

## RESEARCH ARTICLE

# Silver linings in Philippine history and macroeconomics of the COVID-19 pandemic response: Beyond the longest lockdown

Luisito C. Abueg

Author's email address: lcabueg@up.edu.ph

*Department of Economics, College of Economics and Management, University of the Philippines Los Baños*

## ABSTRACT

The Philippines has been the leading country in Southeast Asia in terms of infections (both in terms of total and active cases) brought forth by the SARS-COV-2 virus, known as the COVID-19 pandemic. We highlight the historical underpinnings of pandemic responses that are related to the Philippines, both globally and locally. We also present some counterfactuals in an economic recession that the pandemic caused. Arguing for fast-track rehabilitation and improvement of digital infrastructure, this development is essential in promoting e-commerce, quality education through remote learning, and the quality of health data generation and analysis. As the world is reminded of the Balmis expedition while the world still grapples to obtain a cure for the pandemic, we look at these tenets of the “new normal” to address issues of social justice in the Philippine setting.

**Keywords:** *Covid-19 pandemic, Balmis expedition, Philippine economic history, “new normal”, social inequality*

## Introduction

It has been more than half of 2020 that the Philippines still endure the adversities of the COVID-19 pandemic. As virtually all economic sectors are forced to embrace the slogan of the “new normal” (*i.e.*, old practices and models with new health protocols and measures), there remains a significant degree of skepticism, anxiety, and mixed prognoses of how will the next months and year would reveal, in terms of possible economic opportunities. Nonetheless, as the private sector and the national and local government remains hopeful of the near future, we provide some indications that are already discussed in various platforms. In this paper, we hope to provide additional insights and further discussion that will push forward collective and collaborative efforts, and also to push for realistic, attainable, and effective policies, programs and strategies.

As the world celebrates the 75th year of the United Nations in the time of the pandemic, it highlights the increased unity among nations and territories of the world affecting the economic, social, health, political, and other dimensions of international relations. Notably, a lot of experts and scholars have compared the pandemic with some form a “world war” (in reference to the First and Second World wars of the twentieth century), in which the difference is that the

enemy remains unseen and undefeated. In the advent of developing a vaccine or cure, we are of no choice but to embrace health protocols both from government authorities and health experts. Citizens are also reminded of the civic and moral duty in contributing to infection prevention and also to help in bringing more health consciousness and social responsibility.

In this paper, we present an update on the COVID-19 pandemic while the Philippines is being regarded to have the longest lockdown (since March 15). We revisit the macroeconomic situation and provide updates on how the Philippine economy fares during this community quarantine. In such a discussion on the pandemic effects and the macroeconomic consequences, we pick up historical highlights of previous pandemics that has happened in the Philippines, and in the world that has affected the state of affairs in the country. We follow through this discussion with the developing notion of the “new normal”, which are iterations of the pre-pandemic situation. In such an iteration, we discuss the main feature of such post-pandemic situation: the digital economy. As we will see, both in the e-commerce and remote learning situation would provide significant examples where the digital divide happens. As

scholars from various disciplines would argue, this pandemic is aggravating social and economic inequality.

## COVID-19, pandemics, and some historical insights

As early as 2014, there has been speculations of an imminent pandemic that might be experienced in the world in a few years' time or so. These pronouncements were made due to the outbreak of the Ebola virus in that year. This is particularly highlighted by [2], saying that

[W]hile all these (global) risks are severe, none is as threatening as the specter of a virulent, deadly global pandemic. ... In terms of likelihood and potential damage that may be caused, pandemics pose a significant risk to both global health and economic stability.

Support on this view was resounding during that time. In particular, [3] "raised the possibility of a pandemic occurring in the future and emphasized the need to prepare for it" [4]. However, the heightened alert and concern was not given particular consideration or attention, *i.e.*, a "pink flamingo": a predictable event that is ignored due to cognitive biases of a senior leader or a group of leaders trapped by powerful institutional forces [5]. And now, we have the COVID-19 pandemic, affecting much of the world economy and society and continuously changing the human landscape.

The COVID-19 pandemic is the next global epidemic comparable with the effects of the 1918 Spanish Flu (coincident with the last years of the First World War). To be clear, there have been pandemics between the Spanish Flu and the COVID-19 pandemic: the Acquired Immune Deficiency Syndrome (AIDS) epidemic beginning 1984 (which the Philippines also leads in terms of the rate of increase in infections) and the initial manifestations of the coronavirus (during the Severe Acute Respiratory Syndrome [SARS] in 2001 and the Middle East Respiratory Syndrome [MERS] in 2012). More particularly, the Philippines also witnessed outbreaks of Koch's disease (tuberculosis) and Hansen's disease (leprosy) during the first decades of the American occupation. In the case of COVID-19, early manifestations of the virus have already been reported beginning in the latter half of 2019, although much of these has been dismissed as nonthreatening by authorities in China. This complacency has been also seen as how Philippine authorities viewed the problem between January and February of 2020, given that the first reported case of COVID-19 was through a Chinese national from Wuhan, China and arrived in the Philippines via Hong Kong, China. In

March 7, the fourth case of COVID-19 in the Philippines was the first reported local transmission, which prompted the national government to call for a community quarantine in Metro Manila (and later extended to Luzon) beginning March 15, a week after.

Fast forward to the fourth quarter of 2020, the Philippines remains to be the leading country in Southeast Asia in terms of the number of total and active cases, according to the Johns Hopkins University Coronavirus Resource Center [7]. Running at minimum of 300,000 recorded infections by the end of September, the country emerged as the twentieth in the world in terms of total infections by October. Cases continue to increase with 400,000 cases recorded in just half a month shown in Table 1. The UP OCTA Research Group has also projected that the holiday season may pose the country's total cases to reach the 500,000-level by end-2020. These tracking is made possible by technological advancement, which provided another peculiar feature of the pandemic: a real-time tracking of events and developments. In today's complex world, data and information matters in planning, decision-making, and program and development strategies (whether public or private initiatives).

**Table 1.** COVID-19 cases in the Philippines, in terms of first-recorded-hundred-thousand case (and length of days). Day counts and intervals are author's calculations of the reported data. Data from Covid-19 tracker website, and Department of Health.

Number of days since imposition of quarantine	Date	Total cases	Interval in days
1	March 15	140	0
137	August 02	103,185	138
161	August 26	202,361	24
192	September 26	301,256	31
208	November 11	401,416	16

While the government continues to trumpet the problem of the "pasaway attitude" as the leading reason for community transmissions, independent organizations, data and research institutions, and scholars have shown counterevidence on this mindset. The term pasaway (English: person being reprimanded with repeated difficulty) has been in the Philippine colloquial language as early as 2010. This terminology is loosely applied to people who would love to be reprimanded despite repeated deviant behavior. Much of the attributions of the term are to the youth who never feared of extreme exploration and experimentation of deviation with social rules and legal laws. This concept is often used by the government as the reason why the Philippines has had also recorded the

longest lockdown in the world, and with expanded and term-dodgy classifications—expanded, extreme, hard, modified, general, localized—and a plethora of terms, which does not deny the fact that the pandemic management has been in significant disarray. To provide a striking counterexample, [8] uses data from Imperial College London and Google Mobility to show that Filipinos have a strong sense of following of health protocols and guidelines (obviously defying the pasaway narrative).

Formally, the national government has imposed restrictions called “community quarantine”, but became more popular under the name “lockdown”. There is even an initial denial from the national government that it will not implement a “lockdown” but rather mobility restrictions. Quarantines are not new to this pandemic, which were imposed to docking ships in Venice during the Black Death beginning 1347 in Croatia. In fact, the word “quarantine” has its roots from the Latin *quarantena*, meaning forty days. These quarantine measures—no matter antiquated—has not helped the medical sector. It may be recalled that the Philippine Medical Association and the Philippine Nurses Association lead the rally of the health sector through their own respective remonstrances on the government’s general program of action for the pandemic. Remonstrances are not new, as the Philippines had its historical in October 7, 1701 through the Jesuits’ letter to the Governor General Fausto Cruzat y Góngora in lieu of the declining Philippine population due to the spread of diseases (*e.g.*, cholera, typhoid) as early as the seventeenth century [8]).

The national government has resorted to a series of versions of quarantines, and centralized pandemic response through the formation of the Inter-agency Task Force for Emerging and Infectious Diseases (IATF-EID). This group has been in charge of oversight and directions for pandemic management, economic resiliency programs, health protocols implementation, among others. This group also coordinates with various levels of local government units (municipal, provincial, and regional) on similar concerns respective to their own jurisdictions. Also, the Philippine Congress has enacted iterations of national laws in response to the COVID-19 pandemic: the Bayanihan to Heal as One Act (Republic Act no. 11469), and the Bayanihan to Recover as One Act (Republic Act no. 11494). The term *bayanihan* (English: collective action of a community in physically moving a house structure) became the image of the law in envisioning a collective and collaborative response to the pandemic. This Filipino cultural value has been recognized as early as the pre-Spanish era communities prior to the

fifteenth century. This remarkable Filipino culture has been one of the prime elements in the debates on the national budget for fiscal year 2021 resulted to revisions in budget, which are incorporated to align with national policies in response to the pandemic. To date, there are talks in legislation to do a third iteration of the Bayanihan laws, which is named Bayanihan to Rebuild as One Act [9].

As the efforts of the government are always under scrutiny, we discuss in the next section the resulting macroeconomic indicators and other related metrics that describe the extent of the pandemic to the Philippines. We contextualize these numbers given the underlying conditions and also note why there has been a significant dissatisfaction among various sectors with regards to containment of infection and the prevention of disease spread. Not only that macroeconomic indicators and health metrics corroborate the quality of response of the government, the populism stance of the current administration showed some otherwise different result in terms of perception surveys administered during the months of the community quarantine (*e.g.*, in [10]).

While we are reminded of the population-poverty nexus of developing countries, the pandemic also serves as a “positive check” as Malthus [11] would suggest. Nevertheless, the modern global economy despite its continuous innovation to cope with demands for basic necessities for the growing population, some countries may not have the means of providing for some degree of safety net to mitigate the health and economic effects of the pandemic. We will see this in some detail in the next section.

## The Philippine economy and the pandemic: Undoing economic fundamentals

As early as the first quarter of 2020, the Philippine economy recorded its first negative gross domestic product (GDP) growth at 0.7% (from a preliminary report of -0.2%) after 40 successive quarters after the Asian financial crisis (AFC) in 1997. The 40-quarter streak of positive growth reflected the lessons of AFC, which brought the economy into better standing as it has weathered the global financial crisis (GFC) in 2008 [12]. However, by second quarter of 2020, the Philippines officially entered into recession, with -16.9% growth (from a preliminary report of -16.5%)—the lowest since the Philippines recorded its national income accounts in 1946—even worse than what has the country has experienced during the political crisis of 1983-85. Figure 1 indicates the official growth rates of the Philippines in the

last 40 years, with crises years both of domestic origin (1983, 1991, 2004) and international origin (1997, 2007).

In addition to record-breaking recession, the Philippines also registered dismal figures for unemployment. The Philippines had its record-high unemployment rate of 17.7% in April 2020, since the data became available in 1987. We even note that this unemployment rate in April 2020 remains to be the highest even there is a change of definition in unemployment beginning April 2005. Further, the same report noted that all Philippine regions reported double-digit unemployment; and also having the historical lowest labor force participation rate at 55.6%. Nevertheless, indications of improvement have been reported in the July 2020 report with a follow-through in the October 2020 report seen in Table 2. However, this is not totally celebratory as underemployment remains to be significantly high across the three quarterly labor reports. We have to emphasize that in a developing country like the Philippines, it is important to measure rates of underemployment as it would better contextualize employment situation of the economy [14]. Historically, the driving force of the overseas Filipino workers (OFWs) beginning 1970s (earlier known as overseas contract workers or OCWs) stems from the fact that employment opportunities are significantly insufficient plus the elements of job mismatch. A perfect example for the Philippine medical sector is the exodus of trained nurses and physicians to better opportunities abroad.

One significant reason why the Philippine economy has had dismal performance during the pandemic months is that

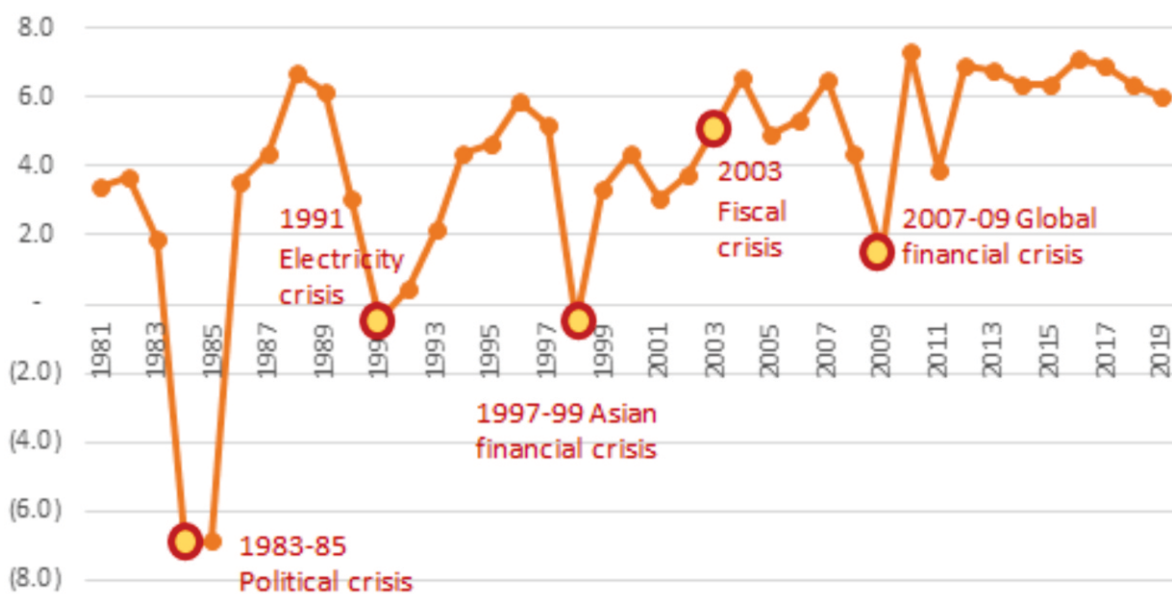
the epidemic epicenter of the country was in the National Capital region affecting adjacent provinces of Regions 3 and 4A. As we will see in the 2018 national accounts report in Table 3, these regions contribute significantly to total national output. Thus, the effect of the pandemic has been significantly felt by the economy as early as first quarter of 2020 noting that the community quarantine was only implemented in the second half of March (the last month of the first quarter).

**Table 2.** Labor Force Survey Reports covering 2020 pandemic months, to date. Data from PSA, reported in [15].

Labor and employment indicators	April 2020 (final)	July 2020 (preliminary)	October 2020 (preliminary)
Philippine population of aged 15 years old and above (in thousands)	73,722	74,061	74,307
Labor force participation rate	55.7	61.9	58.7
Employment rate	82.4	90.0	91.3
Underemployment rate	18.9	17.3	14.4
Unemployment rate	17.6	10.0	8.7

**Table 3.** Regional GDP latest report, using 2018 as base year. Data from PSA.

Region	Share to total real GDP in 2018 (in percent)	Growth share to GDP in 2018 (in percent)
National Capital Region (NCR)	31.8	1.8
Region 4A (CALABARZON)	14.8	1.2
Region 3 (Central Luzon)	11.3	0.7



**Figure 1.** Real GDP growth rates 1981-2019, crisis years indicated. Data from Philippine Statistics Authority (PSA); crisis periods from [13].

Another significant reason for the worst-record performance of the Philippine economy was due to its economic composition. The Philippine economy remains to be largely services-driven in terms of industrial origin. Consumption—both from the households and the government—constitute the expenditure side of national income accounts that contribute largely to spending. These economic characteristics are manifested in the “mall culture” that has driven urban centers over the last decades [16], and the prevalence of the cash transactions and retail economy, which is more particularly evident in the informal sector. Additionally, [4] noted that as the data shown by the PSA, there has been an increasing share in employment in the services sector in at least the last decade, which persists even in the current situation given the pandemic.

Metro Manila being the pandemic epicenter and economic hub (which is densely populated) had also similarities with Cebu City, which had a surge of infections during the months of June-July. It is in this context of the pandemic caused the government to re-launch an old program to relocate residents of the national capital back to the provinces, called the Balik Probinsya, Bagong Pag-asa program (shorthand, BP2). While the ultimate goal of the program is to decongest city centers especially Metro Manila owing to health protocols of the pandemic, a short-term version of this initiative is called the Hatid Probinsya (HP) program, which aims to immediately bring back individuals from Metro Manila to their respective provinces (called “locally stranded individuals”). There was a mixed reaction among local governments on the timing and the implementation of the BP2 and the HP, since it induced local transmissions to provinces and areas with relatively weak health care systems (which is extensively discussed in [17]).

A striking consequence of the Philippine pandemic experience is the “undoing” of macroeconomic fundamentals that the Philippine economy has been improving over the last years. The experience of the Philippine economy in the last months have proved that the COVID-19 pandemic has worsened both consumer and business confidence in the economy. This has serious effects on what the economic managers have initially hoped for during the beginning of the new administration: that the Philippines will be an upper-middle income economy. The economic recession that the country is experiencing has shown that the economy is back to 2014 levels of GDP per capita as shown in Figure 2. The latest level is even lower than that of 2014q4 (note that zigzags between quarters are due to seasonality effects). This story of a “failed economic leap” is not new: before the AFC, the Philippines already posted government budget surplus for 1997 and 1998, up until the AFC came in and kicked the dream of the government then that the Philippines will be one of the tiger economies by the year 2000. The Philippines' economic managers have hoped that the economy will cross the minimum GDP per capita to be classified as an upper-middle income economy (as early as 2016). Latest estimates of the World Bank Atlas Method show that the Philippines has USD3,830 per capita in 2018, with USD3,995 as minimum for a country to be classified as an upper-middle income economy [18]).

It is also noteworthy to see that given the seasonality of GDP (attributed to consumption patterns), the pandemic created a consumption pattern disarray to the extent that even this expected seasonality effects did not able to help improve national income accounts. This is because given

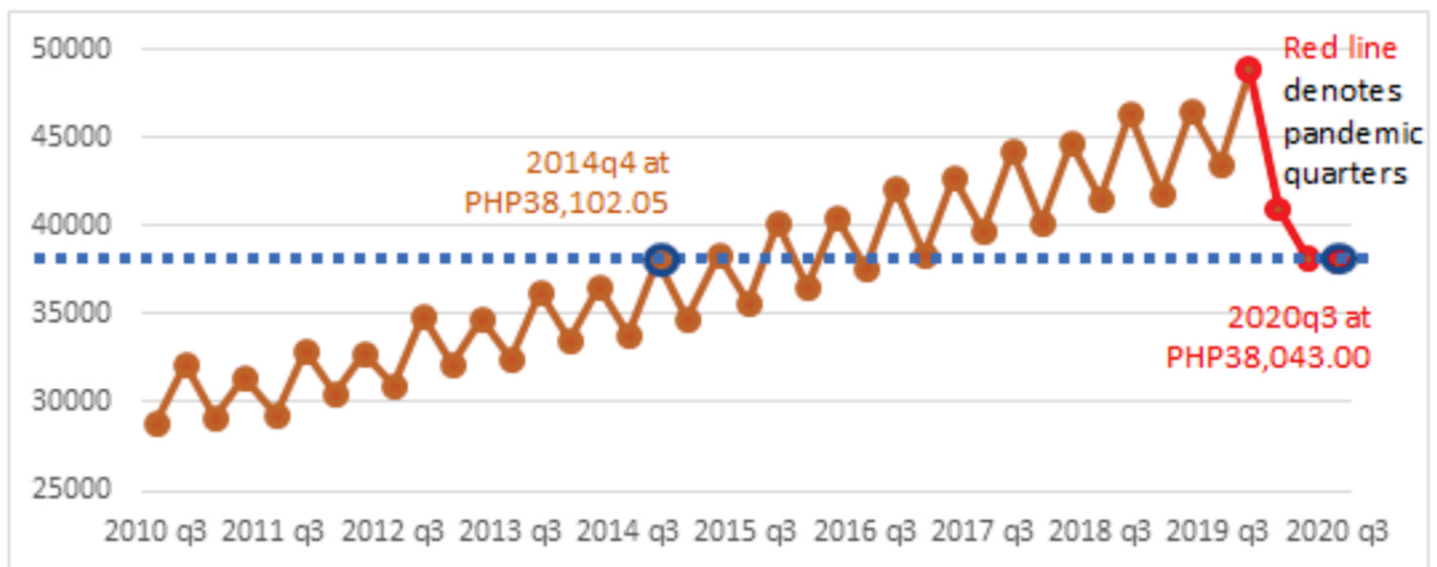


Figure 2. Real GDP per capita, 2010q3-2020q3. Data from PSA.

**Table 4.** Real GDP growth rates (in percent) in 2020, covering pandemic months. Quarter-on-quarter growth rates are author's calculations using latest reported data. Data from PSA.

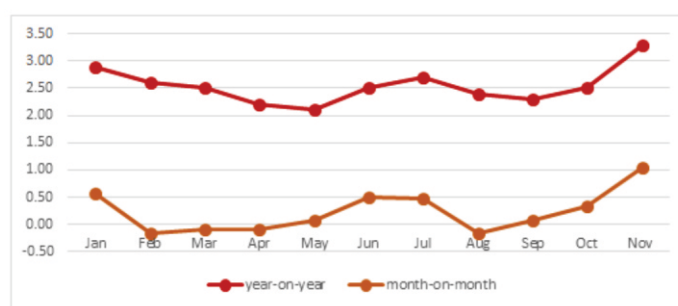
Real GDP growth	2020q1	2020q2	2020q3
Year-on-year, preliminary	-0.2	-16.5	-11.5
Year-on-year, revised	-0.7	-16.9	
Quarter-on-quarter (not seasonally-adjusted)	-15.86	-6.62	0.12

that classes in basic education are expected to open in the second quarter (but moved by the Department of Education to October 5) and the expected surge of consumption in the “ber” months, it did not pull-up significantly per capita GDP in the third quarter. This is even supported by the quarter-on-quarter growth of GDP between the third and second quarters: a dismal 0.12% growth, given in Table 4. Clearly, a reduction in year-on-year contraction does not imply an improvement as the government would claim (e.g., in [19]).

With a repeat of this failed realization of an economic boom, it is also important to note that the pandemic cannot be totally blamed for this economic undoing, but it only exposed further the constraints and problems of the Philippine economy and its economic institutions. While we learned so much from the AFC that made the Philippines resilient during the GFC, the pandemic proved a totally different experience that made our economic tools inadequate [20]. This is because as noted in Figure 1, virtually all recessions in the last forty years were financial, economic, or politically induced. This is the first time that a recession was induced by a pandemic. As [4] noted that the Philippine economy has a good history from learning in its previous recessions (which proved remarkable between AFC and GFC [5]), the tools and lessons from the past were not appropriate given that this is a different case of a recession. Moreover [4] and [21] furthered that such historical economic contraction during the pandemic was seen despite that the Philippine economy had good macroeconomic fundamentals relative to the ASEAN neighbors in recent years. Scholars also warned that the average performance of the economy relative to counterparts in Southeast Asia in the previous years may bring back the old moniker as the “sick man of Asia”. As reported by the International Monetary Fund [22], GDP per capita estimates show that Viet Nam is posed to overtake the Philippine economy, and further increasing the disparity in GDP per capita of the two economies in the medium-term. Even estimates from the Asian Development Bank has shown the Philippines lag behind its ASEAN neighbors in terms of total spending on the pandemic response (at USD21.45 billion) and also the lowest in terms of percentage of GDP (at a meager 5.83%) [23].

### Some interesting caveat: Price movements in a pandemic-induced recession

While economic or financial recessions are notorious as having low GDP growth (even negative growths) and high inflation rates (and to some extent double-digit inflation, or hyperinflation), price movements during the pandemic may be considered as “unusual” based from empirical expectations (e.g., in [12]). As we see in Figure 3, both year-on-year and month-on-month inflation rates during the reported months in 2020 have been relatively stable. The uptrend in November 2020 is due to the effects of the series of typhoons, affecting agriculture and food supply [24].



**Figure 3.** Headline inflation rates for January to November 2020, year-on-year and month-on-month. Month-on-month rates are author's calculations of CPI data. Data from PSA.

A simple macroeconomic model of aggregate demand and aggregate supply would suggest that in a pandemic, while aggregate demand usually adjusts more rapidly than supply (a leftward shift in this case), the pandemic have caused smaller leftward shifts in aggregate supply. This is suggested in Figure 4: the observed low inflation—both month-on-month and year-on-year—are possibly coming from production adjustments of firms due to the pandemic. Moreover, the pandemic may have crippled some industries but it provided opportunities for other modes of production, business, and services (e.g., medical and online-based activities). This is in contrast to the expected tandem of high inflation and low growth in a recession of economic or financial origin as described in Figure 5. These diagrams follow the arguments posed earlier in March by Krugman [25].

While pandemic spending is geared towards health, food and survival concerns, this does not create a widespread contagion in the economy. Unlike in a usual economic or financial recession, production subsides due to high costs induced by inflation (or hyperinflation) causing the demand side to panic and be disincentivized to hold money. As mentioned above, pandemic also offers some potential

opportunities—or silver linings as may be considered—to some sectors of the economy. This is even supported by the data on core inflation reported by the PSA—basket of urban goods excluding food and energy-related goods and services. Core inflation measures inflation momentum, *i.e.*, a purely demand-driven pressure to prices, which the PSA data shows that the behavior is consistent with headline inflation, as well as the upsurge due to the series of typhoons in October and November [4].

The quarantine restrictions that have been imposed over the months of the COVID-19 pandemic also taught us one important infrastructure that is neglected over the last decades: digital infrastructure. The pandemic served as a wake-up call to upgrade seriously and swiftly our digital infrastructure, from connectivity speeds to competitive telecommunications sector. The next section provides the reasons that necessitates the speedy rehabilitation, but with costs to some sectors of the economy.

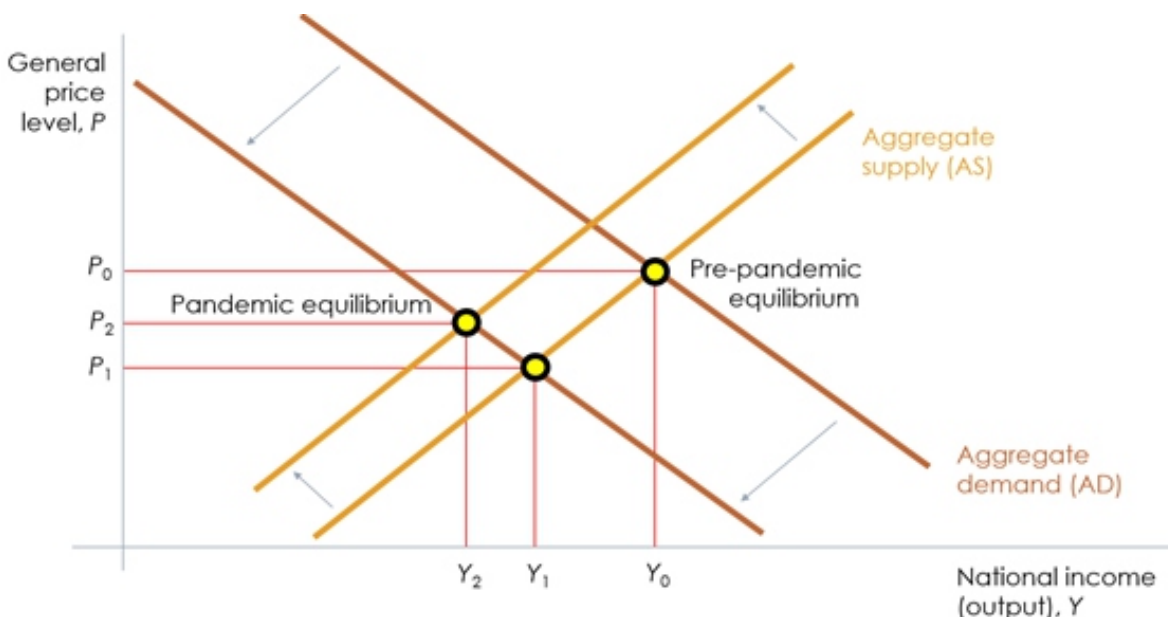


Figure 4. A simple macroeconomic model given a pandemic or health-related recession.

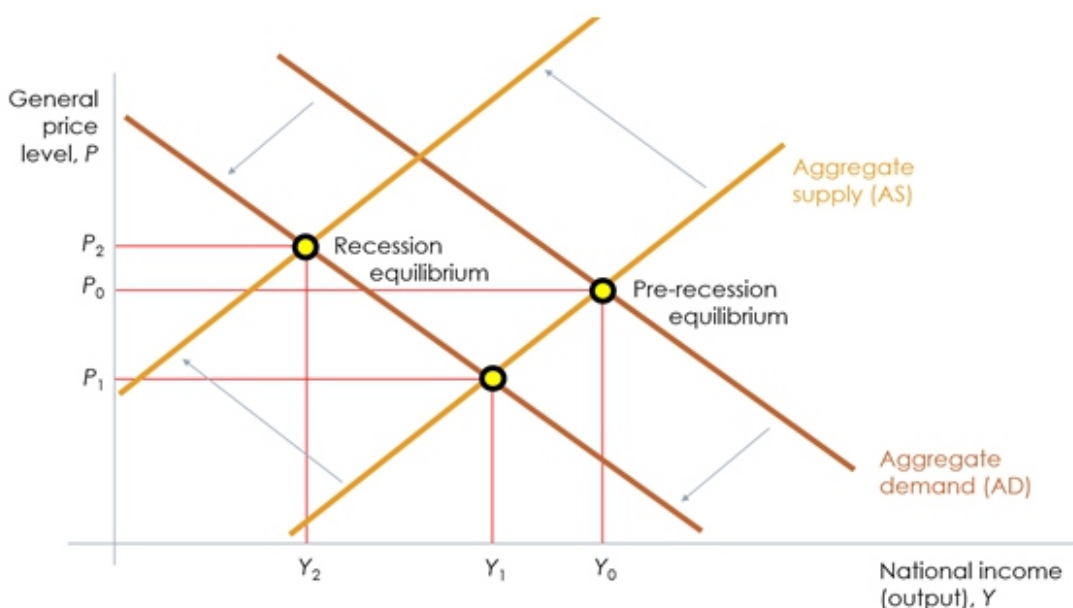


Figure 5. A simple macroeconomic model given an economic or financial recession.

## Digitization as the road to resilience and sustainability

For the longest time, the telecommunication sector of the Philippines was predominantly a duopoly (beginning its deregularization in 1992). While the sector blames the government for the significant transactions costs in expanding infrastructure, the government also blames the sector for the bad quality service owing to the less degree of competition. Recently, the current administration thwarted threats of closure and replacement to industry players should their services would not improve.

Now that there is third player in the telecommunication industry, doubts of cybersecurity attacks still persist. In addition, despite the legislative proposals to shorten the application processes for infrastructure upgrade and expansion, Philippine connectivity remains laggard with the rest of the Southeast Asian region and in the world [26]. These hampers the development of e-commerce (with the *Bangko Sentral ng Pilipinas* [BSP] leading the program since 2013), and now gravely affecting the quality of education delivered through remote and online modes (with the Department of Education supervising basic education).

As the economy remains largely cash-dominated, e-commerce in the time of the pandemic has a big room for improvement of access. While banks, financial institutions, and digital money transform platforms have documented a surge in the use of online means of financial payments and monetary transaction requirements, the government grapples with the distribution of its emergency subsidy program through provision of physical cash to identified recipients. Human interventions in the distribution take time for aid to be distributed; moreover, the government personnel tasked to be in the frontlines of these work have been reported to have contracted the virus during the distribution. To date, highly urbanized city governments of Makati and Parañaque have begun providing their local (and national) subsidy through electronic means. This also created a renewed call for the government to roll-out the national ID system (enacted already into law in 2018), as well as the call to revive the corruption-laden national broadband network program of the government in the past administration.

In addition to access to financial institutions, upgrades to digital platforms may be costly to both the consumption and production sides of the market. This limits to access and participation, which may prevent further sectoral development and competition among firms or market players. It also

prevents consumers initially in the informal cash economy to migrate to the formal and digital-based transactions economy. An example would be the eventual use of digital payments in major highways in Metro Manila beginning November. As the upgrade to digitization is costly to some extent, some road users might be forced to use secondary roads, which will create problems of traffic congestion. The ongoing upgrades have also caused serious problems in traffic congestion in major roads, and have caused affected local governments and national agencies to take action on the matter.

As digitization remains important in e-commerce development and sustainability, it highlights the fact that much of the low-income population do not have access to formal financial institutions such as banks. Pre-pandemic data of the BSP reveals that a large percentage of the adult Filipino population do not have access to financial institutions [27]. This prevents the further development of the e-commerce, notwithstanding that the Philippines was regarded to be the “text capital in the world” and with users who have been extensively active in social media: a consistent record in the last decade or so, to date [28]. The higher-income households having access to digital infrastructure coupled with their economic means (which constitute a significant portion of the group of digital natives or netizens), have developed some coping mechanism in the pandemic called “revenge spending”. This of course, is a privilege of the affluent class, and not those who are risking themselves of getting infected in search of economic opportunities and other sources of living. As mental health issues arise during the pandemic, well-off individuals and households have managed to create a version of retail therapy through digital platforms. This “revenge spending” is their way of compensating their supposed spending have the pandemic did not happen.

Not only that e-commerce phenomenon indicates the problem of uneven access to financial institutions through digital means, but also the access to remote learning among students. Apart from the dismal connectivity speeds, access to education—especially at the level of basic education—has been only relatively well for the above-average income households. Low-income households cannot afford to provide one electronic gadget for online learning use for each child, and to some extent, some households cannot even procure even a single gadget for this purpose. The problem is exacerbated by the fact that these households have low incomes to begin with (which they would devote to meeting basic necessities) and plus the fact that most low-income households are generally larger in size, given the predominantly extended family culture in the Philippines. By



an “extended family culture” we mean that households would have family members from grandparents to children of in-laws. Usually, extended families have household sizes that have more than five members. This practice of keeping children despite getting married and having their own families have become ingrained in Philippine culture over the decades. This is a clear manifestation of the so-called “digital divide” in literature that is not particular in the Philippines, but a realized byproduct of the COVID-19 pandemic in many parts of the world (*e.g.*, in [29], [30]). This is also noted in [31] citing [32]:

First, the digital divide is not a binary yes/no question as to whether the basic physical access to the Internet is available. Access does not equal regular and informed use. ... What matters is the extent to which people regularly use computers and the Internet for meaningful purposes. As [32] argues, “a digital divide is marked not only by physical access to computers and connectivity, but also by access to the additional resources that allow people to use technology well.”

Second, the digital divide is shaped by social factors as much as by technological factors. Technological fixes will not close the divide unless they also take into account the social reasons why people are not online.

One particular consequence of poor digital infrastructure in the Philippines is shown by how authorities report and manage data obtained in the pandemic response. Quality of data have deteriorated, owing to slow verification of cases, administrative roadblocks, non-aggressive response mechanisms, among so many problems. The recourse of the government to implement an “Oplan Recovery” (*i.e.*, a weekly updating of the data began in July to correct for data on recoveries, deaths, and active cases) is a clear indication of poor data management and quality checks in its reported cases. In addition, there has been a misfit of qualifications for pandemic response: only in the Philippines where you see retired generals manage the pandemic response (to no surprise that the “*pasaway* attitude” is the slogan), whereas in Viet Nam, Taiwan, New Zealand, and Germany, we see competent public health scholars, economists, and scientists leading the collective pandemic response and management. Despite the absence of a vaccine, notably these economies have proven that they can combat the effects of the pandemic.

## Do “we [really] heal as one”?

Given that some parts of the world have shown signs of recovery from the pandemic, scholars have been reminded

of the Balmis expedition: the first global vaccination program lead by Spain for its colonies in South America, and the Philippines during the beginning of the nineteenth century. The Balmis expedition from 1803 to 1806 was commissioned by King Carlos IV of Spain to be led by Francisco Javier de Balmis, an army official who happened also to be the king's physician. This expedition intended to mass vaccinate the population of the colonies against smallpox. While this historical event has shown massive and democratized access to vaccination in the Spanish Indies, modern-day conditions of access to quality healthcare may indicate some degree of inequality [33]. This remains to be a sensitive geopolitical and international relations issue [34], as the world wait for the vaccination developments. Whether in the global arena or in the Philippine setting, those with above-average financial and economic means are more likely to survive the pandemic than those who have low or meager household incomes. The dynamics of vaccine availability, affordability, and access in both the Philippine and global arena indicates degree of social justice—or injustice—that this pandemic has created.

As the big pharmaceutical companies announced on their vaccine development efforts, countries have already setup procurement protocols. This is even hallmarked by the historical rollout of the United Kingdom of its first vaccination in December 6, 2020. However, as it is revealed by data from the Duke University Global Innovation Health Center [35], the access to the vaccine is dominated by the high-income economies of the world. In contrast, the less developed countries including the Philippines have hoped for the initiative led by the World Health Organization: the solidarity trial of the vaccine that the institution is developing through its partners. These dynamics in geopolitics and international relations remind scholars of the supposed humanitarian approach to the COVID-19 pandemic even in the earlier pandemics (*e.g.*, AIDS, influenza, measles, and polio).

In the Philippines, the national government penned its theme for its pandemic response as “we heal as one”. Patterned after the slogan of the 2019 Southeast Asian Games hosting, the national government is encouraging a public-private multi-stakeholder collaboration in responding to pandemic effects: primarily the health concerns, and secondly the economic effects. However, as experience in the months during lockdown have shown, the discoordination even among the IATF-EID has proved that the pandemic response does not get better. Apart from the domination of retired military personnel in the task force, the national

government devised titles of persons in the implementation of the pandemic response: a chief implementer czar (and later, vaccine czar), testing czar, contact tracing czar, and isolation or quarantine czar. However, it must be noted that the title “czar” originally refers to the Russian emperors who ruled until 1917: Nicholas II being the last emperor, deposed violently to give way to the revolutionary government, but killed a year after. In addition to cumbersome bureaucracy in the pandemic response, there are poor data reporting, increasing cases of infection, military as disciplinarians (hence, the “*pasaway* attitude”) are some of the points that would require serious revisit and rethinking. There is even no serious roadmap locally to develop local vaccines that will help support production given that countries around the world will have significant struggles in procuring vaccines. No wonder the medical sector has raised their remonstrances during the implementation of various degrees of community quarantine. This is even exacerbated by the series of natural disasters during the year (Taal Volcano eruption in January, series of typhoons in October-November, and episodes of earthquakes). The rollout of the vaccination program of the government for measles, polio, dengue was strained due to the pandemic, exacerbated by the increase of leptospirosis cases after the typhoons.

Quality of institutions also matter, whether they are economic, political, health, or social. These institutions also indicate some degree of compliance with health protocols and guidelines. While there has been a study across European economies [36], anecdotal evidence and reports show that a similar pattern also happens between and among local governments in the Philippines. An example of this mistrust on institutions coupled with poor management during the months of June and July made Cebu City to be the second epicenter of the pandemic. Additionally, while Baguio City was praised for its contact tracing efforts and infection mitigation, a sudden surge of cases was noted in end November to early December, which again caused alarm for the IATF-EID (a similar pattern was also observed in Davao City). It also brought forth alarm to the government to ramp up medical schools to produce needed physicians to help combat the pandemic and provide support to the medical sector as a whole. As this experience negates the objective of “healing as one”, it also affirms an earlier historical observation in [37]:

[The absence of doctors] also correlates with other knowledge-related deficits, such as illiteracy, low school enrollments, and small national investments in scientific research. Of course, national poverty levels help explain

the absence of adequate health care, but that is the point: in the contemporary world, access to the knowledge and care embedded in science-based medicine depends on income and wealth, not on need or just deserts.

The issues of health management and economic well-being in this pandemic give rise to revisiting the issues of global justice, more particularly in the context of the Philippines. As there are highly unequal access to healthcare due to economic circumstances, the digitization roadmap may further worsen the degrees of inequality among households of varying incomes. The government must not only be the leader in times of recession, as [38] would suggest, but also be the enabler of a more democratized access to economic and health opportunities. Note that while inasmuch as everyone would want to recover from this pandemic and be resilient in the future, [39] noted that the Philippines is one of the vulnerable economies in the long term. This is an important facet of the pandemic, since as the economies of the world proposes various forms of stimuli to pump-up the economy from the recession, [40] warns that such unequal access to the stimulus may even induce inequality that may be in place prior to the pandemic:

Just as inequality creates a need for stimulus, they argue, stimulus eventually creates more inequality. This is because it leaves economies more indebted, either because low interest rates encourage households or firms to borrow, or because the government has run deficits. Both public and private indebtedness transfer income to rich investors who own the debt, thereby depressing demand and interest rates still further.

Moreover, the Philippine government should also revisit its program of pandemic management, as it espouses the “health versus economy” trade-off in dealing with the COVID-19 pandemic. The global tug-of-war on access to vaccines as integral in the pandemic response is also much correlated to the income and education inequality across the globe. Finally, as it will be affirmed by this pandemic, experience of countries shows that there is no trade-off between health and the economy during this pandemic: the goal is not to balance but to resolve it altogether. In a more stringent argument, economists assert that health is even more important (and is a prerequisite for economic recovery). That is, problems of the pandemic must first be addressed before economic concerns. As [4] puts it more directly, a healthy populace is a prosperous economy. But with this rhetoric of a “trade-off”, waves of pandemics will just result to a vicious cycle of lockdowns and eases of

protocols that are not sustainable and resilience-building. This “trade-off” argument in the Philippines provided for additional sources of inequality in access to healthcare, and in provision of economic opportunities. Finally, as [25] emphasized,

The point is that only part of what we're facing is a conventional recession, which can be offset by fiscal and monetary policy. The rest of it is more like a natural disaster, where the government's role is to help families avoid economic hardship, not put them back to work.

## Acknowledgements

The author is grateful to Dr. Liberty I. Nolasco (GMCS), Dr. Faith Christian Q. Cacnio (BSP and Philippine Economic Society), Professor Chadwick C. Sy Su (University of the Philippines Manila), and Mr. Brian Irvin Chan (De La Salle University Manila) for their comments during the presentation of the earlier version of this paper in the first Top Of Mind International Conference. The author is also indebted to the comments and suggestions given by the reviewers in improving this paper.

## References

1. Abueg LC. (2020) Silver linings in Philippine history and macroeconomics of the COVID-19 pandemic: Some ways forward for resiliency and sustainability. Proceedings of the Top Of Mind International Conference 1.
2. Goldin I. (2014) Future opportunities, future shocks key trends shaping the global economy and society. Citi GPS: Global Perspectives and Solutions.
3. Gates B. (2015) The next outbreak? We're not ready. TED Talk.
4. Cacnio FCQ. (2020) The Philippine economy in the time of a pandemic: developments and prospects. Top of Mind First International Conference.
5. Hoffman F. (2015) Black swans and pink flamingos: Five principles for force design. War on the Rocks: Texas National Security Review.
6. Johns Hopkins University Coronavirus Resource Center. (2020)
7. Punongbayan JCB. (2020) How data debunk Duterte's toxic 'pasaway' narrative. Rappler.
8. Blair EH, Robertson JA. (1909) The Philippine Islands, 1493-1898. Cleveland, Ohio: Arthur H. Clark Company.
9. CNN Philippines Staff. (2020) Lawmakers file own version of Bayanihan 3 seeking additional COVID-19, disaster relief. CNN Philippines.
10. Arguelles CV. (2019) “We are Rodrigo Duterte”: Dimensions of the Philippine populist publics' vote. *Asian Politics and Policy* 11(3):417-437.
11. Malthus TR. (1798) An essay on the principle of population, as it affects the future improvement of society, first edition. London: J. Johnson, St. Paul's Church-yard.
12. Dacanay SJO III, Hapitan RB, Abueg LC. (2018) Macroeconomics and industry analysis. In: Santos RR (ed.). *Essentials of Investments in the Philippine Capital Market*, third edition. Las Piñas City, Philippines: Southville Global Education Network.
13. Abueg LC. (2020) *Ekonomiks: ang Pilipinas at ang sandaigdigan*. Manila: St. Augustine Publications.
14. de Dios ES, Dinglasan K. (2015) Just how good is unemployment as a measure of welfare? A policy note. *Philippine Review of Economics* 52(2):234-245.
15. Philippine Statistics Authority. (2020) Employment Situation in October 2020.
16. Rico J, de Leon KRC. (2017) Mall culture and consumerism in the Philippines. *State of Power 2017*. Transnational Institute.
17. Correa LNV, Abueg LC. (2020) The Philippines' Balik Probinsya, Bagong Pag-asa initiative and the real estate development sector during the COVID-19 pandemic: some policy morals. *International Journal of Real Estate Studies* 14(S2):156-176.
18. World Bank (2019). *Classifying countries by income*.
19. Lopez V. (2020) Palace on Q3 GDP data: Economy on path to recovery. *GMA News Online*.
20. Abueg LC. (2020) Extended, enhanced, and extreme: macroeconomic implications of the community quarantine in the Philippines due to the COVID-19 pandemic. *Economics and Management Matters (CEM Discussion Paper Series)* no. 2020-01. College of Economics and Management, University of the Philippines Los Baños.
21. Monsod TMC, Gochoco-Bautista MS. (2020) Rethinking “Economic Fundamentals” in an era of global physical shocks: Insights from the Philippine experience with COVID-19. *Asian Economic Papers*:1-45.
22. International Monetary Fund. (2020) *World Economic Outlook, October 2020: A Long and Difficult Ascent*.
23. Pernia EM. (2020) Health is economy: some lessons from COVID-19. *UPSE Discussion Paper* no. 2020-23.
24. Philippine Statistics Authority. (2020) *Summary Inflation Report Consumer Price Index (2012=100): November 2020*.
25. Krugman P. (2020) Some wonky thoughts on economic policy in a time of pandemic.

26. Lopez ML. (2019) PH internet economy still the smallest in Southeast Asia. CNN Philippines.
27. BusinessWorld. (2020) BSP approves regulatory framework for digital banks.
28. Buccholz K. (2020) These are the countries that spend the most and least time on social media. World Economic Forum.
29. Myers J. (2020) 5 things COVID-19 has taught us about inequality. World Economic Forum.
30. Allmann K. (2020) COVID-19 is increasing digital inequality: We need human connectivity to close the digital divide. The Oxfordshire Digital Inclusion Project.
31. Chen W, Wellman B. (2005) Minding the Cyber-gap: the Internet and Social Inequality". In: Romero M, Margolis E (eds.). The Blackwell Companion to Social Inequalities. Cornwall, United Kingdom: Blackwell Publishing.
32. Warschauer M. (2002) Reconceptualizing the digital divide. First Monday: Peer-reviewed Journal on the Internet 7(7).
33. Franco-Paredes C, Lammoglia I, Santos-Preciado JI. (2005) The Spanish royal philanthropic expedition to bring smallpox vaccination to the New World and Asia in the 19th century. *Clinical Infectious Diseases* 41(9):1285-1289.
34. Letzing J. (2020) How countries are dealing with the delicate matter of who to vaccinate first. World Economic Forum.
35. Duke University Global Innovation Health Center. (2020).
36. Chan HF, Brumpton M, *et al.* (2020) How confidence in health care systems affects mobility and compliance during the COVID-19 pandemic. *PLoS ONE* 15(10):e0240644.
37. Tilly C. (2005) Historical perspectives on inequality. In: Romero M, Margolis E (eds.). The Blackwell Companion to Social Inequalities. Cornwall, United Kingdom: Blackwell Publishing.
38. Keynes JM. (1936) The general theory of employment, interest, and money. London: Macmillan and Company Ltd. Reprint: Palgrave Macmillan.
39. Economist. (2020) Daily chart: Which economies are most vulnerable to COVID-19's long-term effects?
40. Economist. (2020) Starting over again: The COVID-19 pandemic is forcing a rethink in macroeconomics.