



Economic relief and stimulus: Evidence from Thailand

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1. Issues

The COVID-19 pandemic is, first and foremost, a human tragedy. Most countries put public health as the top policy priority, and many measures (e.g. lockdowns, social distancing, workplace closure measures) were launched to reduce the virus spread. These policies resulted in unprecedented economic impacts on individuals and businesses, including disrupting people's access to essential services, food, and livelihoods, slowing down economic activities, and increasing the probability of firms defaulting and job losses.

In contrast to many earlier crises, the onset of the pandemic was met with a large, decisive economic policy response in mitigating its worst human costs in the short run. Global fiscal support of \$14 trillion has contributed to saving lives and livelihoods and has mitigated the effects of the pandemic on consumption and output. Fiscal response, nonetheless, varies greatly across countries, from 2 per cent in Egypt to 46 per cent of GDP in Italy (WDR, 2022: Figure 1.1). Together with economic contraction causing lower revenues, such support has led to a rise in deficits and public debt. The range of government budget deficit is projected at -13.3 per cent for advanced economies, -10.3 per cent for emerging market and middle-income economies, and -5.7 per cent for low-income developing countries. Global public debt is estimated to soar to 98 per cent of GDP at the end of 2020, compared with 84 per cent in 2019 (IMF, 2021; WDR, 2022). Despite the decisive economic policy response, together with a massive amount of fiscal

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stimulus, the world economy experienced the largest global economic crisis in more than a century (WDR, 2022).

A wide range of policy measures have been introduced to confront the short-run impacts. They include direct income support programs, temporary debt relief, i.e., debt moratoria for households and businesses, regulatory forbearance for banks, and tax breaks for firms and individuals. These measures have been introduced differently across countries, depending on the availability of resources and the specific nature of risks the countries faced. In the context of developing countries, implementing them might be challenging as social safety net schemes are still at the early stage. Basic infrastructure to reach people and those vulnerable to the crisis in particular might not be ready for use, thereby retarding the above policy efforts. As a result, the magnitude of fiscal resources spent during the crisis might not be a reliable indicator of the impact of COVID-19 on the economy.

It points to the need for a country case study to analyze how the government responds to the crisis, any challenges that emerged in implementing these measures, and policy lessons for the next crisis. So far country-specific analysis remains sparse (OECD, 2021; Subramaniam, A. Perdiguero, J. Rush, & Asis-Layugan, 2021). Against this backdrop, this paper aims to reveal how the Thai government responded to the crisis with an emphasis on economic relief and stimulus launched.

The paper's structure is as follows; it begins with the stylistic fact about four waves of COVID-19 infected cases in Thailand as well as the government responses to suppress infection cases (Section 2). In Section 3, economic relief and stimulus measures are presented. The next section discusses the key features of these measures.

2. Overview of COVID-19 Situation, Border Controls and Mobility

Restrictions

Thailand was the first country affected by COVID-19 outside of China. The country is a popular destination for Chinese tourists. The first confirmed COVID-19 case in Thailand was reported on 13 January, 2020. By the end of June 2022, there were around 2,000 newly infected cases a day and the cumulative number of infected cases reached 4.5 million, ranked 26 in the world.

Up to June 2022, there have been four waves of COVID-19 contagion in Thailand, (1) 15 March-30 April 2020; (2) 15 December 2020-15 March 2021; (3) April- December

2021; and (4) January 2022 onward (Figure 1). By the end of September 2022, COVID-19 was removed from the list of a dangerous communicable disease (Yuvejwattana and Tanakasempipat, 2022). The most severe one was the third, which began around mid-April 2021 and lasted for 9 months. In this wave, the new daily cases increased to more than 1,000 cases on 14 April and reached the wave's peak of 23,418 cases by 13 August 2021. The new daily cases were above 5,000 until December 2021, resulting in more than 20,000 cumulative deaths, accounting for two third of total cumulative deaths of the four waves (Figure 2). Even though the growth of infected cases in the fourth wave was relatively higher than the third one, most of the infected cases in the latter have been dominated by the omicron variant, whose symptoms are less severe than the delta variant which was the majority in the former.

---- Insert Figures 1 and 2 around here -----

Like other countries, Thailand imposed border control measures together with social distancing measures to suppress the virus spread. The former is managed with a conservative stance, whereas the latter was imposed pragmatically to ensure businesses remain in operation amid the threat of virus spread.

When the newly infected cases noticeably surged in early March, border control was imposed immediately. It was in effect by 19 March 2020. Nonetheless, the effectiveness of such control on neighbouring countries with a common border was rather limited (Yuda , 2020; Kohpaiboon et al. 2021). Movement across border was the main source of the virus' spread in the second and third waves.

Even though there was no infected case from April -November 2020, reopening the border was undertaken slowly. In particular, reopening schemes were associated with strict procedures so that it is less likely for general foreign visitors to enter.¹ The first attempt to reopen the border was on 8 December 2020. People from 56 countries could apply for a standard 30 days visa, which would be extended to 45 days, or apply for the Special Tourist Visa. All tourists should have a negative test result within 72 hours

¹ Note that by 1 August 2020, it was opened for certain groups of foreigners including medical tourists, filming crews, Thailand Elite card members, foreigners who have work permits, foreigners married to Thai nationals and foreigners studying at educational institutions were allowed to enter but subject to the mandatory 14-day quarantine. All of them must get tested at the airport.

of their arrival, go through a second test once they land, and stay in a compulsory quarantine of 14 days on arrival. If any visitors test positive, they should be quarantined for 14 days in a state hospital. Such procedures were not practical for temporary visitors to enter Thailand. In other words, the border was still *de facto* closed.

Until July 2021, a pragmatic reopening scheme began for selective tourist destinations. It began with the *Phuket sandbox scheme*, which allowed vaccinated international travelers² to visit Phuket without a quarantine period. International arrivals had to have tested negative for the virus upon arrival. If they went on to other destinations in Thailand, they needed to spend at least 14 nights in Phuket before leaving. The travelers were also required to download an app tracing their location. It was similar to a field experiment where reopening will be continued if there are no signs of noticeable surges in COVID-19 infected cases in Phuket.

After 15 days a similar scheme was launched in four other tourist destinations: Surat Thani provinces (e.g. Samui island, Pha Ngan island, Tao island) by 15 July 2021; Krabi province (e.g PP Island) by 30 July 2021; Chonburi province (i.e. Pattaya), Prachuap Khiri Khan province (Hua Hin) by 1 October 2021, and Perchaburi province (Cha-am) by 1 October 2021.³ The schemes applied elsewhere were slightly different in terms of the quarantine period required.⁴ Five provinces – Bangkok, Chonburi, Chiang Mai, Prachuap Khiri Khan (Hua Hin) and Phetchaburi – have been forced to delay reopening from October 1 to November 1 because their vaccination rate is still too low whereas the others ended by 1 October, 2021.

² Incoming travelers from a low-to-medium risk country categorized by Thailand's Ministry of Public Health (e.g. Taiwan, Australia, New Zealand, Singapore, Qatar, Israel, and Norway) must be fully vaccinated at least 14 days before their departure with vaccines registered with Thailand's Ministry of Public Health or approved by the World Health Organization (WHO). A vaccine certificate must be presented as a proof. A negative PCR test result issued no more than 72 hours before departure must also be presented. They also must buy insurance for COVID-19 expenses, with a minimum coverage of \$100,000 (Yuda, 2021a)

³ Authors compiled from official documents available online at <https://www.facebook.com/informationcovid19/photos/297007931917538>

⁴ For example, in Hua Hin Scheme known as *Hua Hin Recharge*, visitors must undergo three RT-PCR tests during their stay in the town – the first upon arrival, the second seven days later and the third on the 13th day in town. While awaiting for results of the first test, they can check in to their hotels, which must meet the SHA Plus standard, without stopovers en route to the hotels. If testing negative for COVID-19, they can travel freely in the town or within 86.36 square kilometres of the district's territory without being quarantined. If testing negative in the second test, they can move to a new hotel of their choice. If testing negative in the third test, they can travel anywhere across Thailand, after completion of their 14-day stay in Hua Hin (Thai PBS, 2021).

Even though partial reopening in several tourist destination provinces did not fulfil the target of international arrivals at 100,000 visitors⁵, they revitalized the tourism sector in Thailand (BangkokPost, 2022a). Such experiments also made a strong case for the government to continue gradually reopening the border. Eventually, by 11 May 2022, fully vaccinated international arrivals entering Thailand are no longer required to endure a brief hotel quarantine and take an RT-PCR COVID-19 test upon arrivals, together with easing other requirements such as the amount of health insurance coverage (from 20,000 to 10,000 USD)(BangkokPost, 2022b).

The government was fully aware of the adverse economic impact of nationwide lockdowns as a social distancing measure, so it was used as the last resource to combat the virus spread. The first nationwide lockdown was in April 2020 to combat the first wave. The full-scale national lockdown together with curfews (10.00pm-04.00am) and stay-home policy were introduced (Rajatanavin et al., 2021; OECD, 2020: Table1). As illustrated by Google mobility data, there was a significant reduction in population mobility in April 2020 to major transit coach and railway stations (60%) and workplaces (30%), and a moderate increase in people staying in their residential areas (20%) (Rajatanavin et al., 2021: Figure 4). When the number of daily infected cases dropped noticeably, lockdown measures were eased with a close monitor.⁶

Experience from the first wave management, during which the national lockdown induced steep economic hardship, led the government impose a partial lockdown during the second wave – on its epicenter of Samut Sakhon province. This measure worked well in containing local contagion as the circle of virus spread in the second wave was relatively short and highly concentrated around Samut Sakhon.

When the third wave came around, the government was rather slow to impose a national-wide lockdown even while new daily infected cases started to surge in mid-April 2021. The full-scale lockdown was imposed on 28 June 2021. It was gradually unlocked according to the infected cases situation by early August (Directive No. 30, Published in the Royal Thai Government Gazette on 1 August 2021). In particular, all

⁵ According to data released by the Tourism Authority of Thailand, since the launch of the Sandbox, Phuket has seen just over 25,886 international arrivals in the first 60 days (July and August 2021). This seemed far lower than the target of 100,000 arrivals (Nation, 2021).

⁶ At the onset of the COVID crisis, a state of emergency was instituted on March 26, 2020 to overcome complexity of bureaucratic system in Thailand. All administrative authorities have been centralized to the new set up center namely Centre for Covid-19 Situation Administration (CCSA) chaired by Prime minister Prayuth Chan-o-cha (Marome and Shaw, 2021)

provinces were categorized into three zones according to whether new daily infected cases continue to grow, i.e., (1) maximum and strictly controlled areas (dark-red zone provinces) (29 provinces); (2) strictly controlled areas (red zone provinces) (37 provinces), and (3) controlled areas/orange zone provinces (11 provinces).

In dark-red zone provinces where new daily infected cases continued to rise, the night-time curfew (9.00 pm-04.00 am) remained unchanged. People were also asked to go out only if necessary, i.e., to shop for everyday items like food, medicine and medical supplies, to visit the doctor, or to receive a vaccine. This was different from red zone provinces, where restaurants and eateries were allowed to offer dine-in services up until 11.00 pm without the sale and consumption of alcoholic beverages.

Since then, controlling local movement was further relaxed, although there was another wave of the virus spread (i.e., the fourth wave). New Year countdown festivities (31 December/1 January), as well as traditional new year (Songkarn Festival), were allowed. By the end of June 2022, controlling local movement was abolished.⁷ Outdoor mask-wearing has been endorsed as voluntary, although the public are still advised to wear a face mask in crowded places, such as, public transport, markets, and concert venues, or for people with certain health conditions.

Social distancing above was supplemented with a contact tracing scheme, which identified people who were in contact with COVID-19 patients. Contact tracing scheme was undertaken effectively due to a strong public health system that was well established long before COVID-19 crisis (WHO, 2020: 19). The scheme was carried out by more than 1,000 surveillance and rapid response team (SRRT), which comprises public health nurses and officer with epidemiologists in some teams. SRRT are stationed at provincial health offices and district hospitals and are networked with subdistrict health centres. In Bangkok, the SSRT is linked to the Department of Diseases Control and Bangkok Metropolitan Administration. At the subdistrict level, more than one million village health volunteers (VHVs) and staff from subdistrict health centres supported the SRRT. VHVs helped in assessing villagers' risk of exposure to infection and liaised with the subdistrict health centres. The cost of lab testing and treatment was fully subsidized by

⁷ By mid June 2022, the reduction in new cases has observed. The average daily number of all currently 'active' COVID-19 cases (23,010) over the last seven days decrease by 27 per cent, compared to the previous week (31,318). Most cases continue to be monitored in hospitals, community isolation and home isolation. The average number of COVID cases occupying hospital beds per day over the past week (12,074) decreased by 15 per cent. 52.9 million people or 89 per cent of population got the second dose of vaccines (WHO, 2022)

the government in all cases, regardless of nationality. This allowed tracing and testing measures highly effective to combat the contagion especially in rural areas during the first and second Covid-19 waves (Rajatanavin et al., 2021). As revealed in WHO (2020) report, Thailand does not have a single national infection prevention and control program because of limited fiscal resources. Most healthcare facilities conduct activities using their own limited resources (WHO, 2020: 7). This constrain the country's capability to combat the large wave of infected cases like the third wave.

The government also enhanced laboratory capacity by scaling up real-time PCR laboratory capacity from 80 certified laboratories in April 2020 to 230 (154 public and 76 private laboratories) in October 2020, covering 77 provinces. It also installed intensive care units (ICUs) and stockpiled personal protective equipment and medicines. This was to enhance health care capacity to combat any emerging infectious diseases that might occur in the future.

3. Economic Relief and Stimulus

3.1 Overall

As measures to prevent the virus spread could noticeably slowdown economic activities, the unemployment rate in Thailand soared. Despite the low level, unemployment rate doubled from 1.1 per cent by the first quarter in 2020 to 1.9 per cent in the third quarter in 2020. Until the first quarter of 2023, the unemployment rate returned to the pre-COVID Crisis.⁸

Like other developed countries, the Thai government swiftly launched measures to cushion the effect, beginning in March 2020. There are two broad categories of fiscal policy responses, i.e. *Above the line* measures and *liquidity support*. The former refers to increases in government expenditures and tax deductions that directly impacts on economic activity via fiscal multipliers; the latter encompasses equity injections, loans, asset purchase or debt assumptions, and contingent liabilities (guarantees, and quasi-fiscal operations). Figure 3 illustrates how fiscal resources and financial sector interventions were deployed around the world to combat the adverse economic impact induced by the COVID-19 crisis.

⁸ Data are extracted from CEIC database, retrieved in June 2023.

--- Insert Figure 3 around here---

The total value of the policy measures the Thai government launched between January 2020 and September 2021 was 2.5 trillion baht or 14.2 per cent of the 2019 GDP. Note that some of these measures were not completed by June 2022.⁹ *Above the line* measures was 1.8 trillion baht, equivalent to 10.6 per cent of the 2019 GDP, whereas liquidity support was 0.67 trillion baht or 3.9 per cent of the 2019 GDP.¹⁰ To finance these measures, Thailand borrowed 1.5 trillion baht, i.e., 1 trillion baht in 2020 and 0.5 trillion baht in May 2021. The size of fiscal policy responses were far larger than the standard of emerging market economies. This is especially true when above-the-line measures are concerned where the size of fiscal measures of Thailand was more or less in line with the average of advanced economies (Figure 3).

Such a magnitude of fiscal measures by Thailand seems sensible for at least two reasons. One is Thailand, by the middle-income country standard, exhibited a sizable informal sector measured by the share of informal to total employment. In 2018, the percentage share of informal workers in Thailand was 63.2 (Figure 4). This seems to be relatively large by the middle-income country standard, where a rather small fraction of informal employment would be in the subsistent agricultural sector in rural areas. These workers are the result of rural-urban migrants and often set up or were employed by microenterprises selling things in various business hubs or tourism spots in Bangkok and its vicinities. Their businesses tend to rely on social interaction, so that these workers are very likely to be adversely affected by any measures to prevent the virus from spreading. More importantly, they have yet to be protected by the social safety net scheme available so far.

--- Insert Figure 4 and Figure 5 around here---

Secondly as many are aware of the relative importance of the tourism sector to the Thai economy. It accounted for nearly 20 per cent of total exports pre-COVID (i.e.

⁹ Figure is from (IMF, 2021) which is slightly above the estimate by (WorldBank, 2021). The difference is due to foregone incomes of other economic reliefs such as tax relief, lower utility bills and the like.

¹⁰ The original figure reported in IMF website is 11.4 and 4.2 per cent of 2020 GDP for above the line and liquidity support measures, respectively. What was reported here is using 2019 nominal GDP figure which is 16.9 trillion baht.

2018-19) (Figure 5). Clearly, tourism is the hardest hit sector by the COVID-19 crisis. Social distancing and border closure imposed in many countries to suppress the infection caused sudden stops of international arrivals.

3.2 Packages of Economic Relief and Stimulus

Generally, all the packages could be broadly divided into two main categories like above, i.e., *Above the line* measures and liquidity support. In the former can be further decomposed into three groups according to their purposes (1) economic reliefs; (2) economic stimulus measures and (3) those serving both economic relief and stimulus.

3.2.1 Economic relief

The main measure of economic relief is cash handouts. The scheme was first introduced after imposing national lockdown during the first wave. It was known in Thai as 'Rao Mai Thing Kan', meaning *No One Left Behind*. It offered 5,000 baht a month from April to June for those working in the informal sector, including temporary workers, contract workers and self-employed people. 5,000 baht a month is equivalent to 75 per cent of the minimum wages.¹¹ It aimed to discourage these workers from leaving the capital and possibly spreading the virus upcountry. The total budget was initially set at 45 billion baht covering 3 million workers.

The main problem of this scheme was the underestimation of affected workers. In particular, by 1 April 2020, there were nearly 20 million people registering for 5000-baht cash handout scheme, far higher than the target of 3 million workers (Yuda, 2020). Together with poor communication on how to receive them, such underestimation ignited public frustration. As a consequence, the cabinet meeting approved an extension of the government's 5,000-baht cash handout scheme to cover 16 million people in total by the end of April 2020 (NNT, 2020).¹²

A similar scheme was offered to 10 million farmers from May to July 2020. The total budget for cash-handouts was 390 billion baht, accounting for 22 per cent of the total *Above the line* measures. Also, some 6.78 million infants, seniors and disabled people were

¹¹ By 2020, minimum wage in Bangkok was 331 baht a day. Under the assumption that these workers work 5 days a week for 4 weeks (a month), the monthly return from minimum wage would be 6,620 baht.

¹² Nonetheless, there are many not eligible for the scheme. NNT (2020), '5000-baht cash relief extended to 16 million people' National News Bureau of Thailand, 28 April available at <https://thainews.prd.go.th/en/news/detail/TCATG200428200905050>

each provided with 1,000 baht a month for three months, while 1.16 million people holding the state welfare card were also given extra financial assistance on top of their monthly living allowances.

Company workers are protected under the Social Security System (SSS). The workers furloughed because of COVID-19 are eligible to receive 62 per cent of their daily wages for up to 90 days. There is a wage ceiling under Thailand's SSS at 15,000 baht a month. Hence, the maximum amount was 9,300 baht a month. Employers are required to confirm that the business closed due to COVID-19, which led to some delays in receiving benefits. As of 29 May 2022, 1.4 million salaried employees, representing approximately 8 per cent of the 15.9 million enrolled in Thailand's Social Security Fund, have made claims on their unemployment insurance; 1.29 million were approved. Note that this part of the funding is from Social Security Fund, not by the government.

The next round of the cash handout was in effect between January and June 2021. The government addressed problems and shortcomings experienced in the first round this time. In particular, it covered almost all vulnerable people and made use of e-wallet to control how money was spent. It began with *Rao Chana* scheme (meaning We Win), introduced on 29 January 2021. 3,500 baht per month was offered between February and March 2021 and can be spent until 31 May 2021. E-money was for buying necessities (foods, beverages and other services) from registered shops. 30 million individuals were covered under *Rao Chana* scheme, including vulnerable people who are not eligible for any social safety net scheme elsewhere, and the poor (i.e. taxable income by 2019 less than 300,000 baht and total saving account less than 500,000 baht by 31 December 2019). Note that 14 million holders of the state welfare card were also eligible for the second cash handout received up to 2,800 baht each (Bangkok Post, 2021c).

Two programs supplemented it. The first, known in Thai as *Rao Rak Kan* (meaning We love each other), assisted firms in keeping their operation and maintaining jobs. Company employees under Section 33 of the Social Security System were targeted, covering 9 million employees. 4,000 baht was offered in total, receiving 1,000 baht a week from 22 March to 12 April 2021. The second program targeted self-employed workers or freelancers who contribute to Social Security Fund (Sections 39 and 40). 3,500 baht a month was offered between February and March 2021. Those who have not registered with the Social Security Office may do so within this month to qualify for it. There are 3.5

million workers in this group. Total budget of *Rao Chana* scheme was 210 billion baht or 11.7 per cent of total *Above the line* measures.¹³

During the onset of the third wave, the government extended the second round of cash handouts. Under *Rao Chana* (We Win), 1,000 baht a week were transferred by May 21 and 28. Another 2,000 baht was offered for employees under Section 33 (*Rao Rak Kan*). By the end of June, the total budget for the second round was 273.5 billion baht covering 27.2 million people.

As the newly infected cases in the third wave continued in July, the next round of cash handout was launched in 6 July 2021. This new round was applicable to certain areas and economic activities. Out of 29 provinces in the dark red zone, only those in 10 provinces were eligible.¹⁴

Under the third round, *Rao Rak Kan* provided employees an additional 2,500 baht a month for two months, while the self-employed and freelancers were be entitled to 5,000 baht each. In addition, companies which have employees not covered by social security scheme must register within July 2021. They received support for their employees and for companies' owners (3,000 baht for each employee under employment but not more than 200 employees). The transfer was made in August 2021. The packages were slightly modified in August 2021 because only 40.5 per cent of the total budget was utilized. The modification included the registration deadline extension, covering all 29 provinces in the dark red zones (Cabinet Resolution, 2021, 9 August).

Since then, the government has no longer launched cash handout schemes. Despite the surge of the fourth wave, strict control of local movement was not imposed. Table 1 presents the summary of cash handouts in these three waves of COVID infections.

----- Insert Table 1 around here -----

¹³ Note that 14 million holders of the state welfare card who were also eligible for the second cash handout received up to 2,800 baht each (Bangkok Post, 2021c).

¹⁴ Bangkok, Nakhon Pathom, Nonthaburi, Pathum Thani, Samut Prakarn, Samut Sakhon, Narthiwat, Pattani, Yala and Songkhla. They included Bangkok and its vicinities and 4 Southern provinces (Narthiwat, Pattani, Yala and Songkhla). It was for nine sectors (1) construction, (2) accommodation and food services, (3) arts, entertainment, and recreational activities, (4) transportation and warehouses, (5) wholesale and retail businesses, (6) administration and services support, (7) science and academic activities, (8) information and communications, and (9) other services as stated by the Social Security Office.

3.2.2 Economic stimulus

The government also launched the stimulus package with a hope to create more demand to cushion the negative economic shock derived from the COVID-19 crisis. This stimulus package is in line with standard Keynesian measures.

Initially, the stimulus package was set at 358 billion baht, accounting for 60 per cent of the total budget of 600 billion baht (covering the stimulus package, economic reliefs and healthcare expenses). While the absolute amount of stimulus package remained unchanged, its share dropped to 40 per cent. This was because the stimulus package was implemented slowly, whereas the other two components were spent urgently to combat the virus spread. The initial budget for the stimulus package was relocated to economic relief and healthcare expenses. By September 2021, the share was 22.7 per cent.

By the end of May 2021, additional 0.5 trillion baht was borrowed as the COVID-19 crisis continued.¹⁵ 170 billion was set for the stimulus package so that the total budget of the stimulus package virtually returned to its original target of around 400 billion baht. The rest was to finance healthcare measures (especially expenses in acquiring COVID-19 vaccines) and economic relief ones.

As mentioned earlier, the economic stimulus package was slowly utilized. Figure 6 presents the budget's utilization rate (the share of approved to total planned budget). It increased from 35.7 per cent in January 2021 to 38.9 per cent in May 2021. The utilization was shortly surged to 98 per cent in June 2021 due to the budget reallocation and returned to its trend in July. The utilization rate reached 48 per cent in November 2021 to 70 per cent in June 2022.

----- Insert Figure 6 around here -----

Public funds for economic stimulus were directed as various objectives, such as promoting a coffee farming project (0.9 million baht) and SMEs in Nonthaburi province (1 million baht), and strengthening the production capacity of mulberry (3 million baht). Despite high local content, they were fragile, so it is hard to stimulate aggregate demand

¹⁵ Emergency Decree authorizing Ministry of Finance to raise addition loans to solve problems, to remedy and restore the economy and society as affected by the coronavirus disease with total value of 0.5 trillion baht by 25 May 2021 was issued.

countrywide and have been slowly implemented. Hence, the efficacy of cushioning the negative economic shock induced by COVID-19 seems to be limited.

3.2.3 *Dual-purpose Measures*

The last set of policy measures pursued two purposes, i.e. economic relief and stimulus at the same time. While partial subsidy was offered, those receiving it had to co-pay to be eligible for the support. They include (1) co-payment measures; (2) tourism stimulus measures; and (3) boosting domestic consumption measures.

The first package was for buying necessities. It was known as the half-half program, where the government pays for 50% of food, drink and general goods purchases of up to 150 baht per person per day, with the total subsidy's ceiling for a specified duration. Phase 1 was between 23 October-31 December, 2020 with a ceiling of 3,000 baht. The scheme was extended three times, i.e. Phase 2 from 1 January to 31 March 2021; Phase 3 from 1 July-31 December 2021; and Phase 4 from 1 February to 30 April 2022). The ceiling varied across phases. It went up to 3,500 baht in Phase 2, and then dropped to 1,500 and 1,200 baht in Phases 3 and 4, respectively. The cap in Phases 1 and 3 was 3,000 baht but it was lifted to 3,500 baht in Phase 2. In Phase 4, the cap was imposed at 1,200 baht.

Phase 1 & 2 could result in 102 billion baht in spending, in which 49.8 billion baht came from the government side. Under these two phases, 1.6 million people were involved. Phase 3 involved 1.5 million people and resulted in 223.9 billion baht (three rounds in total) spending, 48 per cent from the government subsidy. Note that there was a minor change in subsidy scheme during November and December 2021, in which the ceiling was cut to 1,500 baht a person. Given the amount of money spent by people in the first three phases, the government re-launched the scheme from February-April 2022. The subsidy was granted in terms of e-money and transferred into the Pao Tang application.

The second package is to promote domestic travel, entitled *Rao Tiew Duay Kan* in Thai (meaning we-travel-together program).¹⁶ Under the program, the government will

¹⁶ In fact, there was another measure launched in March 2021 and in effect between May – September 2021, known as the *Tour Tiew Thai* scheme. Under this measure, the government will subsidise 40% of the payment, up to 5,000 baht per person. Participants must buy packages with a domestic tour agency for three days and two nights, with a minimum price of 12,500 baht, and must visit places from Sunday to Thursday. Participants must be aged 18 or more on the date of registration. The target is one million participants and total budget was 5 billion baht. Due to the upward trend of new daily infected cases (the

subsidize hotel accommodation at 40% of normal room rates, with a ceiling of 3,000 baht per night for up to five nights. Tourists will be responsible for the other 60%. Subsidies for other services are also available, including food, which are capped at 600-900 baht¹⁷ per room per night, air travel, refunding 40 per cent of the normal ticket price, up to a maximum of 3,000 baht per person -- up from 1,000 baht and 2,000 baht in the first few months of the scheme and the quota is limited to 2 million seats. Similar to the first package, it was transferred in e-money format. So far there are five Phases of this measure as follows;

Round 1 15 July -Oct 2020)

Round 2 December 2020-Apr 2021

Round 3 October 2021-Feb 2022

Round 4¹⁸ Feb- June 2022

Round 4 Extended July- October 2022

Its performance was decent. 11.6 billion baht of total budget was spent from 15 July 2020 to 28 February 2022, and then followed by additional 9 billion baht. Nonetheless, Phase 4 's performance was rather poor. Only 2.9 out of 9 billion baht was spent. It is expected to perform in the extended phase as the new daily infected case has gone down successively.

Two additional schemes were introduced in May 2021 to boost consumer spending. One is the more you spend, the more you get program, (*Ying Chai Ying Dai* in Thai) on 1 June 2021 and completed by December 2021.¹⁹ Cashback e-vouchers to domestic spenders were offered between July and September 2021. Participants receive cashback in their e-wallets at a rate of 10-15% of spending, with a maximum limit of 10,000 baht per person. The e-voucher can be used from August to December 2021.

third wave), it was postponed to October 2021-February 2022 . So far its project has been underperformed. Total budget was cut to 1 billion baht and another project duration was extended to December 2022.

¹⁷ 600 baht are for those traveling on the weekend (Friday to Sunday) and 900 baht for the weekdays.

¹⁸ There were minor changes in subsidies in Phase 4 onward. For example, the maximum of accommodation subsidies was cut to 10 instead of 15 nights, air transportation limited to 0.6 million (formerly 2 million).

¹⁹ Initially, the target was ambitiously set at 4 million participants. By 20 July 2021, its duration was extended to 30 November 2021, the ceiling was raised from 7,000 to 10,000 baht a day, and the targeting participants were only 1.4 million participants.

Another one is the Shop and Payback program (*Shop Dee Mee Khuen* in Thai), offering a tax deduction for individual taxpayers of up to 30,000 baht when purchasing goods or services. The government used the scheme to promote domestic shopping between 23 October and 31 December, 2021. It aimed to not only help deplete high inventory levels of goods, but also to help boost sales volume and increase liquidity for various businesses. In addition, the increased spending helped the retail sector to recover. By 29 December, 2021, there were 91,952 participants with 3.8 billion baht spending (MOF, 2021). This was far from the revised target of 1.4 million participants. The official report about the performance of *Shop Dee Mee Khuen* is not yet publicly available but it was expected to be underperformed similar to Ying Chai Ying Dai scheme.

3.2.4 Liquidity Support

Liquidity support, principally to help firms with credit lines and debt relief, complemented the *Above the line* measures. The first soft loan package was launched on 10 March 2021 through the state-owned Government Savings Bank (GSB) (Cabinet Resolution 2020, 10 March). In this measure, Bank of Thailand (BOT) offered 0.01 % interest rate to GSB and then GSB could further lend to other financial institutes at 2 per cent interest rate for 2 years. The credit limit was 20 million baht per account. GSB was urged to lend them within March 2020. BOT set a budget ceiling to subsidize GSB for any foregone interest income by 7.5 billion baht. As it was launched at the onset of COVID-19 crisis when the crisis duration was not expected to be long and the first lockdown had not been imposed yet, risk and uncertainty were arguably low. The soft loan was quickly and fully utilized in spite of no sharing of default risk.

There were subsequent liquidity supports summarized in Table 2. All of them were injected through existing financial institutions, including GSB and other state-owned banks like Bank of Agriculture and Agricultural Cooperative (BAAC). This would allow the new liquidity to be injected without delay. Another advantage of using the existing financial institutes is to utilize relevant information about their customers to minimize opportunistic behaviour – i.e. moral hazard–, thus helping to ensure that the special low-interest credit went to legitimately needing it. .

----- Insert Table 2 around here -----

Nonetheless, Thailand’s liquidity support was accompanied by a much more limited credit guarantee compared to similar programmes implemented in developed countries.²⁰ A clear example is the largest soft loan by Bank of Thailand (BOT), with a total worth of 0.5 trillion baht in April 2020, which addressed this credit guarantee shortcoming.²¹ A compensation offered to financial institutions for losses was limited to

²⁰ See (OECD, 2020) for the schemes applied in OECD countries.

²¹ Note the first soft loans to financial institutes through Government Saving Bank (GSB) in 10 March 2020 (Cabinet Resolution 2020, 10 March). In this measure, Bank of Thailand (BOT) will offer 0.01 % interest rate to GSB and then GSB can further lend to other financial institutes at 2 per cent interest rate for 2 years. The credit limit was 20 million baht. GSB was urged to lend them within March 2020. BOT set a ceiling of budget to subsidize GSB for any foregone interest income by 7.5 billion baht. As it was launched at the onset of COVID-19 crisis where COVID-19 remained new and the first lock-down had not been imposed yet, risk and uncertainty were arguably low. The soft loan was quickly and fully utilized inspite of no sharing default risk.

60-70 per cent (BOT, 2020).²² Such a guarantee was smaller than similar schemes adopted by countries, such as Singapore, Malaysia and OECD countries, which provided guarantees in the range of 80-90 per cent (Kohpaiboon, Jongwanich, Wongcharoen, & Sriudomkajorn, 2021; OECD, 2020). As a consequence, financial institutes tend to rely on their usual practice to lend this soft loan, e.g. seeking collaterals, and prioritizing their good clients – and the soft loan was hardly utilized.

There were minor changes in October 2020, such as allowing companies listed on MAI to apply for loans (BangkokPost, 2020), but the shortcoming were not included in the change. Additional 19.2 billion baht more loan was lent from October 2020 to March 2021 (BOT, 2021b). All in all, as of 12 April 2021, 138.2 out of 500 billion baht of the soft loan were lent to 77,787 borrowers.²³

Subsequently, a new soft loan scheme was introduced by April 2021 as the original soft loan target of 500 billion was far underutilized and the number of new daily infected cases continued to grow (the third wave). The remaining loan from the previous scheme worth 0.35 trillion baht was split into 2 components; one is the new soft loan scheme worth 250 billion baht and the other is debt restructuring program (also known as asset warehousing). In the former, problems related to credit guarantee in the previous scheme using Thai Credit Guarantee Corporation mechanism (TCG)²⁴, credit ceilings, firms without credit line with any financial institution as of 28 February 2021 to be eligible (BangkokPost, 2021a; BOT, 2021a). By 27 June 2022, there were 131,637 borrowers approved with 318,469 billion baht loan.²⁵ Given the new loan budget (i.e. 250 billion), the loan performance above is likely to cover both the previous and current soft loan

²² Note that the scheme was wisely designed to enhance the coverage of SMEs. In particular, BOT wisely used 500 million baht of outstanding loan as a cut point instead of the usual criterion used according to SME Promotion Act (2018) where the criterion identifying SMEs are based on either a number of employees (less than 50 and 50-100 for small and medium enterprises, respectively) or annual revenues (less than 100 million baht, and 100-150 million baht, respectively). This made BOT much easier to identify SMEs, larger cover firms and turn policy in action swiftly.

²³ Data retrieved from Bank of Thailand Official website available at <https://www.bot.or.th/covid19/Pages/progress/property/default.aspx>

²⁴ A regular practice of TCG in debt guarantee is if SME loans become non-performing loans (NPLs), TCG will provide compensation worth 80 per cent of the loss to lenders. The compensation increases to 90 per cent in the case of micro SMEs. TCG charges micro-SMEs and SMEs a guarantee fee of 1.75 per cent a year. However, under the soft loan scheme, the fee is cut to 1 per cent a year (Bangkokpost, 2021b).

²⁵ Data from Bank of Thailand available at <https://www.bot.or.th/covid19/Pages/progress/property/default.aspx> Retrieved by 5 July 2022.

scheme. Hence, the additional lending from April 2021 to June 2022 would be 180.3 billion baht. It increased from 102.6 billion baht by 13 September 2021.²⁶

The latter, *Asset warehousing* program is the standardized debt restructuring program for adversely affected borrowers whose businesses require prolonged recovery period while processing business models and collaterals. Under the program, businesses have the first right to repurchase their collaterals at the agreed transferred price plus an additional carry cost at 1 per cent per annum as well as incurred asset maintenance costs and other relevant fees. Businesses whose assets have been transferred may lease their assets from financial institutions to continue business operations; and the rents received by financial institutions will be deducted from the amounts to be repurchased by the businesses at a later date. Such a scheme would shield businesses from having to sell collaterals at firesale prices and provide the opportunity to continue their business through the recovery. The BOT supported the program by providing low- cost funding to financial institutions equivalent to the asset- transferred price agreed upon by financial institutions and borrowers. At the same time, relevant public agencies provided exemptions or reductions on taxes or relevant fees such as those levied on asset transfers during initial transfers and repurchases by original owners. The measures were designed to utilize limited resources of both public and private sectors to yield the greatest impact. Nonetheless, the program utilization was quite low. By 27 June 2022, only 356 firms applied to the program, claiming 49 billion baht in funds.²⁷

Despite being highly relevant, firms' size aspect was overlooked by policymakers. The target of the liquidity support was small and medium enterprises (SMEs) under the assumption that large firms are capable of surviving by themselves. In fact, this assumption is not always true in the context of the COVID-19 crisis where the economic impact was largely driven by sudden stops of economic activities. Tourism industries are the case in hand to illustrate the argument above. All are affected badly, regardless of their size. In addition, despite its shortcoming, the definition of SMEs is somehow arbitrary. Using these arbitrary criteria could leave out some firms at the criteria' border.

3.2.5 Others

²⁶ Data from Bank of Thailand available at <https://www.bot.or.th/covid19/Pages/progress/property/default.aspx> Retrieved by 13 September 2021.

²⁷ Data from Bank of Thailand available at <https://www.bot.or.th/covid19/Pages/progress/property/default.aspx> Retrieved by 13 September 2021

A few other indirect economic relief measures are worth mentioning. These include reduction of certain taxes and fees (e.g. property tax, housing transfer and mortgage fees), refund of households' water and electricity meter deposits in the first wave, reduction of water bills and electricity during the lockdown, reduction of social security contributions (to 4 and 1 per cent for employees and insured persons respectively) from March to May 2020, and the extended time for submitting social security forms and for remitting social security contributions for 4 months. All of them were implemented with time limits.

4. Implication for economic recovery

Even though Thailand's fiscal resources spent to combat with the COVID-19 crisis is in a comparable level to other developed countries, its effect on economy seems to be limited. This was reflected in Figure 7. Particularly, Thailand's Y-o-Y GDP growth dropped from 1.3 per cent in 2019Q4 to -12.2 per cent in 2020Q2. This was better than Malaysia (-17.2 per cent), the Philippines (-16.9 per cent) and Singapore (-13.3 per cent). However, the economic recovery took longer time than other ASEAN counterparts. By 2022Q2, Thailand's Y-o-Y GDP growth registered at 2.2 per cent, the worst performance as opposed to ASEAN neighbours.

The nature of fiscal resources spent to combat the COVID-19 crisis discussed in the previous section would partly explain the slow recovery. Two fundamentals of the Thai economy – the sizable informal sector and the importance of the tourism industry – explain the size of the GDP contraction as well as the slow recovery speed. The implementation of these relief and stimulus measures also impacted on the slow recovery, given the much larger size of fiscal resources spent (Figure 3). With regard to cash handout schemes, the amounts became smaller with each successive Covid-19 wave, although the effects from prolonged closure were become increasingly severe, especially for the informally employed and the tourism sector. In general, relief and stimulus arrived too slowly for the most vulnerable people.

Arguably, the second and third cash handout programs were associated with a half-half co-payment scheme. This would help to acquire necessities for living to a certain extent, but it hardly stimulated additional demand for goods and services. People must spend an equal amount to be eligible for such a scheme. For those losing their jobs and running out of cash, they might not be able to survive without borrowing money from someone else especially informal sources. Even though the co-payment schemes were

fully utilized, many shops eligible for half-half co-payment schemes are beneficial for middle-class people. They might not necessarily be hit hard by the COVID-19 crisis²⁸ so the programs seem to lower the prices of goods that are not always necessities. It seems to fulfil economic stimulus, not economic relief. Given the nature of the program, it is less likely to boost economic growth countrywide.

Interestingly, the amount of stimulus package that was initially set in July 2020 at around 400 billion baht, has been kept constant. Its effect to stimulate overall demand would have been limited to cushion the shrinking demand by the COVID-19 crisis as they have been slowly utilized. In June 2022, its utilization rate registered at 81 per cent.

Despite rapid and wise responses to the crisis, liquidity supports were undermined by the limited credit guarantee. Even though they were revised twice (October 2020 and April 2021), the scheme remained unattractive for financial institutes to inject the soft loan and assist firms in handling the liquidity constraints.

A scheme assisting firms to keep their workers (*Rao Rak scheme*) was later introduced in mid 2021, a year after Thailand hit by the COVID-19 crisis. The amount of assistance was small, with total budget of 37 billion baht or less than 2 per cent of total fiscal resources to combat the COVID-19 crisis.

The final remark is related to sector-specific policies. It is widely recognized that the effect of the COVID-19 crisis varies across sectors. For some sectors (foods and electrical appliances), the COVID-19 crisis provided business opportunities. Nonetheless, the launched policy packages fell to address this variation. This is especially true for the tourism business which was one of the major economic activities in the pre-crisis and highly export-oriented. While there were policies and special soft loan schemes for those in tourism businesses, it was treated the same as other businesses in terms of applying for the loan (e.g. additional collaterals required).

5. Conclusion

This paper examines how developing countries' governments launched measures to cushion the adverse economic effect induced by the COVID-19 crisis, using Thailand as

²⁸ Please see the samples of webs advertising half-half schemes

<https://food.trueid.net/detail/KWdZZydXqjZA>, <https://food.trueid.net/detail/1lBr77Ov8axl> or <https://shopee.co.th/-STARBUCKS->

[%E0%B8%82%E0%B8%A7%E0%B8%94%E0%B9%81%E0%B8%81%E0%B9%89%E0%B8%A7%E0%B9%83%E0%B8%AA-POLARBEAR-%E0%B8%88%E0%B8%B2%E0%B8%81-starbucks-%E0%B9%80%E0%B8%81%E0%B8%B2%E0%B8%AB%E0%B8%A5%E0%B8%B5-i.1129259.6011942231](#)

a case study. While the overall indicator suggests Thailand spent sizable fiscal resources to maintain economic contraction in the COVID-19 crisis, its net effect was somewhat limited measured in terms of GDP growth. Thailand was the slowest in terms of economic recovery among ASEAN members.

Our analysis suggests nearly three quarters of fiscal resources were spent to save people' livelihoods as well as to partially assist them in handling with adverse effects from social distancing measures imposed to control the virus spread. As COVID-19 crisis is new for developing countries where the social safety net system remained at the infancy stage, it is less likely for these measures to be delivered satisfactorily.

Various economic stimulus and liquidity supports were launched to cushion adverse effect on economic activities. Nonetheless, they were arguably too little and too late in delivery. In fact, most of these measures were designed under an implicit assumption that COVID-19 crisis was similar to precedent economic crises experienced in the past decade, even though the magnitude of border closure and mobility restriction was far greater this time. Also, the high uncertainties surrounding the recovery from the pandemic reduced the likelihood that standard economic stimulus could boost substantial demand. Thailand's administration appeared to expect the same level of responsiveness and recovery as experienced in preceding crises, such as SARS. The low uptake of liquidity support demonstrates the failure to adequately account for the collapse of confidence – particularly, the lack of support for large firms, which were under threat of bankruptcy due to the sudden stop of economic activities in the COVID-19 crisis that affected all firms, regardless of size. It is likely that such firms will need more credit support, to speed up economic recovery in the post COVID-19 era.

Thailand also faltered in not offering specific measures for sectors hit hardest by the COVID-19 crisis. Tourism is a clear example. While the government provided subsidies for domestic travelling, it unevenly benefited. As the subsidy was applicable to all hotels, fierce price cuts from international chains/bigger hotels could drive smaller ones out of business. All in all, this could explain the slow economic recovery of Thailand.

As the pandemic is approaching the end, the post-COVID-19 crisis policy priority is job creation. Given the weak domestic demand, export is the one realistic growth engine. Nonetheless, it could be constrained by technological leapfrogging reform agenda, taking the crisis as an opportunity for technological leapfrogging. In fact, technological upgrading takes time and incurs fixed costs. This seems not to be a viable

option at the onset of the post-COVID-19 era. It was even worsened by rising geopolitical tensions and anti-globalization move. In fact, for a small open economy like Thailand, a pro-globalization stance is needed. Collective action through regional cooperation available might be useful in pursuing the stance.

Table 1
Summary of cash handout schemes according to the virus spread from April 2020 to September 2021.

	Company workers (8.1 m workers)	Freelancers (3.5 m workers)	Those out of social security system (33 m workers)
First wave: (15 March-30 April 2020)			
Assistance	Max 9,300 baht a month	5,000 baht a month	5,000 baht a month
Duration	3 months	3 months	3 months
Conditions	Businesses closures declared by the government	Approved by the government	Approved by the government
Starting to receiving the assistance	Standard procedure	May 2020	May 2020
Second wave (15 December 2020-15 March 2021)			
Assistance	1,000 baht a week	3,500 baht a month	3,500 baht a month
Duration	4 weeks	2 months	2 months
Conditions	Companies remain operating		
Starting to receiving the assistance	March 2021	February 2021	February 2021
Third wave (April-December 2021)			

	Company workers (8.1 m workers)	Freelancers (3.5 m workers)	Those out of social security system (33 m workers)
Assistance	1,000 baht a week; 2,500 baht a month	5,000 baht	1000 baht a week
Duration	2 weeks; 2 months	1 month	2 weeks
Conditions	none	none	
PerStarting to receiving the assistance	May 2021;September 2021	September 2021	21 May 2021

Source: Authors' compiled from official documents discussed in the text.

Table 2

Measures of easing liquidity constraints offered in Thailand

Relief and recovery packages	Billion Baht (% of 2020 GDP)	Duration	Target	Loan Cap	Remark
Soft loans to financial institutes by Government Saving Bank (GSB)	150 (0.89%)	30 December 2020	Enterprises	less than 150 million baht for existing customers; 50 million baht for new customers	0.01 % interest rate charged by GSB to financial institutes; 2 % per cent interest rate for 2 years
Soft loans to promote employment by Social Security Office	30 (0.18%)	Expired	Enterprises	5, 10 and 15 million baht for small (less than 50 workers), medium (51-200) and large (greater than 200 workers)	
Bank of Thailand Decree to provide soft loans to SME via commercial banks and specialized financial institutions (SFIs)	500 (3.0%)	April 2020-21; 350 billion remaining were reallocated and the loan condition	Enterprises		138.2 out of 500 billion by 12 April 2021,

Relief and recovery packages	Billion Baht (% of 2020 GDP)	Duration	Target	Loan Cap	Remark
		was revised in April 2021			
Measures to postpone principal payments, reduce interest, and extend repayment period for debtors affected by COVID-19	n.a.	Expired by October 2020; extended to December 2021	Individuals	n.a.	Performance by 21 June 2021: 3.46 trillion baht credit lines under the measures
Loans for freelancers/informal workers by GSB and BAAC	40 (0.24%)	Started in March-December 2020, extended to June 2021	Individuals	10,000 baht per person (0.1% monthly interest rate); 6 months grace period, 2.5 years duration	50 percent credit guarantee by the government; 17,328.46 and 8,797 million baht lent by 18 January 2021 for GSB and BAAC; easing the restriction in 15 February 2021 (i.e. extending interest rate free from 6 to 12

Relief and recovery packages	Billion Baht (% of 2020 GDP)	Duration	Target	Loan Cap	Remark
					months; loan duration from 2.5 years to 3 years
Special credit facilities for employees with collateral by GSB and BAAC	20 (0.12%)	Started in March-December 2020	Individuals	10,000 baht per person(0.35 % monthly interest rate); maximum 3 years; 6 months interest free	Credit guarantee 30 per cent
Soft loans for low-income group to the Office of the Government Pawnshop by GSB	2 (0.01%)	2 Years starting from March 2020	Individuals	0.125 per cent monthly interest; maximum 2 years	GSB charged 0.1 % interest rate to Office of the government pawnshop; The government subsidized 2.4 per cent
Soft loans to support SMEs by SME development Bank	10 (0.06%)	Started in March-December 2020, extended to 30 June 2021 and	Enterprises	less than 3 million baht; 3 per cent interest rate for the	Collateral Required*; 3,250 million baht utilized by 14 June 2021

Relief and recovery packages	Billion Baht (% of 2020 GDP)	Duration	Target	Loan Cap	Remark
		then 30 December 2021		first 2 years, loan duration for 5 years	
Loans to support SMEs in tourism business by GSB	10 (0.06%)	15 February-30 June 2021, extended to 30 December 2021	SMEs in Tourism	10 and 50 million baht for individuals and enterprises, respectively; 0.1, 0.99 and 5.99 per cent annual interest rate for the first, second and last years, respectively	Fixed asset Required; by 11 January 2021 and 7,253 million baht utilized by 14 June 2021; relaxing collateral condition (low quality assets can be used e.g. land without commercial potentials)
Loans to support SMEs in tourism related business by GSB	5 (0.03%)	18 August 2020-30 December 2020, three times extension to 30 June 2021 (22 per cent utilization); 30 December	SMEs in Tourism	0.5 million baht a individuals; Remaining in businesses for at least 2 years; 3.99 per cent annual interest	Personal collateral; 1.1 billion baht utilized by 14 June 2021; easing conditions June 2021 (i.e. extending loan duration from 5 to 7 years; extending

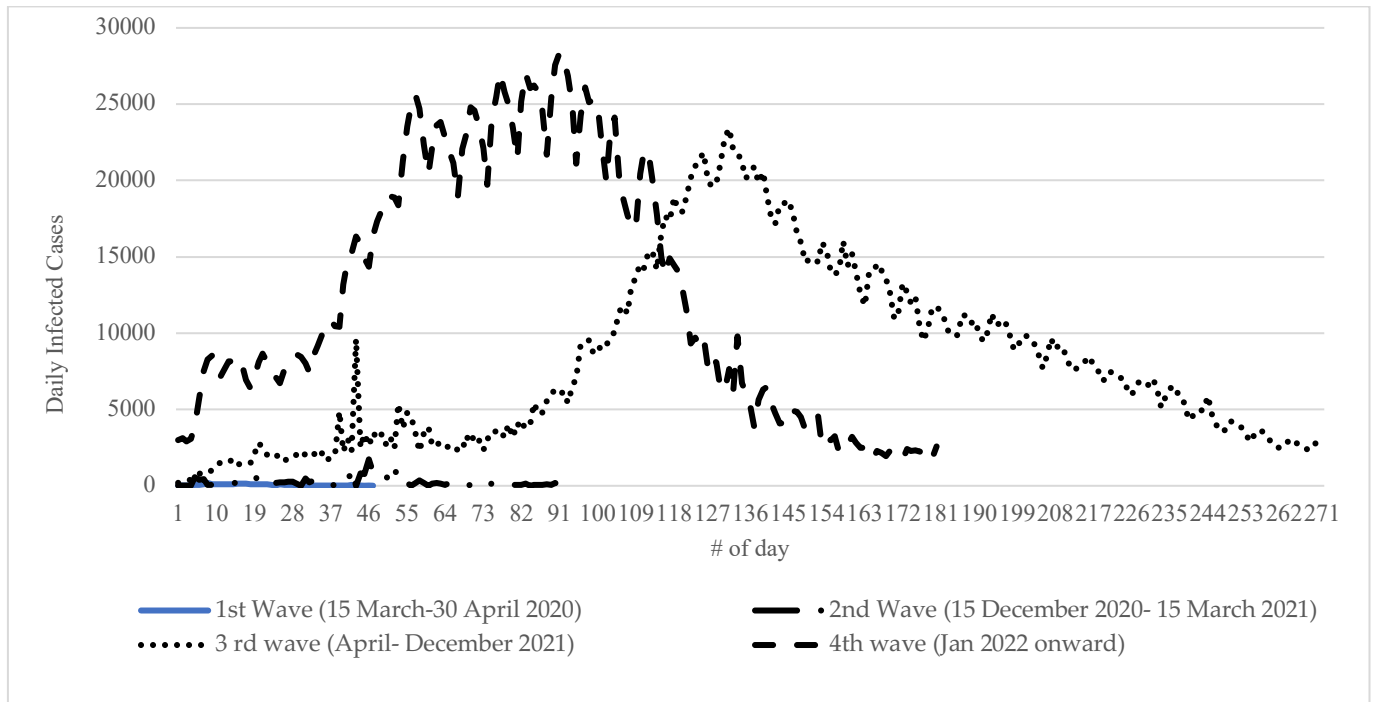
Relief and recovery packages	Billion Baht (% of 2020 GDP)	Duration	Target	Loan Cap	Remark
		2021 (34 per cent utilization by November 2021),to September 2022.			interest rate free period from 1 to 2 years ; 1.7 billion baht utilized by 29 November 2021
Fight with COVID-19 Loan through GSB and BAAC	20 (0.12%)	May-31 December 2021; extended to 30 September	SMEs	0.35 per cent monthly interest rate; 3 years of loan duration maximum;	30 per cent credit guarantee by the government; 8.2 billion baht approved by GSB in November 2021; 0.3 billion baht approved by BAAC

Source: Authors' compiled from official documents.

Table 3
Duo-purpose measures

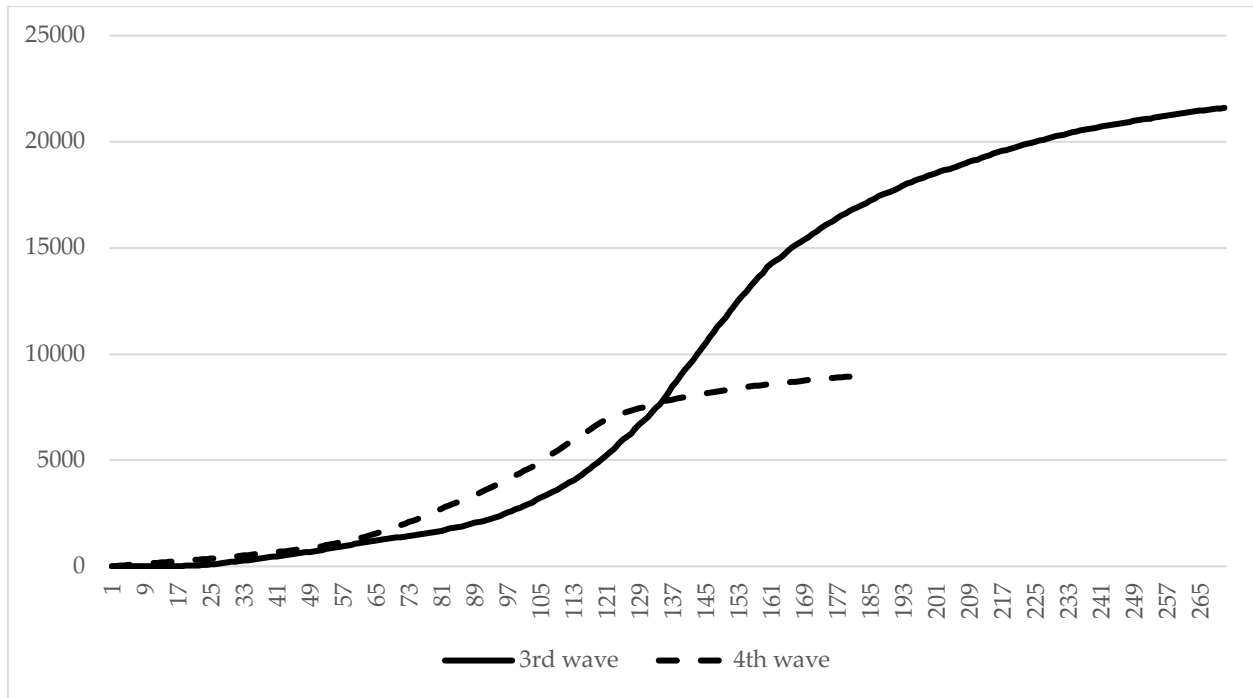
Schemes	Duration	Total value	Purposes
Half—Half	Phase 1: 1 Oct-31 Dec 2020; Phase 2: Jan- March 2021; Phase 3: Jun -Dec 2021; Phase 4: Feb-Apr 2022;	Phase1: 3,500 baht a person (150 baht a day); Phase 2: 3,500 baht a person (150 baht a day); Phase 3: 3,000 baht a person (150 baht a day) during Jun- Oct 2021, and 1,500 baht a person during Nov-Dec 2021; Phase 4: 1,200 baht a person (100 baht a day)	Foods and necessities
Tourism stimulus	Phase 1: 15 July – Oct 2020 (extended to Apr 2021) Phase 2: May -Aug 2021 Phase 3: 15 October- Jan 2022 Phase 4: Feb- June 2022 Phase 4 extended : 1 July - 30 October 2022	<ul style="list-style-type: none"> • 600-900 e-vouchers for foods and other services • 3,000 baht per night up to 5 nights • 40% subsidy on ticket prices 	Domestic traveling
Shopping	Phase 1: 23 October-31 December 2020 Phase 2: 4 June 2021- 28 February 2022	<ul style="list-style-type: none"> • Tax deduction with maximum of 30,000 baht (Phase1) • 10-15 % cash back in form of e-vouchers with 60,000 baht maximum 	Spending

Figure 1
 New daily infected cases from 15 March 2020 to 30 June 2022



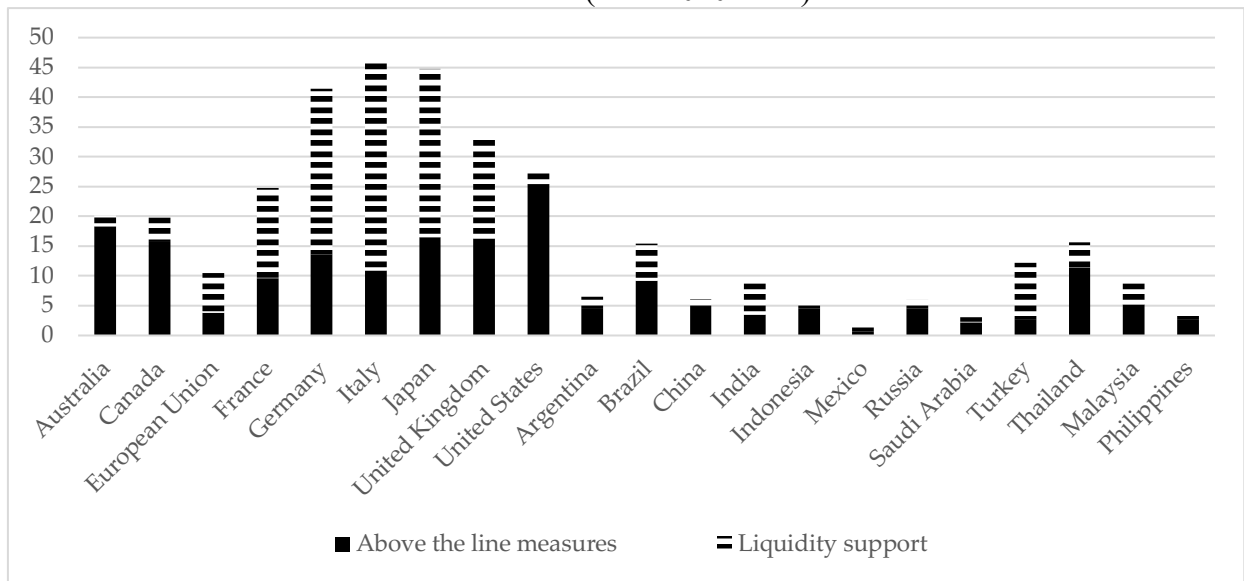
Source: Authors' compilation from World Health Organization (WHO) website available at <https://covid19.who.int/data>

Figure 2
Cummulative deaths caused by the COVID-19 from April 2021- June 2022



Source: Authors' compilation from World Health Organization (WHO) website available at <https://covid19.who.int/data>

Figure 3
Fiscal Measures in Response to the COVID-19 Pandemic since January 2020 of Selected Countries (% of 2020 GDP)



Note: the average figures of above the line measures launched by advanced and emerging market economies were 12.9 and 4.3 per cent, respectively. Those of liquidity measures were 14.8 and 3.3 per cent by advanced and emerging market economies, respectively.

Source: Authors' compiled from IMF's Database of Fiscal Policy Responses to COVID-19, available at <https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>

Figure 4
 Informal employment, given the income per capita level

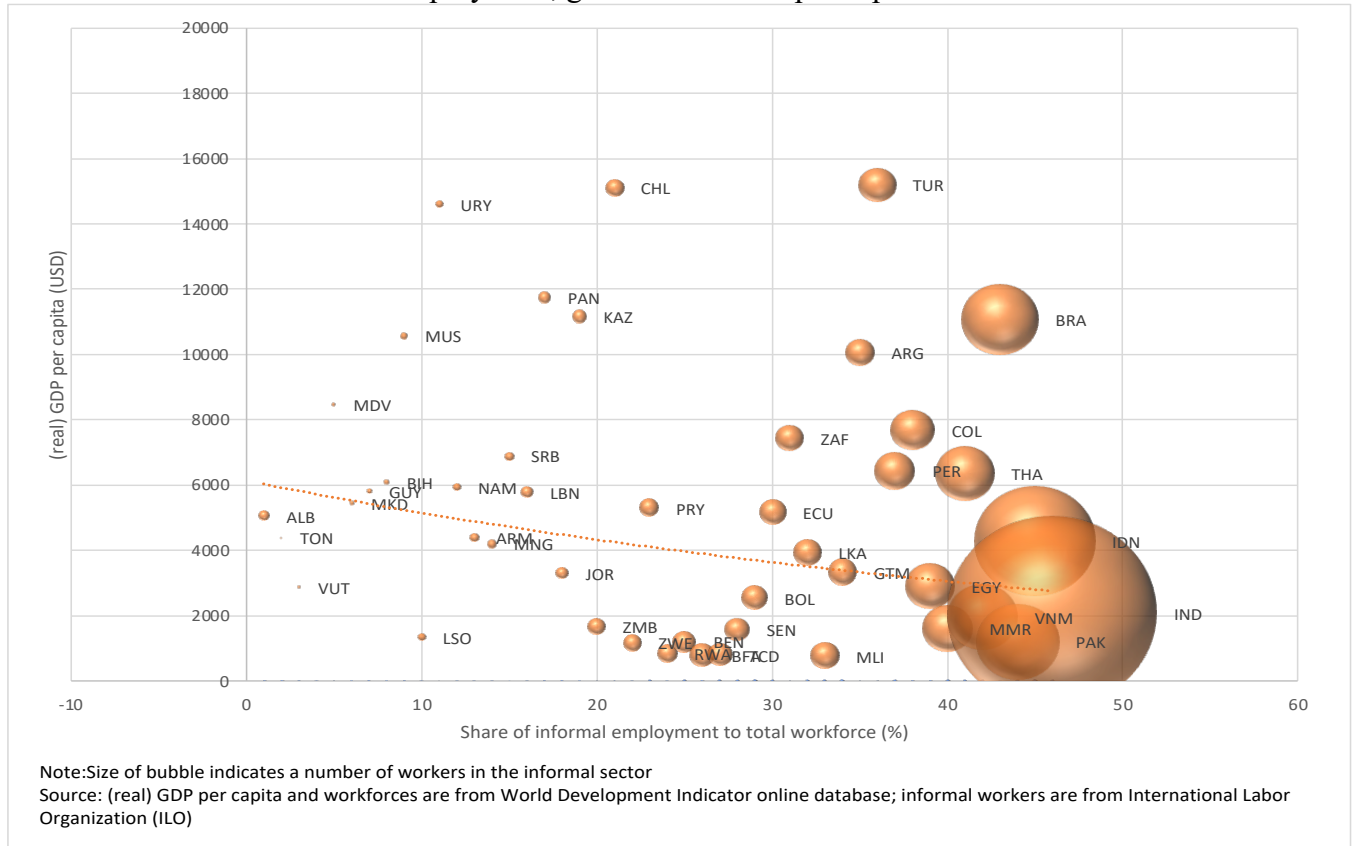
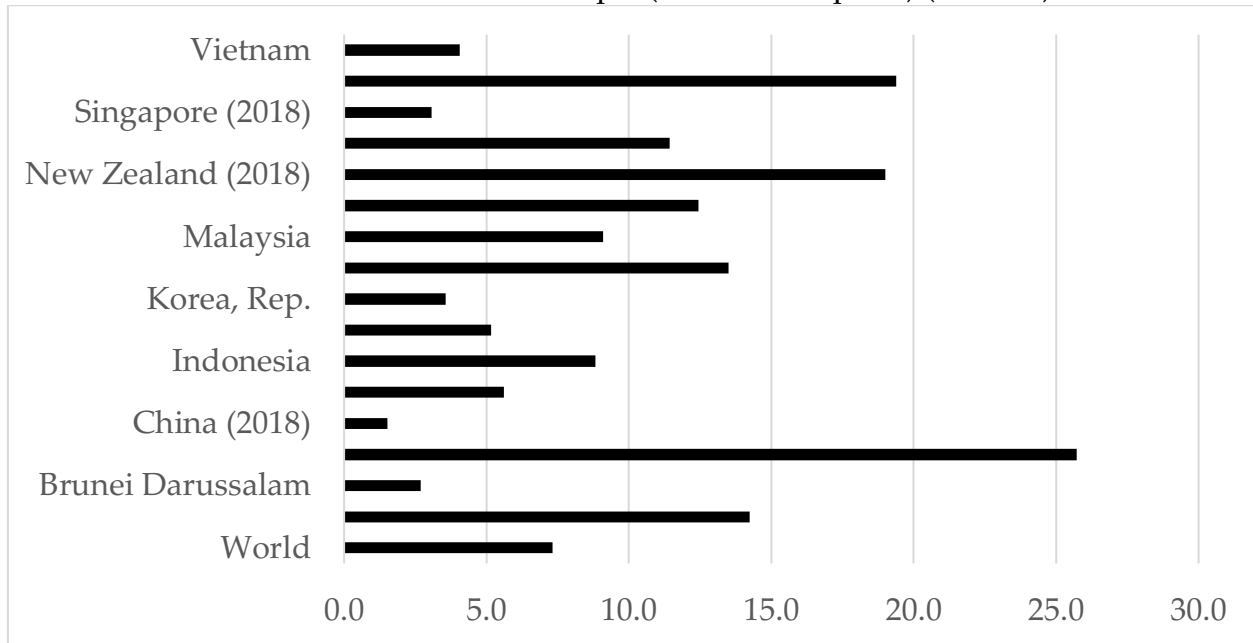


Figure 5
International tourism, receipts (% of total exports) (2018-19)

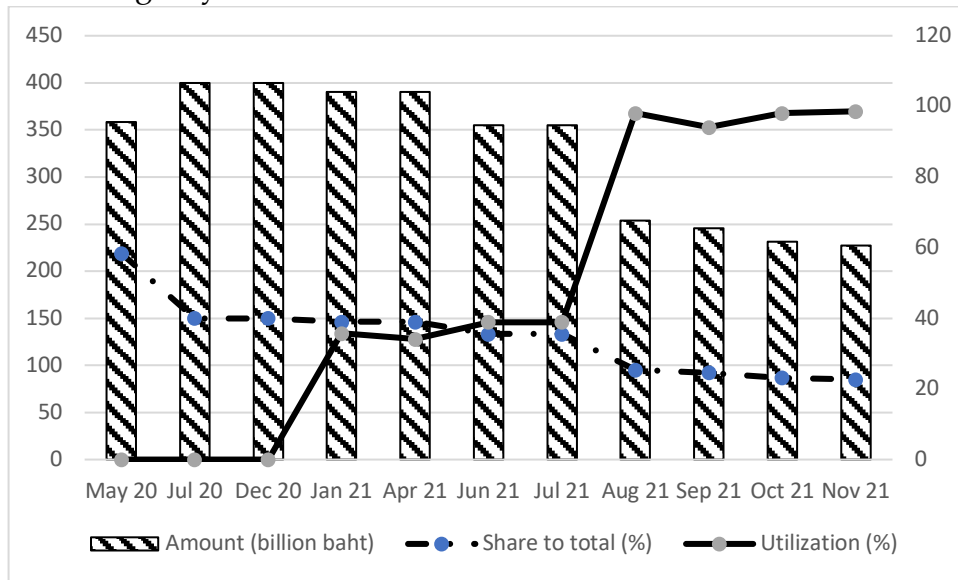


Source: Authors' compiled from World Development Indicator online database, World Bank

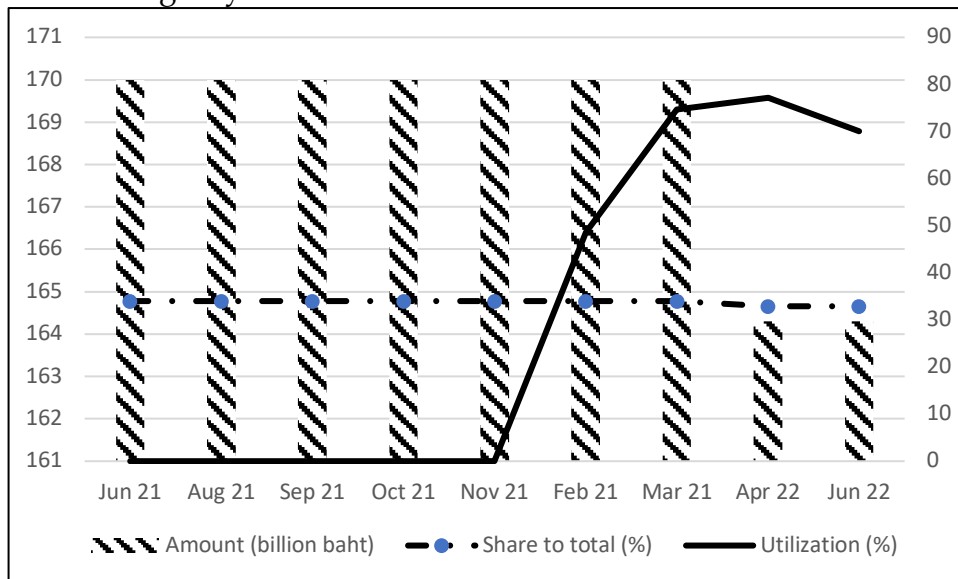
Figure 6

Economic stimulus to combat the COVID-19 crisis from 2020 to June 2022

6.1: 1 Trillion Emergency decree issued in 2020

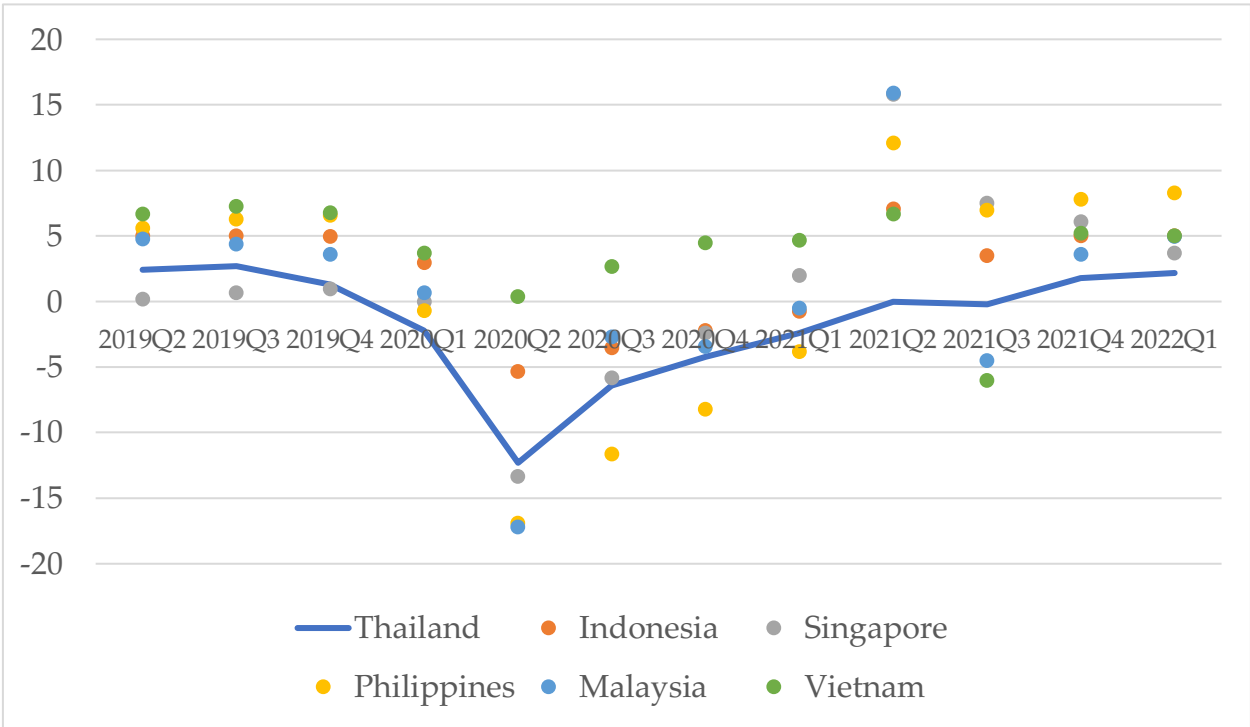


6.2: 0.5 Trillion Emergency decree issued in 2021.



Source: Authors 'compiled from official documents

Figure 7
 YoY GDP Growth of selected Asian countries from 2019Q2 to 2022Q2



Source: Authors' compiled data from trading economics website available at <https://tradingeconomics.com>

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