



EE406 Contemporary Economic Issues

Impact of COVID-19 on unemployment and the labor market in Thailand?

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Introduction

COVID-19 situation in Thailand happened in December 2019 which started in Wuhan, China. It spread to Thailand where there are immigrants from Wuhan to Thailand which Thailand is the first country to report found the virus right after Covid-19 has happened. This rapidly spread all around the globe in only less than a year and this became a serious issue since it caused the economic recession promptly. This research mainly focuses on how COVID-19 affects the unemployment rate and workforce in Thailand by using the statistical data from NESDC and The Bank of Thailand. According to my understanding, the consequences of this pandemic hit Thailand very hard. Surprisingly, the unemployment rate is not that high compared to other countries. Hence, we would like to understand more about how COVID-19 has an effect on unemployment in the country and hope that it would be one of the contributions toward better management.

The research paper is organized as follows. Section 2 addressed the literature review of how COVID-19 impacts unemployment and the labor market in Thailand. Section 3 presents a research gap. Section 4 discusses the data and research methodology. Section 5 provides results analysis and another discussion. In the final section, we present our conclusions and related policies as my recommendation.

Literature review

1. Literature related to factors that affect unemployment in Thailand

- ❖ *Monetary Policy Report (March, 2019)* reported about how Thailand has a very low unemployment rate contrasted to its economic status. Thailand has calculated the unemployment rate according to the international standard definition but the structural problems such as workers having unstable jobs or being employed in jobs that mismatch their skills or education levels lead to inaccurate results.
- ❖ *Sirisankanan (2017)* shows that income risks have a strong negative impact on educational spending. The findings also demonstrate that for certain Thai households, particularly those in metropolitan areas, unemployment has a strong negative association with educational expenditure, but sickness had no relation in any of the sample groups.
- ❖ *Senkrua (2018)* specifies that underemployment has received less attention than unemployment which is also the big issue related to bad underutilization. Similarly to unemployment where people were having qualification mismatch or skill mismatch leads to unemployment.
- ❖ *BBC (2019)* elaborates that the statement “Thailand again claimed the title of the ‘least miserable’ economy, though the government’s unique way of tallying unemployment makes it less noteworthy than Switzerland’s improvement to second-least and Singapore managing to stay in the bottom three.” is a hint to problems underneath the fancy statement. Where Thailand has less unemployment rate but people still have a high poverty rate.

- ❖ Kapilkarn, Amaret, Laosudsan, and Youngyeun (2021) explained that the unemployed or unemployed-like in the 3rd quarter of 2021 will be revived from rock bottom. The unskilled labor and people in the service industry had the hardest effect. They will impose ‘labour formalization’ in the future to attract people to use Social Security in Thailand aimed more at reducing unemployment.

2. Literature related to the impact of COVID-19 on the Thai labor market

- ❖ *Yuvejwattana and Thanthong-Knight (2021)* indicated the risks of Thailand’s economy after lockdown. It mentioned how significant Covid has a downside impact on the unemployment rate, debt, currency, and stocks. It would hurt the economy more if people are not vaccinated, which leads to high-risk markets that foreign investors are avoiding.
- ❖ Chirapaisarnkul (2021) mentioned how labor in Thailand is vulnerable and has the least potential to adapt to Covid-19. Moreover, the agricultural sector cannot support the immigrant workers back to their hometowns. Which are also affected by the change in business models of automation which leads to long-term effects on the labor markets.
- ❖ Chantapong and Tassanasuntornwong (2021) have used mobile big data to identify the turning point of Thai’s agricultural sector and decentralization caused by the Thai immigrants to their hometowns. They elaborated that the younger generations are knowing more technology and it is the opportunity to transform the sector to be more developed and attract this group of labor to stay in the sector more.

- ❖ Thanthong-Knight (2021) explains that tourism could take five years to recover the tourism sector fully. He mentioned that Thailand's economy has been hit hard and could be harder and unemployment for new graduates will be fewer.
- ❖ Kapilkarn, Tepkam, Thongsri, and Laosutsan (2021) stated that Covid-19 has affected Thai economies in terms of importing and exporting very hard and the situation of the nation is still ambiguous. There was an increase in unemployment of more than 750,000 people which doubled the previous year. The Thai social security organization explained that not many workers are using the welfare of the organization enough to help them.

3. Literature related to methodology

- ❖ Albanesi and Kim (2021) mentioned how the emergence of Covid-19 is, unlike the other standard recessions. Unemployment is increasing substantially. They examine real-time data on employment, labor force participation, and gross job flow to see the impact of the pandemic by occupation, gender, and family status.
- ❖ Arham, Salisi, Mohammed, and Tuyon (2020). This study builds on earlier research on the macroeconomic cyclical model by looking at the influence of macroeconomic cycle indicators and nation governance on bank nonperforming loans. The study proposes a novel empirical model for analyzing the impact of national governance in reducing the negative effects of macroeconomic cycles on bank credit risk.
- ❖ Ma'in, Othman, Isa, and Junos (2021). The primary goal of this research is to determine the link between unemployment and macroeconomic indices including inflation, population, GDP, and foreign direct investment. The research was done

using Malaysian yearly data from 1993 to 2019, and the Ordinary Least Square Model was applied. The research found that while population and foreign direct investment had a negative association with unemployment, gross domestic product and inflation had no correlation.

- ❖ Samutachak, Darawuttimaprakorn, and Manachit (2021) Using a mixed-method approach, this study investigated the effect of lifestyles on job search criteria of the generation Y in Thailand. We found that persons with different lifestyles considered job search criteria differently. Job security was more important to males while college major-job match was more important to females.
- ❖ Cockx and Picchio (2013) discussed how this study looks into whether and to what degree additional unemployment experience for youngsters who have previously been unemployed for a long time has a negative impact on future labor market results.

Research gap

This research tries to look at how the pandemic (COVID-19) has an impact on Thailand's labor market and how they will be able to adapt to the rapidly changing environment, especially the unskilled workers and workers in the service sectors. There are concerns where the monthly main economic indicator for unemployment from The Bank of Thailand is not able to tell the exact data of the real unemployment rate underneath the low unemployment rate. As shown on the data according to the office of the National Economics and Social Development Council (NESDC), reported that employment rate decreased 0.6% and the unemployment rate is at 2.25%. Moreover, to indicate the relationship between unemployment and COVID-19 is

impossible by using this time-series data since it only contains data starting from December 2000 to February 2018.

Data and Research method

The data that is used in this research will be the time-series data from Google Trend (secondary data) from February 2011 to March 2020 to analyze the relation to unemployment in Thailand. Covid-19 had started in December. Using keywords to search in Google trends and retrieve data to see the relationship between the searching frequencies for those keywords (Google Trends) and the unemployment data.

Another method used is the Apple Mobility Index data to determine the impact of Covid-19 on Thailand. By selecting the data range to do run a regression to see how it Covid-19 cases related to unemployment. Since the Apple mobility index provides mobility trends for cities and countries or regions from Apple Maps. Using these tools can imply how people commute to work or go anywhere during the lockdown.

Results analysis and discussion

Using Google trend for searching the related keywords and the keywords used are ‘หางาน’ and ‘สมัครงาน’ with respect to unemployment data and number of unemployed (The results are shown in Figure 1, Appendix 1). The results show that the number of unemployed has gradually risen up in an upward trend and seeing that the trends of a number of unemployed are mostly corresponding to the keywords search. For example, looking at 1/1/2017, it is where the unemployment is starting to peak at the top and the search for ‘หางาน’ and ‘สมัครงาน’ are risen up as well.

However, after running the regression to find the correlation of these keywords to the number of unemployed, find out that R-squared is only 0.22 which is considered as a low correlation (see Appendix 1, Table 1). Then I run the regression to find the relationship between job finding and rate of unemployment. I expected it to have a higher correlation since it makes sense that if the rate of unemployment is high then job finding will correspond to it as well. But the result of R-square is only 0.11 (see Appendix 2, Table 2). It has a lower correlation than related to the keywords search on Google trend (See Appendix 2, figure 2).

The unemployment rate classified by industry in Thailand from 2011-2019 data retrieved from the Bank of Thailand showed that the unemployment rate has rapidly increased in 2019 when Covid-19 has emerged. The data showed that the manufacturing sector has been affected the most by this shock (see Appendix 3, figure 3).

With these results, it can be implied that using Google Trend keywords can be used to identify the relationship between the unemployed and the job search but cannot identify how it relates to impact from Covid-19.

Related to the research about how the unemployment rate in Thailand is inaccurate to the reality of the current labor market. The NESDC stated that unemployment in Thailand is a big issue, especially in this pandemic situation. Even though the rate is higher in this period or 3rd quarter of 2021, the real number of people who are ‘unemployed-like’ is more unexpected where there are more than 700 thousand people in this situation, not to mention the new graduates who are automatically jobless right after they finish the university. Therefore, this can be used in terms of indicating the trends of the unemployment only but not the precise results of the unemployment related to Covid-19.

Another method is the Apple Mobility Index using it to see the correlation between Covid-19 to unemployment in Thailand. I will demonstrate Bangkok and Chonburi (See Appendix 4, figures 4 and 5). It showed that there is a high correlation between Covid-19 cases and the mobility of people during the Covid-19 period.

Conclusion and policy recommendations

According to the data retrieved and analysis made using Google trends and Apple Mobility Index, the results do not relate to the impact of Covid-19 on unemployment in Thailand as much as I expected. However, unemployment in Thailand is still a big issue where the government has to focus on this issue very closely especially the service sector and the unskilled labor who are affected by the pandemic most.

I recommend that the government should provide more information about the real situation about current economic situation that people are facing in order to give them some time to prepare themselves for the economic crisis or manage their savings. Since Covid-19 is an inevitable crisis where everyone has no idea how to cope with the situation really well.

Appendix

Appendix 1

Figure 1

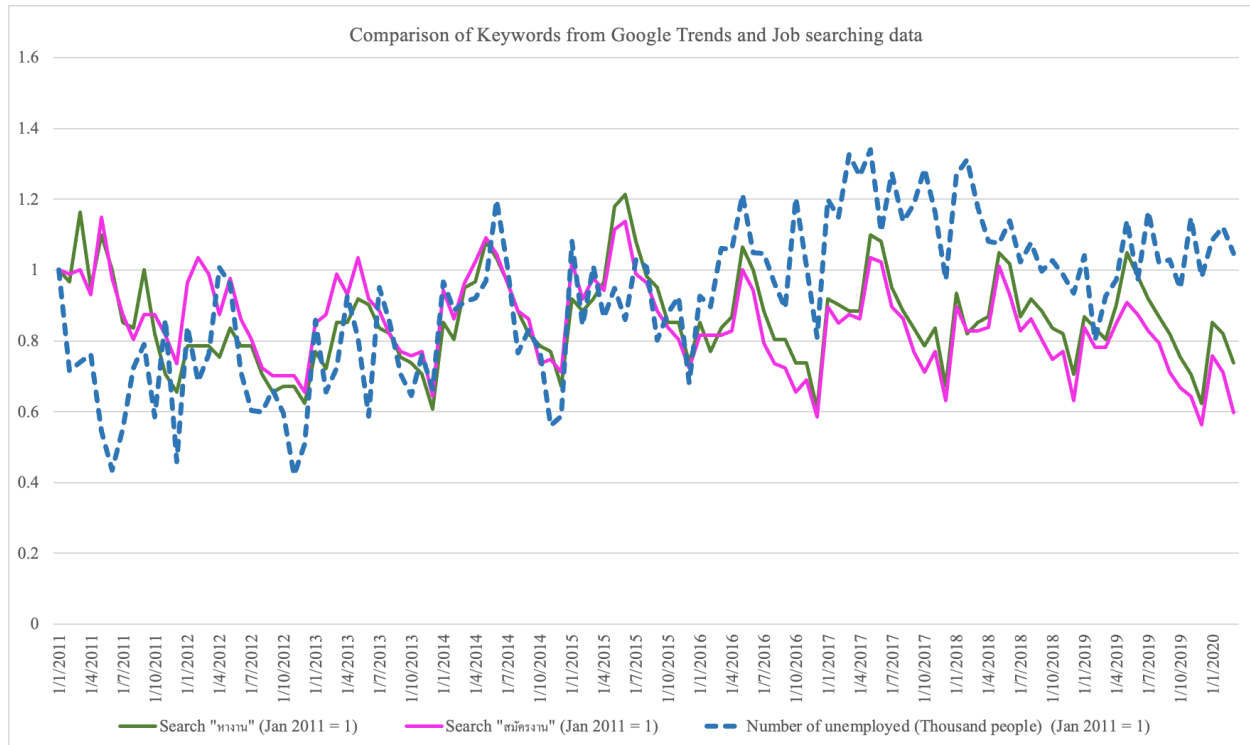


Table 1

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.47079788
R Square	0.22165064
Adjusted R Square	0.20710205
Standard Error	0.19137841
Observations	110

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	1.11599965	0.55799982	15.2352014	1.5061E-06
Residual	107	3.91894925	0.03662569		
Total	109	5.0349489			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
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Intercept	0.59751138	0.13096069	4.56252474	1.3533E-05	0.33789709	0.85712567	0.33789709	0.85712567
X Variable 1	1.38849218	0.25499656	5.44514086	3.324E-07	0.88299124	1.89399312	0.88299124	1.89399312
X Variable 2	-1.0256613	0.25801525	-3.9751962	0.00012801	-1.5371464	-0.5141761	-1.5371464	-0.5141761

Appendix 2

Table 2

SUMMARY OUTPUT

Regression Statistics

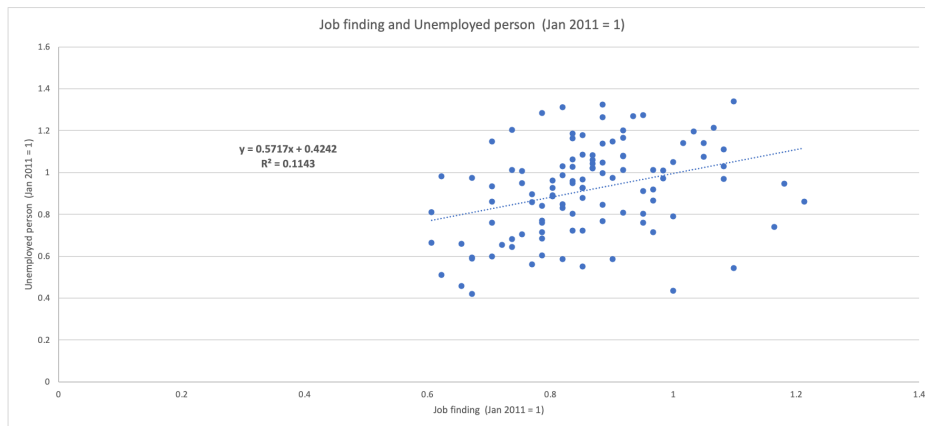
Multiple R	0.32472811
R Square	0.10544835
Adjusted R Square	0.09716546
Standard Error	0.2062092
Observations	110

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.54134507	0.54134507	12.7308708	0.00053785
Residual	108	4.59240129	0.04252223		
Total	109	5.13374636			

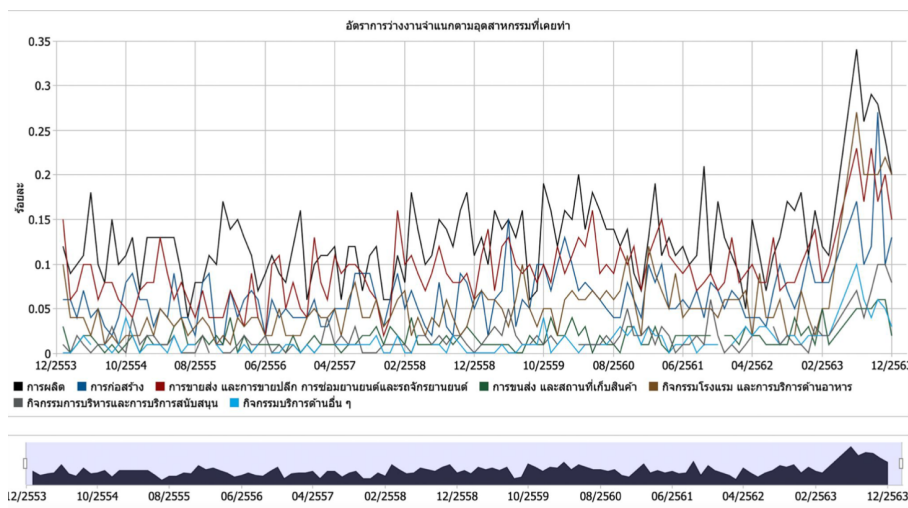
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.41517989	0.13484836	3.07886503	0.00263477	0.14788705	0.68247272	0.14788705	0.68247272
X Variable 1	0.55508741	0.15557232	3.56803458	0.00053785	0.24671609	0.86345874	0.24671609	0.86345874

Figure 2



Appendix 3

Figure 3



Appendix 4

Figure 4

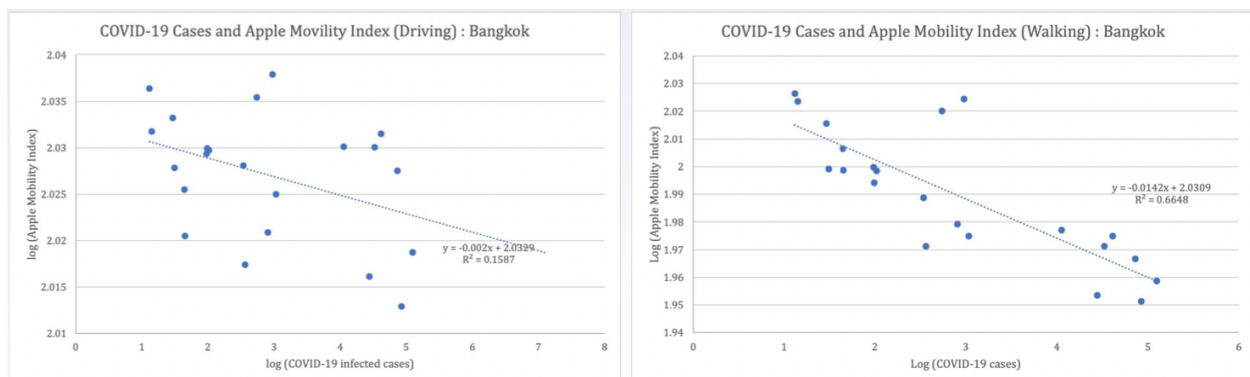
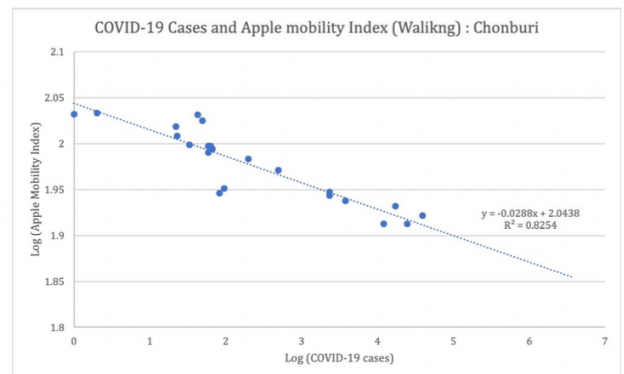
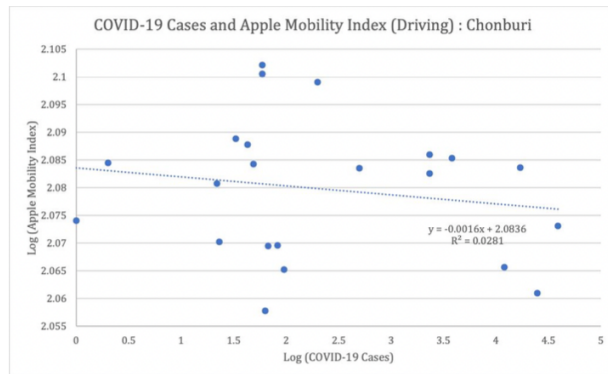


Figure 5



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