Economic relief and stimulus:

Evidence from Thailand

Archanun Kohpaiboon*, Juthathip Jongwanich* and Mayoon Boonyarat**

archanun@econ.tu.ac.th

Paper presented at the ISEAS-Yusof Ishak Institute Conference, "Covid-19 in Southeast Asia, 2020-2022: Restriction, Relief, Recovery", 28-29 July 2022.

DRAFT PAPER; DO NOT CITE WITHOUT THE AUTHOR'S PERMISSION.

1. Issues

The COVID-19 pandemic is first and foremost a human tragedy. As many countries put public health at the policy top priority and many measures (e.g. lockdowns, social distancing, workplace closure measures) were launched to reduce the virus spread, it results unprecedented economic impacts on individuals and businesses including disturbing people's access to essential services, food, and livelihoods, slowing down economic activities, and the probability of default by fundamentally viable firms, 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 by Egypt to 46 per cent by 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 percent for advanced economies, –10.3 percent for emerging market and middle-income economies, and –5.7 percent for low-income developing countries. Global public debt is estimated to soar to 98 percent of GDP at the end of 2020, compared with 84 percent in 2019(IMF, 2021; WDR, 2022). Even though the decisive economy policy response together massive amount of fiscal resources

^{*} International Competitiveness Research Center (ICRC), Faculty of Economics, Thammasat University

^{**} Senior Professional Tax Policy Economist, Office of Fiscal Economics, Ministry of Finances.

spent, 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, tax breaks for firms and individuals. They have been introduced differently across countries in terms of their relative importance, 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 effort. As a result, the magnitude of fiscal resources spent to cushion the negative effect of the COVID-19 crisis might not be a reliable indicator of the effect 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 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 Thai government respond to the crisis with emphasis on economic relief and stimulus launched.

The paper's structure is as follows; it begins with the stylist 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 key features of these measures.

2. Overview of COVID-19 Situation in Thailand

Thailand was the first country affected by the COVID-19, outside of China as a result of the popular destination for Chinese tourists. The first confirmed COVID-19 case in Thailand was reported on January 13, 2020. By the end of June 2022, there were around 2,000 newly infected cases a day and the cumulative 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). 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 in 14 April and reached the wave's peaked at 23,418 cases by 13 August 2021. The new daily cases were above 5,000 cases until December 2021 so that there were more than 20,000 cumulative deaths, accounted for two third of total cumulative deaths (Figure 2). This has been the highest cumulative deaths. 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 former have been dominated by the omicron variant whose symptoms are less severe than the delta variant which was the majority in the latter.

---- 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 to operate amid the threat of virus spread.

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

Even though there was no infected case from April -November 2020, re-opening 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 of border reopening was on 8 December 2020. People from 56 countries could apply for a normal 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 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 word, the border was still *de facto* close.

Until July 2021, pragmatic reopening scheme began for selective tourist destinations. It began with Phuket province known as *Phuket sandbox scheme*. In particular, vaccinated international travelers² are allowed to visit Phuket without quarantine period by 1 July. International arrivals had to have testing negative for the virus upon arrival. If they go on to other destinations in Thailand, they must spend at least 14 nights in Phuket before leaving. The travelers will also be 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 surge on COVID-19 infected cases in Phuket.

After 15 days the more or less similar scheme was launched in other four tourist destinations. They include 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 2021³ Note that the schemes applied

.

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.

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, Isarael, 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 COVD-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

elsewhere were slightly different in terms of quarantine period required but all ended by 1 October 2021.

Even though partial reopening in several tourist destination provinces did not fulfill the target in terms of international arrivals at 100,000 visitors⁴, they revitalized tourism sector in Thailand (BangkokPost, 2022a). Such experiments also made the strong case for government to continue re-opening the border but gradually. Eventually, by May 1, 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 national-wide lockdowns as social distancing measure so it was used as the last resource to combat the virus spread. The first nation-wide lockdown was in April 2020 to combat the first wave. The full-scale national lockdown together with curfews (22.00-04.00) and stay-home policy were introduced (Rajatanavin et al., 2021; OECD, 2020: Table1). As illustrated by Google mobility data there was a significant reduction of 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 a number of daily infected cases dropped noticeably, lockdown measures were eased with a close monitor.

Experience from the first wave management and the economic hardship induced by the measure made the government impose lock down only on Samut Sakhon province, the epicenter of the latest Covid-19 outbreak (i.e. partial lockdown) to combat the second wave. Such partial lockdown worked well in containing local contagion as the circle of virus spread in the second wave was rather short and highly concentrated around the epicenter (Samut Sakhon).

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

⁴ 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).

were categorized into three zones according to whether new daily infected cases continue to grow, i.e.(1) maximum and strict controlled areas (dark-red zone provinces) (29 provinces); (2) strict 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 are also asked to only to go out, 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 is different from red zone provinces where Restaurants and eateries are 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 were abolished. 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 supplement with contact tracing scheme, in which identifying people who were in contact with COVID-19 patients for targeted testing and quarantine as well as vaccination. Contact tracing scheme was undertaken effectively due to a strong public health system that has been well established long before COVID-19 crisis (WHO, 2020: 19). The scheme was carried 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 centers. In Bangkok, the SSRT are 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 centers 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 the government in all cases regardless of nationality. This allowed tracing and testing measures highly effective to combat with the contagion especially in rural areas (Rajatanavin et al., 2021). As revealed in WHO (2020) report, Thailand does not have a single national infection prevention and control programs because of the limited fiscal resources. Most healthcare

facilities conduct activities using their own limited resources (WHO, 2020: 7). This could constraint capability to combat the large wave of infected cases like the third wave.

The government also enhanced laboratory capacity by scaling up nationwide of 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, installing negative pressure intensive care units (ICUs) and stockpiling personal protective equipment and medicines. This was to enhance health care capacity to combat with any emerging infectious diseases that might occur in the future.

3. Economic Relief and Stimulus

3.1 Overall

Like other developed countries, Thai government swiftly launched measures to cushion the effect. The first measure was found in March 2020. Figure 3 illustrates the broad picture about the size of fiscal resources spend to combat the adverse economic effect induced by the COVID-19 crisis. There are two main broad categories of fiscal policy responses, i.e. *Above the line* measures and *liquidity support*. The former refers to increases in government expenditures and reductions in tax revenues—directly impacting economic activity via fiscal multipliers where equity injections, loans, asset purchase or debt assumptions, contingent liabilities (guarantees, and quasi-fiscal operations) are in the latter (Figure 3).

--- Insert Figure 3 around here----

Total value of the policy measures Thai government has launched so far were 2.5 trillion baht or 14.2 per cent of 2019 GDP. These measures were announced between January 2020 and September 2021 but some of these measures have not completed by June 2022.⁵ *Above the line* measures was 1.8 trillion baht equivalent to 10.6 per cent of 2019 GDP whereas liquidity support was 0.67 trillion baht or 3.9 per cent of 2019 GDP. ⁶ As a consequence, Thailand borrowed 1.5 trillion baht to finance these measures, 1 trillion

⁵ 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 likes.

⁶ 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.

baht in 2020 and 0.5 trillion baht in May 2021. Such sizes of fiscal policy responses were far higher 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 per centage 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 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 interacting so that these workers are very likely to be adversely affected by any measures to prevent the virus spread. More importantly, they have yet been protected by social safety net scheme available so far.

--- Insert Figure 4 around here----

Secondly as many are aware of the relative importance of tourism sector to the Thai economy. It accounted for nearly 20 per cent of total export in the pre-COVID crisis (i.e. 2018-19) (Figure 5). Clearly, the tourism is the hardest hit sector by COVID-19 crisis. Social distancing and border closure imposed in many countries to suppress the infection caused sudden stop 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, *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 reliefs

The main measure of economic reliefs is cash handouts. The scheme was firstly introduced after imposing national lockdowns 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 an informal sector including temporary workers, contract workers and self-employed people. 5,000 baht a month is equivalent to 75 per cent of minimum wages.⁷ It aimed to discourage these workers from leaving the capital and possibly spreading the virus upcountry. The total budget was initially set by 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 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). Similar scheme was offer to 10 million farmers during May to July 2020. The total budget for cash-handouts was 390 billion baht, accounting for 22 per cent of total *Above the line* measures.

Also, some 6.78 million infants, seniors and disabled people were 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 Social Security System. The workers furloughed because of COVID-19 are eligible to receive 62 percent 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 as a result of COVID-19, which has reportedly led to some delays in the receipt of benefits. As of 29 May 2022, 1.4 million salaried employees, representing approximately 8 percent of the 15.9 million enrolled in Thailand's Social Security Fund, have made claims on their unemployment insurance. 1,287,960 had been approved. Note that this part of funding is from Social Security Fund, not by the government.

⁷ 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.

⁸ 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

The next round of the cash handout was in effect between January and June 2021. Problems and shortcomings experiencing in the first round were redressed in this round. 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 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).

It was supplemented by two programs. The first is to assist firms keeping their operation and maintaining the jobs was launched. It was known in Thai *Rao Rak Kan* (meaning We love each other). Company employees under Section 33 of Social Security System were the program's target, covering 9 million employees 4,000 baht was firstly offered in total, receiving 1,000 baht a week from 22 March to 12 April 2021.

The other is 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.⁹

During the onset of the third wave, the government extended the second round of cash handout. Under *Rao Chana* (We Win), 1,000 baht a week will be transferred by May 21 and 28. Another 2,000 baht was offered for those under Section 33 (Rao Rak Kan). By the end of June, the total budget on 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 but highly concentrated in certain provinces, the next round of cash handout was launched in 6 July

10

⁹ 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).

2021. This new round was applicable for certain areas and economic activities. Out of 29 provinces in the dark read zone, only those in 10 provinces were eligible.¹⁰

Under the third round, employees under Section 33 will receive an additional 2,500 baht a month for two months. Those under Sections 39 and 40 of SSS will be entitled to 5,000 baht each. In addition, companies which have employees not covered by social security scheme must register within July 2021 and receive the 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 of only 40.5 per cent of total budget was utilized. The modification included the extension of registration deadline, covering all 29 provinces in the dark red zones (Cabinet Resolution, 2021, 9 August).

Since then, the government no longer launched the 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 -----

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 therapy in which public spending is made to stimulate domestic demand

Initially, the stimulus package was set at 358 billion baht, accounting for 60 per cent of 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 of the stimulus package dropped to 40 per cent. This was due to the fact that the stimulus package was implemented slowly whereas the other two components were in urgent to spend to combat the virus spread. The initial budget for

⁻

¹⁰ 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.

the stimulus package was relocated to economic reliefs 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.¹¹ 170 billion was set for the stimulus package so that the total budget of the stimulus package virtually returned to its original target at 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 -----

The samples of projects include promoting coffee farming project (0.9 million baht), promoting SMEs in Nonthaburi province (1 million baht), strengthen production capacity of mulberry (3 million baht). Despite high local content, they were fragile so it is hard to stimulate aggregate demand countrywide and have been slowly implemented. Hence, the effect to cushion the negative economic shock induced by COVID-19 seems to be limited.

3.2.3 Duo-purpose Measures

The last set of policy measures are those pursuing with 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 subsidy. They include (1) co-payment measure; (2) tourism stimulus measures; and (3) boosting domestic consumption measures.

12

 $^{^{11}}$ 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.

The first package was for buying necessities. It was known as 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 the 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 102 billion baht in spending, 49.8 billion baht from the government side. Under these two phases, 1.6 million people were involved. Phase 3 involved 1.5 million people and resulted 223.9 billion baht three rounds together) spending, 48 per cent from the government subsidy. Note that there was a minor change in subsidy during the last two months (November and December 2021), in which subsidy ceiling was cut to 1,500 baht a person. Given the amount of money spending by people in the first three phases, the government re-launched. The duration period was between February-April 2022. The subsidy was granted in terms of e-money will be 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)¹². Under the program, the government will subsidize hotel accommodation at 40% of normal room rates, with the 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, are capped at 600-900 baht¹³ 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

¹² 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 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.

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

package, it was transferred in e-money format. So far there are five Phases of this measure as follows;

Round 1 15 Jul -Oct 2020)

Round 2 Dec 2020-Apr 2021

Round 3 Oct 2021-Feb 2022

Round 4¹⁴ Feb- June 2022

Round 4 Extended July- October 2022

Its performance was decent. 11.6 billion baht 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. ¹⁵ 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.

Another one is 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 scheme to promote domestic shopping between Oct 23 and Dec 31, 2021. It will not only help deplete high inventory levels of goods, but will also help boost sales volume and increase liquidity for various businesses. In addition, the increased spending will help create a better economic atmosphere and restore economic confidence. Overall, the retail sector will benefit the most from this program.

By 29 December, 2021, there were 91,952 participant with 3.8 billion baht spending(MOF, 2021). This was far from the revised target at 1.4 million participants. The official report about the performance of *Shop Dee Mee Khuen* yet publicly available but it was expected to be underperformed similar to Ying Chai Ying Dai scheme.

¹⁴ 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).

¹⁵ 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.

3.2.4 Liquidity Supports

Liquidity support was complemented to *Above the line* measures mentioned above. The first soft loan package was immediately launched in 10 March 2021 through Government Saving Bank (GSB) (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 per account. 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 the crisis duration was not expected to be long. 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.

There were subsequent liquidity supports summarized in Table 2. All of them were injected through existing financial institutions including state-owned banks like Government Saving Bank (GSB), 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 behavior (i.e. moral hazard) that might have on low interest rate borrowing granted.

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

Nonetheless, unlike those launched in developed countries,¹⁶ the liquidity support is not associated with the limited credit guarantee. The clear example is the largest soft loan by Bank of Thailand (BOT) with total worth of 0.5 trillion baht in April 2020 addressed this credit guarantee shortcoming¹⁷, compensation offered to financial

¹⁶ See (OECD, 2020) for the schemes applied in OECD countries.

¹⁷ 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.

institutions for losses was limited to 60-70 per cent (BOT, 2020).¹⁸ Such a guarantee was smaller than similar schemes adopted by other ASEAN economies including Singapore and Malaysia and OECD countries (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, prioritizing their good clients. Hence, the soft loan was hardly utilized.

There were minor change in October 2020 such as allowing companies listed on MAI to apply for the loans (BangkokPost, 2020), the shortcoming remained in place 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 soft loan were lent to 77,787 borrowers.¹⁹

Subsequently, the newly 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 (known as Asset warehousing). In the former, problems related to credit guarantee in the previous scheme using Thai Credit Guarantee Corporation mechanism (TCG) ²⁰, 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.²¹ Given the new loan budget (i.e. 250 billion), the loan performance above is likely to cover both the previous and current soft loan

¹⁸ 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.

¹⁹ Data retrieved from Bank of Thailand Official website available at https://www.bot.or.th/covid19/Pages/progress/property/default.aspx

²⁰ 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).

²¹ 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 2021.²²

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 rights to repurchase their collaterals at the agreed transferred price plus an additional carry cost at 1 percent 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 scheme would shield businesses from having to sell collaterals at firesale price and provide opportunity to continue their business through the recovery. The BOT will support 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 will provide 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 are designed to utilize limited resources of both public and private sectors to yield greatest impact. Nonetheless, the program utilization was quite low. By by 27 June 2022 there were 356 firms applied the program with 49 billion baht worth. It increased from 100 firms with total value of 13 billion baht by 13 September 2021.²³

Despite 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 to survive by themselves. In fact, this assumption is not always true in the context of COVID-19 crisis where 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 their size. In addition, despite its shortcoming, the definition of SMEs is somehow arbitrary. Using this arbitrary criteria could leave out some firms at the criteria' border.

⁻

²² Data from Bank of Thailand available at https://www.bot.or.th/covid19/Pages/progress/property/default.aspx Retrieved by 13 September 2021.

²³ Data from Bank of Thailand available at https://www.bot.or.th/covid19/Pages/progress/property/default.aspx Retrieved by 13 September 2021

3.2.5 *Others*

Above all, there were other economic relief measures. They include reduction of certain taxes and fees (e.g. property tax, housing transfer and mortgage fees), refunding of their water and electricity meter deposits in the first wave, reduction of water bills and electricity during the lockdown, lowering social security contributions (to 4 and 1 per cent for employees and insured persons respectively) from March to May 2020, extending time for submitting social security forms and for remitting social security contributions for 4 months. All of them were implemented with time bound.

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 her developed countries counterparts, 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 Malaysia (-17.2 per cent) the Philippines (-16.9 per cent) and Singapore (-13.3 per cent). By contrast, 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 neighbors.

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 Thai economy, the sizable informal sector and the importance of tourism sector, would explain the size of GDP contraction as well as the slow recovery speed. How these relief and stimulus measures has been implemented would be another factor attributing to the slow recovery given the much larger size of fiscal resources spent. While cash handout schemes are concerned, the amount of cash handed out became smaller. They ran in the opposite direction with the extent to which the COVID-19 crisis hit the economy. They were also slow in delivering to vulnerable people.

Arguably, the second and third cash handout programs were associated with half-half co-payment scheme. This would help to acquire necessities for living to a certain extent. It hardly stimulates additional demand for goods and services. People must spend equal amount to be eligible for such a scheme. For those losing their jobs and running out 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 hit hard by the COVID-19 crisis²⁴ so that the programs seem to lower prices of goods that are not always necessities. It seems to fulfill 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 (October2020 and April 2021), it rather fell to make the scheme more attractive for financial institutes to inject the soft loan and assist firms to handle the liquidity constraints.

A scheme assisting firms to keep their workers (*Rao Rak scheme*) were lately introduced around 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 put 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 opportunity. Nonetheless, so far policy packages launched fell to address it. This is especially true for 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 as the same as other businesses in terms of applying the loan (e.g. additional collaterals required).

5. Conclusions and Policy lessons

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

 $\underline{https://food.trueid.net/detail/KWdZZydXqjZA,\ \underline{https://food.trueid.net/detail/JlBr77Ov8axl}\ or\ \underline{https://shopee.co.th/-STARBUCKS-}$

²⁴ Please see the samples of webs advertising half-half schemes

[%]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 rather limited measured in terms of GDP growth. Thailand was the slowest in term of economic recovery among ASEAN members.

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

To cushion adverse effect on economic activities, economic stimulus and liquidity support were launched. Nonetheless, they are too little and too late in delivering. 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. In fact, they were far different. Amid unusual uncertainty like COVID-19, it is less likely for standard economic stimulus to boost substantial demand as expecting in the precedent crises. This argument is applicable for liquidity supports. Viable firms could go bankrupt due to sudden stop of economic activities in the COVID-19 crisis, regardless firms' size. Keeping them to go through the crisis by providing credit is crucial for the speed of economic recovery in the post COVID-19 era.

There have not been any specific measures to sectors hit hardest by the COVID-19 crisis. Tourism is the clear example. While subsidy for domestic traveling was offered, it uneven benefited. As the subsidy was applicable to all hotels, fierce price cuts from international chain/bigger hotels could drive smaller ones out of the business. All in all, this would explain the slow economic recovery of Thailand.

As many believe that 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 opportunity for technological leapfrogging. In fact, technological upgrading takes time and incurs fixed costs. This seems not to be a viable option in the onset of post-COVID-19 era. It was even worsen by the divided geopolitical tensions and anti-globalization. In fact, for a small open economy like Thailand, pro-globalization stance is needed. Collective action through regional cooperation available might be useful to pursue the stance.

 $\label{thm:condition} Table~1$ 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 Dec 2	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' complied from official documents discussed in the text.

Table 2

Measures of easing liquidity constraints offered in Thailand

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

Relief and recovery	Billion Baht	Duration	Target	Loan Cap	Remark
packages	(% of 2020				
	GDP)				
		was revised in			
		April 2021			
Measures to postpone	n.a.	Expired by	Individuals	n.a.	Performance by 21
principal payments,		October 2020;			June 2021: 3.46
reduce interest, and extend		extended to			trillion baht credit
repayment period for		December 2021			lines under the
debtors affected by					lines under the
COVID-19					measures
Loans for	40 (0.24%)	Started in March-	Individuals	10,000 baht per	50 percent credit
freelancers/informal		December 2020,		person (0.1%	guarantee by the
workers by GSB and		extended to June		monthly interest	government; 17,328.46
BAAC		2021		rate); 6 months grace	and 8,797 million baht
				period, 2.5 years	lent by 18 January 2021
				duration	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	20 (0.12%)	Started in March-	Individuals	10,000 baht per	Credit guarantee 30 per
employees with collateral		December 2020		person(0.35 %	cent
by GSB and BAAC				monthly interest	
				rate); maximum 3	
				years; 6 months	
				interest free	
Soft loans for low-income	2 (0.01%)	2 Years starting	Individuals	0.125 per cent	GSB charged 0.1 %
group to the Office of the		from March 2020		monthly interest;	interest rate to Officie
Government Pawnshop by				maximum 2 years	of the government
GSB					pawnshop; The
					government subsidized
					2.4 per cent
Soft loans to support	10 (0.06%)	Started in March-	Enterprises	less than 3 million	Collateral Required*;
SMEs by SME		December 2020,		baht; 3 per cent	3,250 million baht
development Bank		extended to 30		interest rate for the	utilized by 14 June
		June 2021 and			2021

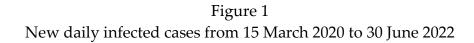
Relief and recovery	Billion Baht	Duration	Target	Loan Cap	Remark
packages	(% of 2020				
	GDP)				
		then 30 December		first 2 years, loan	
		2021		duration for 5 years	
Loans to support SMEs in	10 (0.06%)	15 February-30	SMEs in	10 and 50 million	Fixed asset Required;
tourism business by GSB		June 2021,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

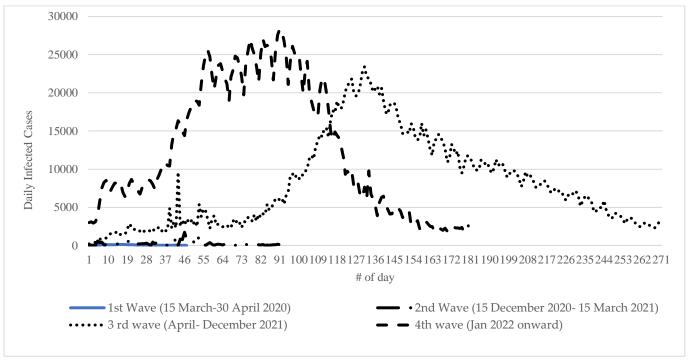
Relief and recovery	Billion Baht	Duration	Target	Loan Cap	Remark
packages	(% of 2020				
	GDP)				
		2021 (34 per cent			interest rate free period
		utilization by			from 1 to 2 years;
		November			1.7 billion baht utilized
		2021),to			by 29 November 2021
		September 2022.			
Fight with COVID-19	20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

Source: Authors' compiled from official documents.

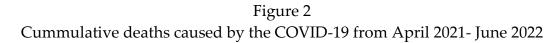
Table 3
Duo-purpose measures

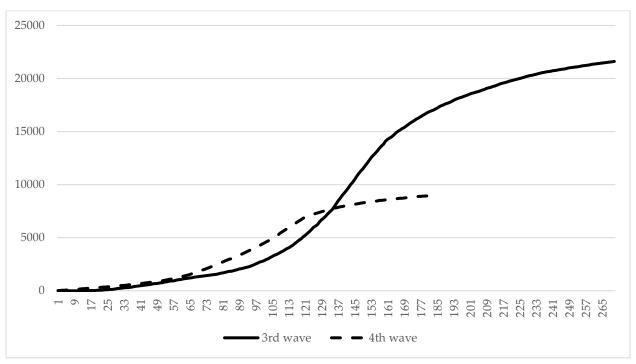
Schemes	Duration	Total value	Purposes
Half—Half	Phase 1: 1 Oct-31 Dec 2020; Phase 2: Jan- March 2021; Phase 3: Jun -Dec 2021; Phase 4: Feb-Apr 2022;	Phase1: 3,500 baht a person (150 baht a day); Phase 2: 3,500 baht a person (150 baht a day); Phase 3: 3,000 baht a person (150 baht a day) during Jun- Oct 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 Jul – Oct 2020 (extended to Apr 2021) Phase 2: May -Aug 2021 Phase 3: 15 Oct- Jan 2022 Phase 4: Feb- June 2022 Phase 4 extended : 1 July - 30 Oct 2022	 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	 Tax deduction with maximum of 30,000 baht (Phase1) 10-15 % cash back in form of e-vouchers with 60,000 baht maximum 	Spending





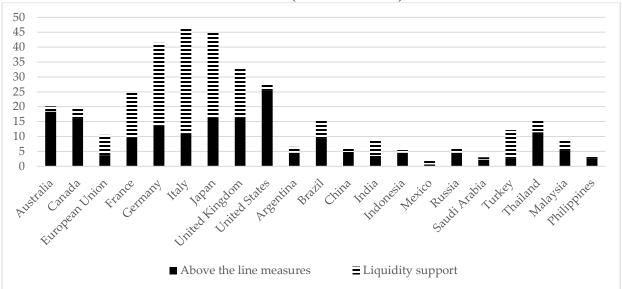
Source: Authors' compliation from World Health Organization (WHO) website available at https://covid19.who.int/data





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

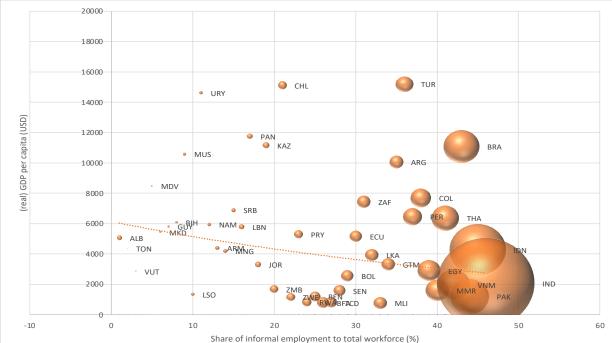
Figure 3
Fiscal Measures in Response to the COVID-19 Pandemic since January 2020 of Selected Countries (% of 2020 GDP)



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.

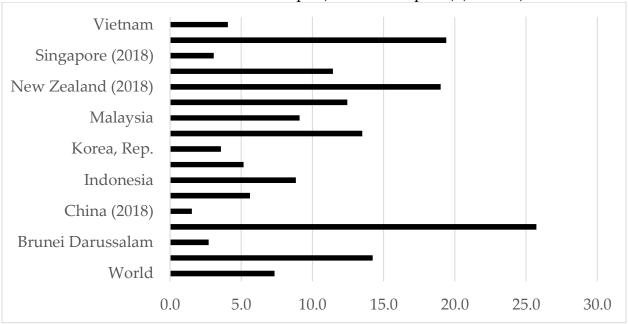
Source: Authors' complied from IMF's Database of Fiscal Policy Responses to COVID-19, available at https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19

Figure 4 Informal employment, given the income per capita level



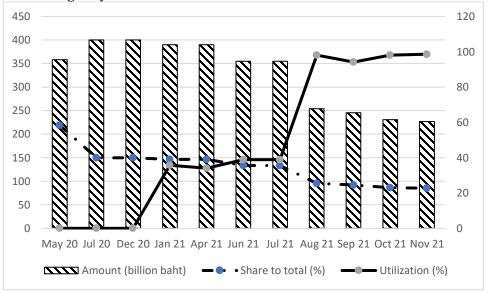
Note:Size of bubble indicates a number of workers in the informal sector
Source: (real) GDP per capita and workforces are from World Development Indicator online database; informal workers are from International Labor
Organization (ILO)

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

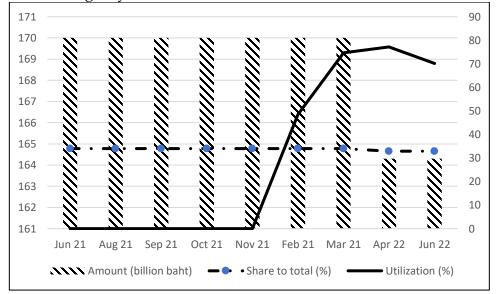


Source: Authors' complied from World Development Indicator online database, World Bank

Figure 6
Economic stimulus to combat the COVID-19 crisis from 2020 to June 2022
6.1: 1 Trillion Emergency decree issued in 2020

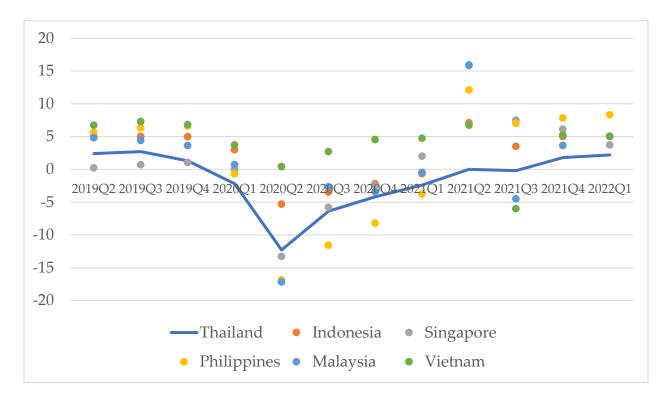


6.2: 0.5 Trillion Emergency decree issued in 2021.



Source: Authors 'complied 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

References

- BangkokPost. (2020, 20 October). BoT okays extension of B500 bn soft loan plan. Retrieved from https://www.bangkokpost.com/business/2004827/bot-okays-extension-of-b500bn-soft-loan-plan
- BangkokPost. (2021a, 21 April). BoT confident new loan scheme will help SMEs. Retrieved from https://www.bangkokpost.com/business/2103307/bot-confident-new-loan-scheme-will-help-smes
- Bangkokpost. (2021b, 18 September). TCG expands soft loan guarantee allocation by B100bn. Retrieved from https://www.bangkokpost.com/business/2183755/tcg-expands-soft-loan-guarantee-allocation-by-b100bn
- BangkokPost. (2022a, 22 February). B43bn generated from Phuket Sandbox. Retrieved from https://www.bangkokpost.com/travel/2268271/b43bn-generated-from-phuket-sandbox
- BangkokPost. (2022b, 27 April). What are the entry rules from May 1? Retrieved from https://www.bangkokpost.com/business/2301054/what-are-the-entry-rules-from-may-1-
- BOT. (2020). Additional measures to assist SMEs affected by COVID-19 and to stabilize corporate bond market [Press release]. Retrieved from https://www.bot.or.th/English/PressandSpeeches/Press/2020/Pages/n2063.aspx
- BOT. (2021a). Financial rehabilitation measures to support business recovery post-COVID-19 [Press release]. Retrieved from https://www.bot.or.th/Thai/AboutBOT/Activities/Documents/230364_Jointstatement.pdf
- BOT. (2021b). Performance of the Thai banking system in the first quarter of 2021 [Press release]. Retrieved from https://www.bot.or.th/Thai/PressandSpeeches/Press/News2564/n3564e.pdf
- IMF. (2021). *Government Support Is Vital as Countries Race to Vaccinate*. Retrieved from Washington DC.:
- Kohpaiboon, A., Jongwanich, J., Wongcharoen, P., & Sriudomkajorn, P. (2021). *Industrial Transformation after COVID 19: Evidence of Thai Manufacturing*. Retrieved from Bangkok:
- MOF. (2021). Performance of Half-Half and Ying Chai Ying Dai Schemes [Press release] Nation, T. (2021, 2 September). Phuket sandbox not quite the resounding success as expected. Retrieved from https://www.nationthailand.com/in-focus/40005610
- OECD. (2020). COVID-19 Government Financing Support Programmes for Business. Retrieved from Paris:
- OECD. (2021). COVID-19 emergency government support and ensuring a level playing field on the road to recovery. Retrieved from Paris: https://read.oecd-ilibrary.org/view/?ref=1113_1113403-090x2f80uf&title=COVID-19-emergency-government-support-and-ensuring-a-level-playing-field-on-the-road-to-recovery
- Subramaniam, R., A. Perdiguero, J. Rush, & Asis-Layugan, P. (Eds.). (2021). *Policy actions for COVID-19 economic recovery: a compendium of policy briefs*. Manila: Asian Development Bank.
- WDR. (2022). Finance for an equitable recovery. Retrieved from Washington DC.:
- WorldBank. (2021). *Thailand Economic Monitor: the road to recovery*. Retrieved from https://documents1.worldbank.org/curated/en/260291626180534793/pdf/Thailand-Economic-Monitor-The-Road-to-Recovery.pdf

Yuda, M. (2020), 'Thai cash handout program creates risky crowds amid coronavirus', Nikkei Asia, 1 April available at https://asia.nikkei.com/Spotlight/Coronavirus/Thai-cash-handout-program-creates-risky-crowds-amid-coronavirus

Yuda, M. (2021), 'Phuket to reopen for vaccinated tourists without quarantine: 5 things to know', Nikkei Asia, 25 June available at https://asia.nikkei.com/Business/Travel-Leisure/Phuket-to-reopen-for-vaccinated-tourists-without-quarantine-5-things-to-know2

Bangkok Post (2021a), 'New Phuket rule passes' 23 July available at https://www.bangkokpost.com/business/2153291/new-phuket-rule-passes Bangkok Post (2021b), 'Phuket sours on sandbox', 6 September available at https://www.bangkokpost.com/business/2176819/phuket-sours-on-sandbox

Marome, W. and R. Shaw (2021), 'Covid-19 responses in Thailand and its implicatins on future preparedness' *International Journal of Environmental Research and Public Health*, 18: 1-10: https://doi.org/10.3390/ijerph18031089

Bangkok Post (2021c), 'More covid relief in the works', 3 May available at https://www.bangkokpost.com/business/2109259/more-covid-relief-in-the-works

Sirivunnabood, P. (2021), 'Thailand's second COVID-19 outbreak: corruption and its consequences' Yusof Ishak Institute (ISEAS) Commentary, 16 January available at https://www.iseas.edu.sg/media/commentaries/thailands-second-covid-19-outbreak-corruption-and-its-consequences/

Rajatanavin, N., T. Tuangratananon, R. Suphanchaimat and V. Tangcharoensathien, (2021), 'Responding to the COVID-19 second wave in Thailand by diversifying and adapting lessons from the first wave', BMJ Global Health, 6 1-9 available at https://gh.bmj.com/content/bmjgh/6/7/e006178.full.pdf

OECD (2020), 'OECD Economic Surveys: Economic Assessment Thailand', Organization for Economic Co-operation and Development (OECD), Paris.

Bangkok Post (2020a), 'People 'lower guard' as coronavirus lockdown measures ease', 17 May available at https://www.bangkokpost.com/thailand/general/1919280/people-lower-guard-as-coronavirus-lockdown-measures-ease

Yuda, M. (2021b), 'Thailand to partially ease business lockdowns from September', Nikkei Asia, 27 August available at

https://asia.nikkei.com/Spotlight/Coronavirus/Thailand-to-partially-ease-business-lockdowns-from-September

WHO (2020), 'Joing intra-action review of the public health response to COVID-19 in Thailand', World Health Organization (WHO), available at https://www.who.int/docs/default-source/searo/thailand/iar-covid19-en.pdf