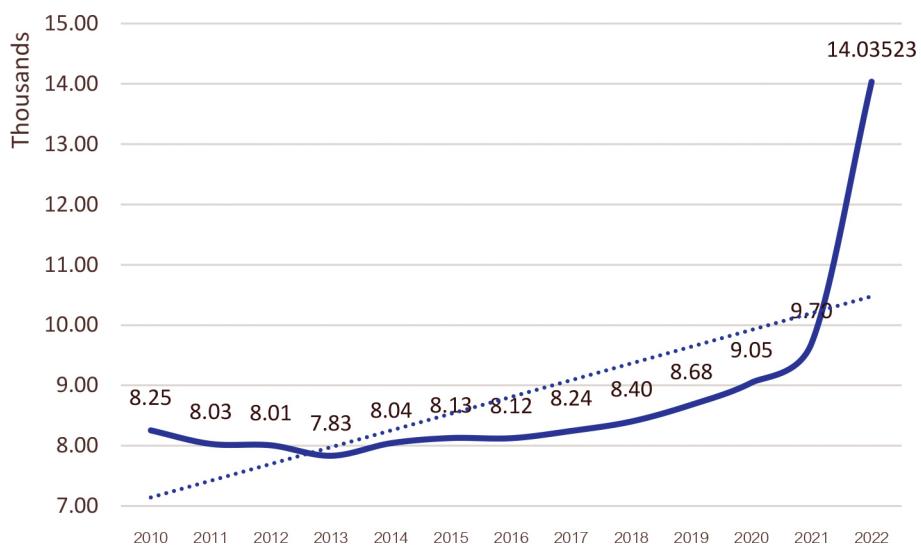


Figure 5 Laos Official Exchange Rate (LCU per US\$, Period Average)

Source: Adapted from The World Bank (2023c)

Figure 5 presents Laos's foreign exchange rate against the US dollar spanning from 2010 to 2022. This economic indicator is significant as it reflects the weakening economic structure of Laos. From 2013 to 2021, the Lao foreign exchange rate gradually depreciated relative to the US dollar. However, in 2022, the depreciation of the Lao kip experienced a sharp drop, plummeting from 9,700 kip per one US dollar to 14,035 kip per one US dollar. This underscores structural economic weaknesses within Laos. Notably, this significant depreciation aligns with the period following the COVID-19 outbreak, highlighting the substantial impact of the epidemic on the depreciation of the Lao kip.

In summary, the analysis of Figures 1-5 sheds light on Laos' economic indicators. The country has witnessed a decline in GDP growth rates, alongside a recent uptick in unemployment rates and sharp inflationary pressures. Moreover, the escalating external debt necessitates prudent management. Furthermore, the significant depreciation of the Lao kip against the US dollar has adversely impacted trade and investment. This analysis underscores the challenges stemming from the ongoing economic crisis in Laos, exacerbated by the adverse effects of the COVID-19 pandemic on all economic fronts. Despite being a global issue, Laos has faced particularly severe consequences, with no immediate signs of economic recovery. The absence of effective government measures or policies to spur economic revitalization further complicates the situation, highlighting the need for initiatives like restructuring production, infrastructure investments, promoting private consumption, and enhancing export-import activities.

2. Analysis of the Causes of Laos' Economic Recession

From an analysis of data extracted from 62 research articles sourced from the Scopus database and Web of Science, spanning the search period of March 28-29, 2023, the gathered information yields several intriguing insights.

1) The focus of the content in the article

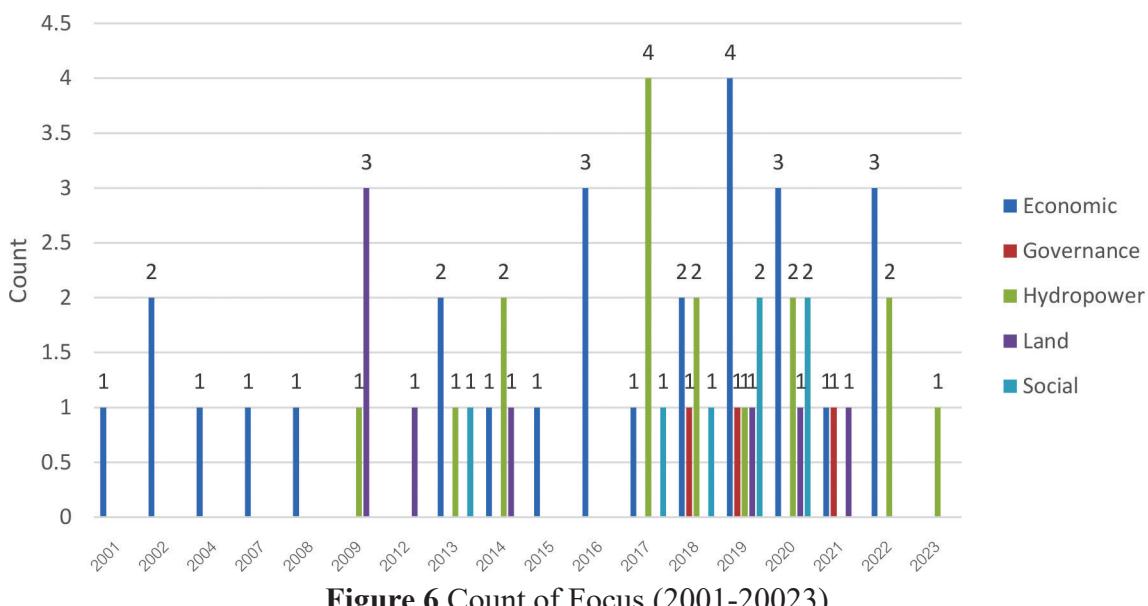


Figure 6 Count of Focus (2001-20023)

Journal of ASEAN PLUS⁺ Studies Vol. 5 No. 1 January-June 2024

Based on the data, the analysis reveals that scholars have shown significant interest in studying various aspects of Laos between the years 2001 and 2023. The top five topics of interest, as identified in academic journals, include economics, politics, hydroelectric power plants, governance, and social aspects.

The Figure below illustrates the number of issues studied during the period of 2001-2023.

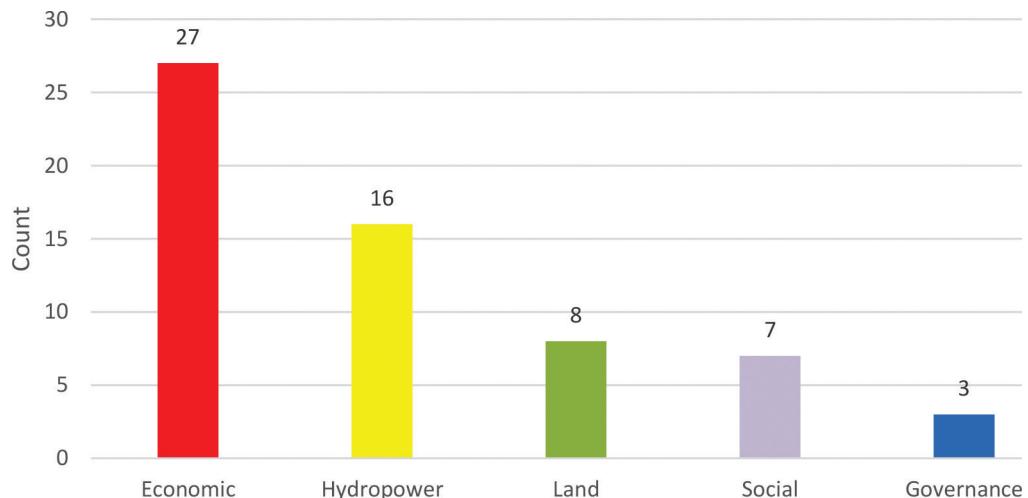


Figure 7 Count of Focus (2001-2023)

From Figure 7, a closer examination of studies conducted in the field of economics reveals the distribution of research conducted over a span of several years, as depicted below.

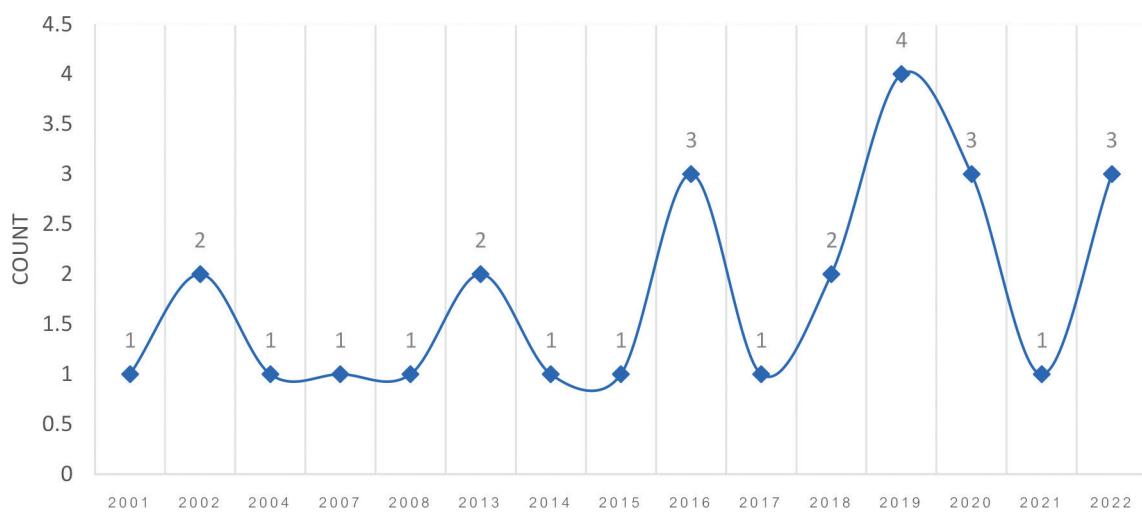


Figure 8 Focus on economic (2001-2023)

In 2019, there was a notable surge in the number of scholars conducting studies on economic issues in Laos. Furthermore, from 2001 to 2021, there has been a consistent focus on examining economic subjects every year, indicating the significance of economic issues as a central area of study related to Laos, particularly in recent years.

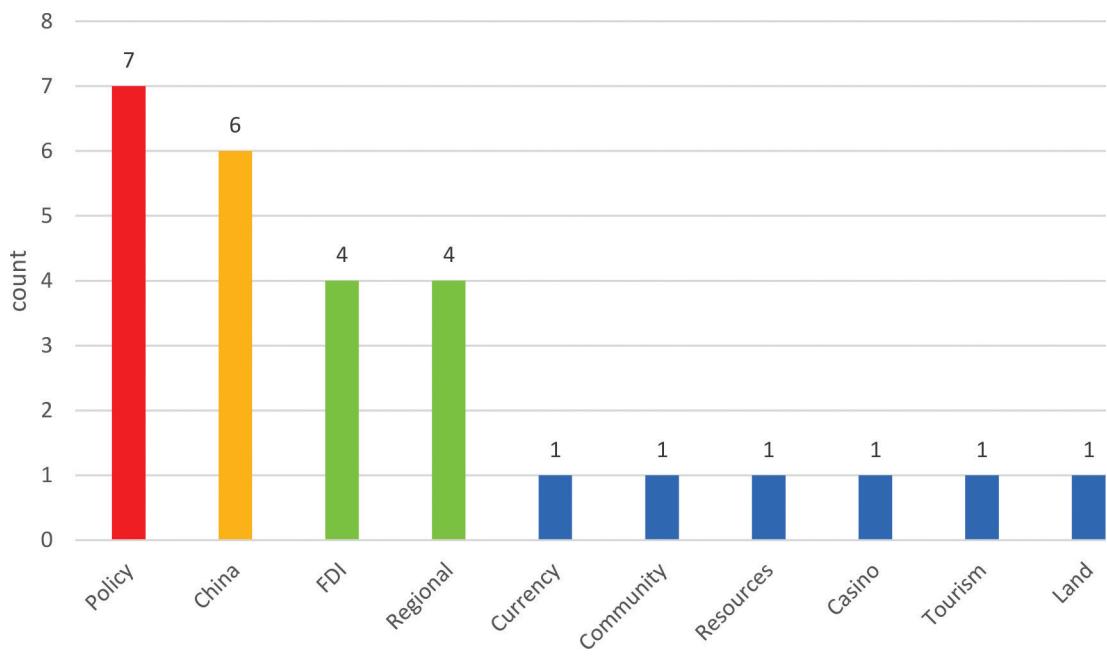


Figure 9 Count of Sub-Theme

Upon reviewing Figure 9, it becomes apparent that the most prevalent sub-topics of academic research between 2001 and 2023 were related to policy matters, followed by China's role in direct investment. Additionally, other notable sub-topics included region, exchange rate, community, resources, casino, tourism, and land, respectively.

In summary, the analysis of scholarly interest in Laos from 2001 to 2023 reveals a consistent focus on various aspects, with economics, politics, hydroelectric power plants, governance, and social factors emerging as the top five topics of study. Notably, there was a significant increase in economic research in 2019, indicating heightened attention to economic issues during that period. Throughout the years, there has been a steady examination of economic subjects, underscoring their importance in academic discourse concerning Laos. Subsequently, the predominant sub-topics of research during this period were related to policy matters, with a notable emphasis on China's role in direct investment. Other significant sub-topics included regions, exchange rates, communities, resources, casinos, tourism, and land.

Discussion

When examining the economic issues of Laos in the contemporary era, two key points can be considered:

1) The current state of the Lao economy can be assessed by examining economic indicators such as GDP growth, unemployment rate, inflation, public debt, and international exchange rates from 2010-2022. Specifically, the onset of the COVID-19 crisis has had a profound impact on the Lao economy. Analyzing these factors and the overall economic landscape reveals a distinct difference compared to the past. This is an intriguing aspect warranting further investigation. A study utilizing inferential statistics could examine the extent to which the factors of the COVID-19 crisis have influenced Laos' economic indicators, providing valuable insights. The Lao economy has faced challenges, as evident from lower GDP growth, high unemployment

rate, inflationary pressures, and unfavorable foreign exchange rates. Hence, the proposal of this study is for the Lao government to promptly implement measures to rejuvenate the economy post the COVID-19 crisis. For instance, following the example of Thailand, efforts to boost tourism to attract foreign currency and promote foreign investment should be considered. However, the strategy should not solely rely on China. Moreover, adjustments to the country's production structure should be made to prioritize exports to diverse countries and regions. Moreover, there is a limited amount of research focusing on the relationship between the Lao economies and neighboring countries, like Thailand, especially during Thailand's Asian financial crisis, where Laos experienced a similar economic slowdown. Kyophilavong et al. (2018) also highlight the significance of trade with neighboring countries, such as Thailand, in driving Lao economic growth. It is intriguing to observe the potential impact of heavily linking Laos' economy to Thailand. Laos heavily depends on importing various products, including energy resources like refined oil, from Thailand. Moreover, a significant number of Lao workers migrate to Thailand for employment due to the comparatively higher wages offered there. These Lao workers are then remunerated and return to Laos. Consequently, any economic downturn experienced by Thailand can have repercussions on the economic growth and development of Laos.

2) Various factors influence the current state of the Lao economy. Analysis of research interest in Laos over the past 23 years (2001-2023) reveals that economic issues have been the primary topic of interest among scholars, underscoring the importance of economic changes in Laos since 2000. Digging deeper into economic sub-issues, it becomes evident that government policies play a crucial role in shaping the direction of the Lao economy. Policy-making factors driven by political and governmental entities have significantly influenced the trajectory of the Lao economy in recent years. Laos is facing difficulties in addressing its poor economic conditions, partially influenced by the global economic downturn. In 2022, Phankham Viphavanh resigned as Prime Minister, passing on the responsibility to Sonexay Siphandone, the current Prime Minister. The burden of revitalizing Laos' economy falls significantly on his shoulders. The primary cause of the economic crisis in Laos is the substantial amount of public debt, particularly from borrowing from China. However, considering Sonexay Siphandone's previous role as a minister in the former government, it remains uncertain whether there will be a deviation in the policy adjustments that rely on China. This aligns with the findings of Barney and Souksakoun (2021), which suggested that heavy reliance on Chinese investment could lead to an increase in national debt and have long-term adverse consequences for the country's economy. Hence, the Lao government's economic policy adjustment stands as one of the pivotal factors that will enable Laos to break free from the cycle of overwhelming debt and ensure the sustained stability of its economic growth.

Conclusions

The examination of Laos' economic issues in the contemporary era highlights two key points. Firstly, assessing the current state of the Lao economy through indicators such as GDP growth, unemployment rate, inflation, public debt, and exchange rates reveals notable differences compared to the past. The Lao economy has encountered challenges, including lower GDP growth, high unemployment, inflationary pressures, and unfavorable exchange rates. Limited research exists on the relationship between the Lao economy and neighboring countries like Thailand, particularly during times of economic downturn such as Thailand's Asian financial

crisis. Secondly, various factors shape the current state of the Lao economy. Analysis of research interest demonstrates that economic issues have been the primary focus of scholars, underscoring the importance of economic transformations in Laos since 2000. Within economic sub-issues, it becomes evident that government policies wield a crucial role in shaping the direction of the Lao economy. Political and governmental entities heavily influence policy-making factors, significantly impacting the trajectory of the Lao economy in recent years. The recommendation for this study is that the Lao government should revise its policies to better address the economic aftermath of the COVID-19 crisis and minimize reliance on foreign borrowing. Instead, the emphasis should be placed on increasing revenue through exports and tourism. The expansion of diverse foreign investment and opportunities within the country's private sector has enabled it to engage in business activities more freely, serving as a catalyst for stimulating the economy. Therefore, the government should implement measures to foster domestic capital growth. Excessive control over private operations within the nation could detrimentally impact long-term economic development in Laos.

References

Asiatimes. (2022, September 14). *China-indebted Laos way more broke than advertised*. <https://asiatimes.com/2022/10/china-indebted-laos-way-more-broke-than-advertised/>

Barney, K., & Souksakoun, K. (2021). Credit crunch: Chinese infrastructure lending and Lao sovereign debt. *Asia and the Pacific Policy Studies*, 8(1), 94-113.

CEIC Data. (2023). *Laos external debt: % of GDP, 1996-2023*. <https://www.ceicdata.com/en/indicator/laos/external-debt--of-nominal-gdp>

Cohen, P. T. (2009). The post-opium scenario and rubber in northern Laos: Alternative Western and Chinese models of development. *International Journal of Drug Policy*, 20(5), 424-430.

Douglas, J. (2023). *Debt troubles in Laos reveal economic turmoil in developing world*. <https://www.wsj.com/articles/debt-troubles-in-laos-reveal-economic-turmoil-in-developing-world-11657877403>

Great Mekong Subregion. (2023). *Lao people's democratic republic*. <https://greatermekong.org/g/lao-pdr>

International Banker. (2022, July 21). *Can the Laos economy be rescued from the brink of default?* <https://internationalbanker.com/finance/can-the-laos-economy-be-rescued-from-the-brink-of-default/>

Jiang, J. (2023). *Laos faces debt crisis after borrowing billions from China*. <https://www.voanews.com/a/laos-faces-debt-crisis-after-borrowing-billions-from-china-/6641633.html>

Kyophilavong, P., Shahbaz, M., Kim, B., & Jeong-Soo, O. (2017). A note on the electricity-growth nexus in Lao PDR. *Renewable and Sustainable Energy Reviews*, 1(1), 1251-1260 <http://dx.doi.org/10.1016/j.rser.2017.03.055>

Kyophilavong, P., Shahbaz, M., Lamphayphan, T., Kim, B., & Wong, M. C. S. (2019). Are devaluations expansionary in Laos? *Global Business Review*, 20(1), 72-83. <https://doi.org/10.1177/0972150918803996>

Journal of ASEAN PLUS⁺ Studies Vol. 5 No. 1 January-June 2024

Kyophilavong, P., Shahbaz, M., Rehman, I. U., Souksavath, S., & Chanthasene, S. (2018). Investigating the relationship between trade balance and the exchange rate: The case of Laos' trade with Thailand. *Global Business Review*, 19(3), 590-603.

Langbein, J., Gazizullin, I., & Naumenko, D. (2021). Trade liberalisation and opening in post-soviet limited access orders. *East European Politics*, 37(1), 139-158.

Li, D., & Wang, X. (2021). Land-use change and efficiency in Laos' special economic zones. *Land*, 10(10), 1012.

Li, P., & Xiao, Z. (2022). Impervious surface expansion in the China-Laos border area under the context of geo-economic cooperation: A case study of the Mohan-Boten Economic Cooperation Zone. *Giscience & Remote Sensing*, 59(1), 2184-2201.

Phimmavong, S., & Keenan, R. J. (2020a). Forest plantation development, poverty, and inequality in Laos: A dynamic CGE microsimulation analysis. *Forest Policy and Economics*, 111, 102055. <https://doi.org/10.1016/j.forepol.2019.102055>

Phimmavong, S., Keenan, R. J., & Ozarska, B. (2020b). Impact of forest plantation development in Laos: A dynamic general equilibrium analysis. *Formath*, 19, 1-18.

Radio Free Asia. (2023). *As Laos' new leader takes office, government focuses on tackling surging inflation*. <https://www.rfa.org/english/news/laos/laosnewpmminflation-01042023173705.html>

Rehbein, B. (2022). Laos in 2021: One more return to the subsistence ethic? *Asian Survey*, 62(1), 145-152.

Sims, K. (2017). Gambling on the future: Casino enclaves, development, and poverty alleviation in Laos. *Pacific Affairs*, 90(4), 675-699.

Sims, K. (2022). BRI as cognitive empire: Epistemic violence, ethnonationalism and alternative imaginaries in Zomian highlands. *Singapore Journal of Tropical Geography*, 43(3), 309-324.

Sims, K. (2023, January 28). *Laos in limbo heading into 2023*. <https://www.eastasiaforum.org/2023/01/28/laos-in-limbo-heading-into-2023/>

The World Bank. (2023a). *GDP growth (annual %)*. <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2022&locations=LA&start=2010&view=chart>

The World Bank. (2023b). *Inflation, consumer prices (annual %) - Lao PDR*. <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?end=2022&locations=LA&start=2010&view=chart>

The World Bank. (2023c). *Official exchange rate (LCU per US\$, period average) - Lao PDR*. <https://data.worldbank.org/indicator/PA.NUS.FCRF?end=2022&locations=LA&start=2010>

The World Bank. (2023d). *Unemployment, total (% of total labor force) (modeled ILO estimate) - United Arab Emirates, Lao PDR*. <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS?end=2022&locations=LA&start=2010&view=chart>

Vientiane Times. (2022, July 18). *Chinese investment in Laos tops US\$16 billion*. <https://asianews.network/chinese-investment-in-laos-tops-us16-billion/>

Wang, J., Sui, L. C., Yang, X. M., Wang, Z. H., Ge, D. Z., Kang, J. M., & Liu, B. (2019). Economic globalization impacts on the ecological environment of inland developing countries: A case study of Laos from the perspective of the land use/cover change. *Sustainability*, 11(14), 1-21.

Journal of ASEAN PLUS⁺ Studies Vol. 5 No. 1 January-June 2024

Worlddata. (2023, February 18). *Laos: country data and statistics*. <https://www.worlddata.info/asia/laos/index.php>

Zheng, F. Y., Xiao, C. W., You, Z., & Feng, Z. M. (2022). Evaluating the resources and environmental carrying capacity in Laos using a three-dimensional tetrahedron model. *International Journal of Environmental Research and Public Health*, 19(21). <https://doi.org/10.3390/ijerph192113816>