



(RESEARCH ARTICLE)



## Gauging the efficacy of the Philippines lockdown policies in response to COVID-19

Seongmin Park \*

*International School Manila, Philippines.*

GSC Advanced Research and Reviews, 2022, 12(01), 035–041

Publication history: Received on 27 May 2022; revised on 03 July 2022; accepted on 05 July 2022

Article DOI: <https://doi.org/10.30574/gscarr.2022.12.1.0172>

### Abstract

This research was conducted in order to gauge the efficacy of the Philippines lockdown policies in response to COVID-19. After seeing a surge in cases accompanied by new variants, the Philippines put forth policies that some experts believe managed to decrease the number of cases through strict lockdowns. Other critics believe that these measures were excessively stringent. Hence, this paper presents metrics which gauges the Philippines' pandemic response policies, through identifying the major lockdown policies, comparing them with a weekly case average and the stringency index, also considering how the unemployment rates were affected by such factors. The data for average daily cases, stringency index, and unemployment rates were sourced from various websites and organized into a table to be used as variables in figures that demonstrated the necessity, efficacy, and economic impact of the pandemic response. The results demonstrate a trend of extremely stringent measures that did, however, minimize the overall impact of the pandemic. It can be concluded that while the stringent measures minimized the spread of cases, the negative (economic, among others) effects outweigh the positive impacts of such measures.

**Keywords:** COVID-19; Philippines; Pandemic; Lockdown Policy; Stringency

### 1. Introduction

The first confirmed case in the Philippines was reported on January 30 of 2020. Since then, the Philippine government's pandemic response relied heavily on simply restricting day-to-day activities. The enhanced community quarantine (ECQ) of March 2020 is seen as excessively stringent, although it did initially prevent a spike in cases. Movement was largely restricted and only essential businesses were allowed to operate. The military also got involved to maintain order, which intimidated some citizens. Schools were shut down for the longest period of time out of any country in the world, stunting the academic growth of millions of children.

Some experts in the WHO and other organizations praised the Philippines for managing to contain the spread of cases despite a lack of resources. However, largely seen as among the harshest in the world, others criticized the measures taken for the unnecessary manner in which day-to-day activities such as simply exercising outside were restricted or simply prohibited. The new normal in the Philippines is now one of constant anxiety over the next new restriction, the next excessive measure taken in response to the pandemic.

With the controversy and multifaceted-nature of the pandemic response in mind, this research focused on gauging the efficacy and necessity of the lockdown policies in the Philippines, with several factors such as stringency index, weekly case data, and unemployment rate data all being considered.

\* Corresponding author: Seongmin Park  
International School Manila, Philippines.

## 2. Methodology

First, we identified the timeline of major lockdown policies since 2020 and their classifications according to the Philippine government. We identified seven major timelines for policy implementation, the first of which is the Enhanced Community Quarantine (ECQ) of March 22 to May 15. During this period, the stringency was 100 as seen in the Our World in Data stringency index, which was the highest stringency possible and largely unseen in other countries. May 16 to May 31 saw the implementation of MECQ, a modified ECQ (Enhanced Community Quarantine) with slightly less stringent restrictions compared to that of an ECQ. From June 1 to June 15, a General Community Quarantine (GCQ) was implemented, which is a classification with less stringent restrictions compared to the ECQ and MECQ. From March 29 to April 10 of 2021, the Philippine government implemented the ECQ, with fewer restrictions than the ECQ of March 22 to May 15 of 2020. A GCQ with heightened restrictions was implemented from July 30 to August 5, with the government shifting to an ECQ from August 6 to August 20 after a surge in cases. From November 5 to the time of writing, the National Capital Region (NCR) was under the classification of Alert Level 2 as part of the alert level system [1-5].

We then listed the specific restrictions promulgated by the government (Table 1), and how they differed among different lockdown classifications. After identifying the major lockdown policies, we determined the weekly average for cases corresponding to a 7-day period (data shown in Table 2). Next, we sourced stringency level data from the Our World in Data Stringency Index (graph shown in Figure 1). In a table, we organized the stringency index data and weekly average cases data such that they corresponded to a certain 7-day period, for a total of 96 7-day periods. We later determined the quarterly (in 2020) and monthly (in 2021) unemployment rates and added the data to Table 2.

Using the data from Table 2, we made a graph (Figure 3) showing the progression of the stringency level through time, in which a high stringency usually demonstrated a more restrictive classification of lockdown. A scatter plot graph presented the distribution of weekly cases in relation to the stringency levels corresponding to the same seven-day period.

Next, we made two graphs (Figures 4 and 5) and plotted the stringency levels in relation to unemployment rates to gauge whether or not there was a correlation between the two. A higher position on the graph represents a high unemployment rate, and a plot positioned to the right demonstrates a high stringency index.

## 3. Results and discussion

As seen in Figure 1, the highest stringency for the duration of the pandemic was 100, which came between March 22, 2020 and April 30, 2020. This was when the Philippine government implemented the first ECQ (Enhanced Community Quarantine), the strictest form of lockdown in the Philippines. While this did initially prevent a surge in cases, it can be seen as neither effective nor necessary as the nation reached an all-time high unemployment rate of 17.6%, in addition to the fact that weekly cases began to increase after the end of the ECQ.

Figure 2 shows the progression of the weekly case average through time. As shown, there were three instances of spikes in cases. These three spikes were in August of 2020, April of 2021, and September of 2021. After each spike, there were dips in cases, the most significant being the dip in cases after the September 2021 spike. This can be primarily attributed to the increasing vaccination rates, with 94% of the target population in Metro Manila, the city with the highest population density in the Philippines.

The scatter plot data in Figure 3 shows the distribution of stringency vs confirmed cases data and essentially scopes the necessity and efficacy of implemented lockdown measures and their stringency. To explain this further, a plot close to the top left, would represent an unnecessary level of stringency, as while the cases were relatively low, the implemented measures were extremely stringent. Conversely, a plot close to the top right would represent an appropriate measure taken as cases were high, indicating a need for stringent measures. Following this pattern, a plot closer to the bottom left would also indicate an appropriate measure, as less stringent measures were taken in response to lower cases. Finally, a plot close to the bottom right would indicate measures with unnecessarily low stringencies in response to high numbers of cases. There were no plots near the bottom right of the graph, which indicates that at the very least, the Philippine government was not lax in its response to COVID-19. However, there are a significant number of plots near the top left of the graph, which demonstrates that some of the measures may have been excessively stringent.

Figure 4 and Figure 5 show the correlation between unemployment rates and stringency index for 2020 and 2021 respectively. As the unemployment data for 2020 was updated on a quarterly basis, it may be difficult to see a

correlation between the two variables. However, as demonstrated by the trend line in Figure 4, it is clear that a higher stringency translated into a higher unemployment rate. A relatively constant change of unemployment rates in 2021 can be explained by the fact that the measures taken were not only less stringent overall, but were intended to minimally affect job stability. This can be seen in the shift to Alert Level 2, which saw the reopening of most establishments.

**Table 1** Progression of the Measures Implemented

<b>Date</b>	<b>Classification</b>	<b>Description</b>
March 22 to May 15 (2020)	ECQ	<ul style="list-style-type: none"> <li>- Physical classes at all levels suspended</li> <li>- Public transport is suspended, with the exception of shuttle services for employees allowed to work</li> <li>- No hotels or equivalent establishments allowed to operate with minor exceptions</li> <li>- Mass gatherings prohibited</li> <li>- Only essential businesses allowed to operate</li> </ul>
May 16 to May 31 (2020)	MECQ	<ul style="list-style-type: none"> <li>- Gatherings outside residence are prohibited</li> <li>- Gatherings inside residence with members outside of the household are prohibited</li> <li>- Those below 18 and above 65 years of age must stay at home, except when obtaining essential goods or services</li> <li>- Only essential businesses allowed to operate</li> </ul>
June 1 to June 15 (2020)	GCQ	<ul style="list-style-type: none"> <li>- Essential businesses allowed to operate, in addition to other businesses in industries with numerous employees</li> <li>- Entertainment industries prohibited</li> </ul>
March 29 to April 10 (2021)	ECQ	<ul style="list-style-type: none"> <li>- Recreational venues of all forms not allowed to operate</li> <li>- Pushing for 100% of the population staying at home (only going out when needed)</li> </ul>
July 30 to August 5 (2021)	GCQ with heightened restrictions	<ul style="list-style-type: none"> <li>- Personal care services at 30% capacity</li> <li>- GCQ with certain characteristics of ECQ</li> </ul>
August 6 to August 20 (2021)	ECQ	<ul style="list-style-type: none"> <li>- Possible losses at least 210 billion PHP</li> <li>- Refer to ECQ of March 29 2021 for guidelines</li> </ul>
November 5 to present (2021)	Alert level 2	<ul style="list-style-type: none"> <li>- Schools allowed to open at 50% capacity with prior approval from LGUs (local government unit)</li> <li>- Contact sports allowed with LGU permission</li> </ul>

Date	Confirmed Cases (weekly)	Stringency	Unemployment Rate (%)- Labor Force Survey from Philippine Statistics Authority
December 30	0	0	5.3
January 6	0	0	5.3
January 13	0	0	5.3
January 20	0	0	5.3
January 27	1	11.11	5.3
February 3	2	19.44	5.3
February 10	0	25	5.3
February 17	0	25	5.3
February 24	0	25	5.3
March 2	3	25	5.3
March 9	105	25	5.3
March 16	196	75	5.3
March 23	768	100	5.3
March 30	2019	100	5.3
April 6	1334	100	17.6
April 13	1659	100	17.6

April 20	1207	100	17.6
April 27	1634	100	17.6
May 4	1682	96.3	17.6
May 11	1695	96.3	17.6
May 18	1472	96.3	17.6
May 25	3447	96.3	17.6
June 1	4116	77.78	17.6
June 8	4051	77.78	17.6
June 15	4008	83.33	17.6
June 22	5403	83.33	17.6
June 29	7028	83.33	17.6
July 6	12305	83.33	10
July 13	11080	80.56	10
July 20	13123	80.56	10
July 27	19815	76.85	10
August 3	28651	79.63	10
August 10	31114	79.63	10
August 17	29305	76.85	10
August 24	25889	71.76	10
August 31	21414	68.98	10
September 7	23337	68.98	10
September 14	25568	68.98	10
September 21	17800	67.13	10

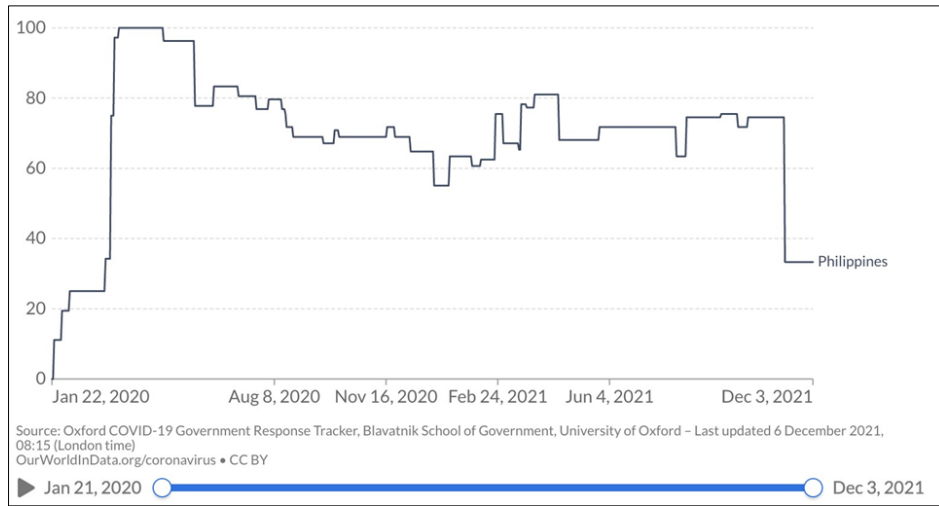
September 28	18076	67.13	10
October 5	17532	68.98	8.7
October 12	17414	68.98	8.7
October 19	13552	68.98	8.7
October 26	12912	68.98	8.7
November 2	13236	68.98	8.7
November 9	12335	68.98	8.7
November 16	10542	68.98	8.7
November 23	10940	71.76	8.7
November 30	10276	68.98	8.7
December 7	10253	68.98	8.7
December 14	9704	64.81	8.7

December 21	10968	64.81	8.7
December 28	7913	64.81	8.7
January 4	8868	55.09	8.7
January 11	12898	55.09	8.7
January 18	12998	63.43	8.7
January 25	11845	63.43	8.7
February 1	12005	60.65	8.8
February 8	11728	60.65	8.8
February 15	12033	62.5	8.8
February 22	14958	75.46	8.8
March 1	16897	67.13	7.1
March 8	25463	67.13	7.1
March 15	39438	65.28	7.1
March 22	56380	77.31	7.1
March 29	71606	81.02	7.1
April 5	69164	81.02	8.7
April 12	72848	81.02	8.7
April 19	63364	81.02	8.7
April 26	57238	68.06	8.7
May 3	48197	68.06	7.7

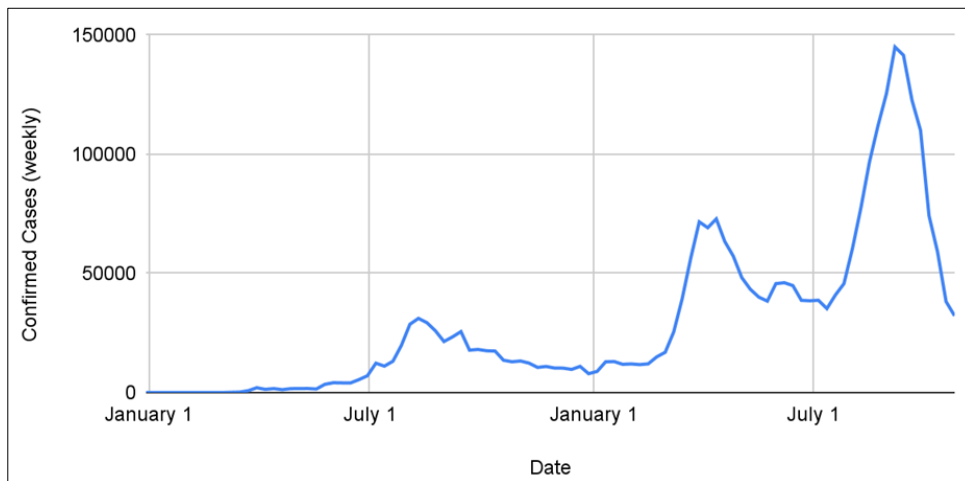
May 10	43339	68.06	7.7
May 17	40034	68.06	7.7
May 24	38362	68.06	7.7
May 31	45681	71.76	7.7
June 7	46087	71.76	7.7
June 14	44875	71.76	7.7
June 21	38684	71.76	7.7
June 28	38507	71.76	7.7
July 5	38706	71.76	6.9
July 12	35235	71.76	6.9
July 19	40932	71.76	6.9
July 26	45678	71.76	6.9
August 2	60373	63.43	8.1
August 9	77540	63.43	8.1
August 16	96724	74.54	8.1

August 23	111904	74.54	8.1
August 30	125470	74.54	8.1
September 6	144991	74.54	8.9
September 13	141522	75.46	8.9
September 20	122625	75.46	8.9
September 27	110023	71.76	8.9
October 4	74227	71.76	7.4
October 11	59052	74.54	7.4
October 18	38189	74.54	7.4
October 25	32222	74.54	7.4

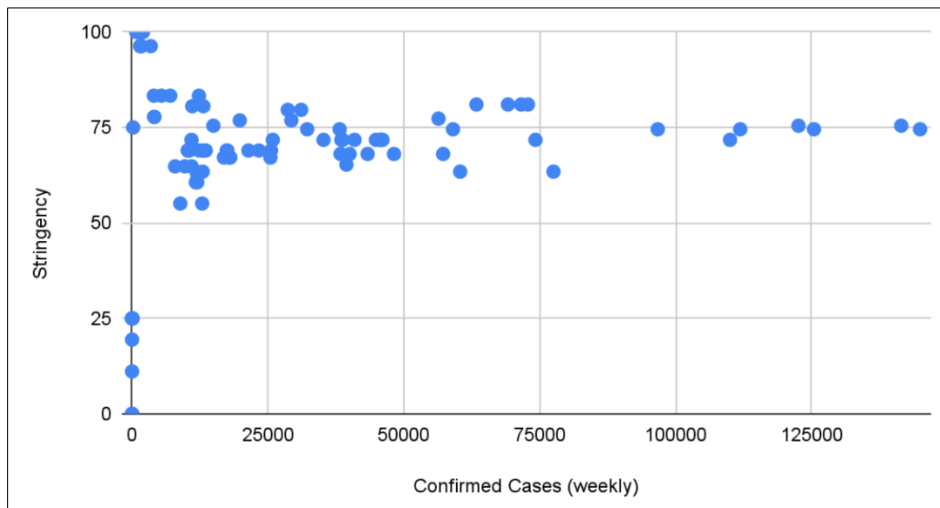
**Table 2** Weekly confirmed cases, Stringency, and Unemployment Rate Corresponding to a 7-day period



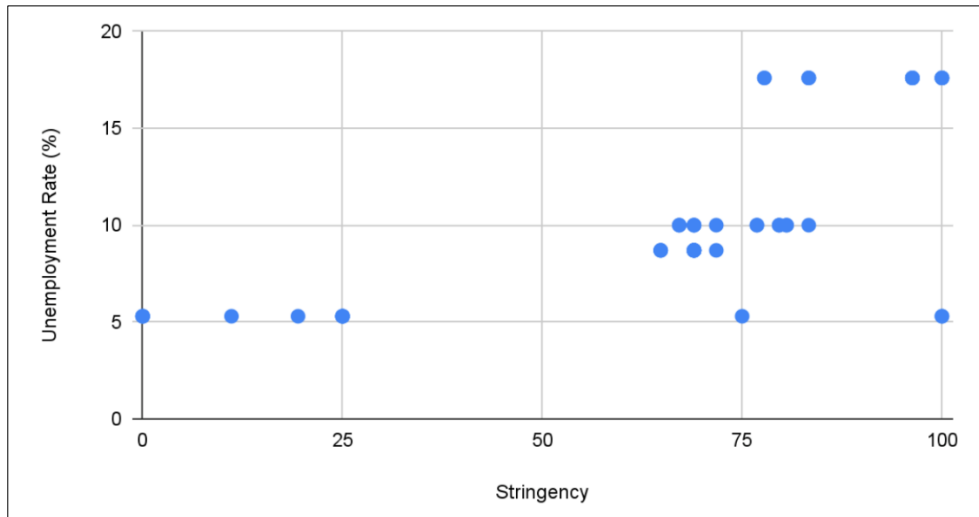
**Figure 1** Stringency Index through time



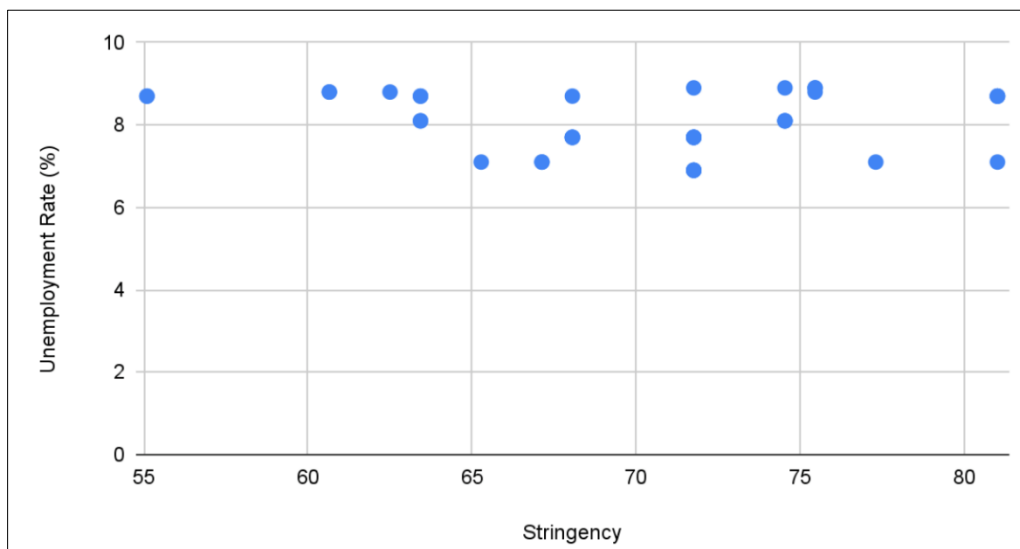
**Figure 2** Number of weekly confirmed cases throughout the course of the pandemic



**Figure 3** Stringency vs. Confirmed Cases (weekly)



**Figure 4** 2020- Unemployment Rates vs. Stringency



**Figure 5** 2021- Unemployment Rates vs. Stringency

#### 4. Conclusion

The Philippines pandemic response is characterized by extremely stringent and drawn out lockdowns, the harshest of which led to the unemployment rate reaching a record-breaking 17.6%. As many businesses were forced to shut down, most of which were unable to operate online, many employees found themselves without a job. The pandemic responses also faced much scrutiny from the medical community, as schools remained closed amid low positivity rates and hospitalizations. While the stringent lockdowns were effective in the initial containment of the spread, they were ineffective in preventing a spike in cases. What’s more, the stringent lockdowns were often placed when the daily cases were relatively low, with the March 2020 ECQ being an example. They did, however, minimize the overall increase of cases, hospitalizations, and fatalities, allowing for hospitals to give more care to patients with severe symptoms. All in all, the Philippines’ lockdown measures were excessively stringent, but did manage to minimize the overall cases and mortalities with minimal resources.

#### Compliance with ethical standards

##### *Disclosure of conflict of interest*

The authors declare that they have no conflict of interest.

## References

- [1] Ritchie H, Mathieu E, Rodés-Guirao L, Appel C, Giattino C, Ortiz-Ospina E, et al. Covid-19: Stringency index [Internet]. Our World in Data. 2020 [cited 2022Jul8]. Available from: <https://ourworldindata.org/covid-stringency-index>
- [2] Pandemic intervals framework (PIF) [Internet]. Centers for Disease Control and Prevention. Centers for Disease Control and Prevention; 2016 [cited 2022Jul8]. Available from: <https://www.cdc.gov/flu/pandemic-resources/national-strategy/intervals-framework.html>
- [3] Philippines: Who coronavirus disease (covid-19) dashboard with vaccination data [Internet]. World Health Organization. World Health Organization; [cited 2022Jul8]. Available from: <https://covid19.who.int/region/wpro/country/ph>
- [4] Bhatia G, Dutta PK, McClure J. Philippines: The Latest Coronavirus Counts, charts and maps [Internet]. Reuters. Thomson Reuters; 2022 [cited 2022Jul8]. Available from: <https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/philippines/>
- [5] Ritchie H, Mathieu E, Rodés-Guirao L, Appel C, Giattino C, Ortiz-Ospina E, et al. Philippines: Coronavirus pandemic country profile [Internet]. Our World in Data. 2020 [cited 2022Jul8]. Available from: <https://ourworldindata.org/coronavirus/country/philippines>
- [6] UN Framework for the immediate socio-economic response to covid-19 [Internet]. [cited 2022Jul7]. Available from: <https://unsdg.un.org/sites/default/files/2020-04/UN-framework-for-the-immediate-socio-economic-response-to-COVID-19.pdf>