

The Philippines' *Balik Probinsya, Bagong Pag-asa* Initiative and the Real Estate Development Sector during the COVID-19 Pandemic: Some Policy Morals

Leonard Nevin V. Correa^{1*}, Luisito C. Abueg²

¹Netscore Resource Management & Training Center Company, Manila, Philippines

²University of the Philippines Los Baños, College, Laguna, Philippines

*Corresponding author's email: leonardnvcorrea@gmail.com

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Abstract

The Philippine government attempts to mitigate economic setbacks of the COVID-19 pandemic, as the country has been included in the top 20 countries with highest infections worldwide and the highest in Southeast Asia, already at 300,000 level. The lockdown of 198 days as of 1 October 2020 contributed to the continued dismal performance of the Philippine economy, which is now officially in recession at -16.5% preliminary growth rate reported in the second quarter of 2020, worse than the recession during the Asian Financial Crisis. Given these adverse effects to the economy, this paper studies the role of the real estate development sector to serve as a catalyst in providing new sources of value-added to the macroeconomy under the “new normal”. Using the lens of institutional economics with tenets of economic history, this paper attempts to investigate the feasibility of reviving an old program of the Philippines to decongest city centers, particularly the National Capital Region. Under the initiative “Balik Probinsya, Bagong Pag-asa” (translation: “Return to the Provinces, with New Hope”; shorthand, BP2), the national government primarily aims to decongest the region to aid in distancing protocols warranted by the COVID-19 pandemic. While it is important for a multi-sectoral approach to this initiative, economic opportunities aligned with health protocols must be placed so as not to defeat the program objectives. We suggest ways of effective collaboration and cooperation between various real estate industry stakeholders to ensure success and sustain development through this re-lived initiative. We also cite particular cases of township models that have been implemented and are continuously developed that will emulate the multi-sectoral approach to this program. A policy framework for the real estate development sector of the Philippines is provided to highlight the importance of its role and potential contributions to this initiative.

Keywords: COVID-19 pandemic, real estate development, institutional economics, rural-urban migration, reverse migration

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1.0 INTRODUCTION: THE PHILIPPINES' PANDEMIC EXPERIENCE

The Philippines is one of the countries in the world that has been significantly affected by the COVID-19 pandemic. It has the highest count of infections in Southeast Asia. As of 1 October 2020, 198 days after the implementation of the community quarantine in Metro Manila (formally, the National Capital Region) – the Philippines is already at the 300,000 level of total infections, according to the Johns Hopkins University Coronavirus Information Center. This also placed the Philippines among the top 20 in the world, in terms of number of infections.

Led by the Inter-Agency Task Force for Emerging and Infectious Diseases (IATF-EID), health protocols and guidelines were put in place; with the implementation of a community quarantine¹, which was earlier known as the “Luzon Lockdown,” being part of the strategies. To aid in the implementation of health, social, political, and economic measures to mitigate the effects of the pandemic, the Philippine Congress through the justification of the national government, ratified Republic Act No. 11469, known as the *Bayanihan to Heal as One Act*² (Official Gazette of the Philippines, 2020a). Effectively, Metro Manila was placed under a lockdown that lasted until May 31, 2020, longer than what was implemented in Wuhan, China (the global epicenter of the pandemic) and in Italy³.

Realizing the adverse economic and social effects of the pandemic, the national government has revived an old program in the context of the pandemic: The *Balik Probinsya, Bagong Pag-asa* Program (translation: “Return to the Provinces, with New Hope”; shorthand, BP2), through Executive Order No. 114 (Official Gazette of the Philippines, 2020c). As Metro Manila is the most populous region in the country due to its economic vibe and promise of opportunities, the BP2 program intends to decongest the national capital to meet the prescribed physical (or social) distancing protocols suggested by the World Health Organization (WHO) and local health officials. While the BP2 program also aims to incentivize people in Metro Manila to return to their provinces for permanent relocation, previous attempts by past national government administration saw significant difficulty in implementing the same program, owing to a multitude of reasons.

Some of the reasons that make Metro Manila the economic hub are job prospects, educational opportunities, and permanent relocation. In addition to these persistent lures from the economic capital, the choice of relocation by the government has not been given enough and proper planning, both in the short-term and long-term. Some relocation sites do not even have adequate infrastructure (e.g., road networks, and provisions for utilities like water and electricity). Residents' locations may be too far from work or not covered by public transport. Social institutions within relocation sites such as schools, religious centers, and commercial centers, among others may be non-existent. Relocation sites have been possibly a matter of "captive voters," of politicians taking advantage of "investing" into relocation in the hopes of providing additional votes in upcoming elections.

A significant effort, one worth mentioning, was made during the administration of Gloria Macapagal Arroyo (President of the Philippines from January 2001 to June 2010), in an effort to relocate key government agencies to various parts of the country, based on their executive mandate. However, this did not materialize as it faced significant opposition and conflict among the ranks of civil servants (Abueg, 2020a). As another intervention to mitigate the problem of increasing population in the national capital (which has some implication to rising informal settlement), local government units through donor non-government organizations resorted to urban upgrading of slum areas (e.g. Minnery et al., 2013; Veneracion, 2008) – such policy resulted in residents remaining to stay in the national capital instead of relocating outside of it. Nevertheless, despite the fiscal budget constraints and implementation hurdles of similar programs in the past, the national government has attempted to revive the program in the context of a health crisis. While there are initially at least 10,000 individuals who have signified their interest in being part of BP2 (C. Gonzales, 2020), the national government has identified at least six provinces to be home to relocates from Metro Manila (Reganit, 2020). The national government also expects that around one million residents of Metro Manila will eventually join the program, through the leadership of the National Housing Authority (Ordinario, 2020a).

In this paper, we will begin by contextualizing the pre-pandemic state of the Philippine macroeconomy and the real estate sector. Given that Metro Manila is the main target of decongestion of the BP2 program, we will provide trends and data that will establish the continuous attractiveness of the Philippines' national capital to migrants. As BP2 is a developing initiative during the Covid-19 pandemic, we provide developments of the program as it is reported in the recent months. These will aid in suggesting the appropriate real estate models to keep the emigrants of Metro Manila through BP2 from returning to the national capital. Furthermore, as this is a multi-stakeholder program, it would be of interest to analyze institutional dynamics – from the classical real estate models to township and community models – and how to revise these models to adapt to the situations of the pandemic.

As we will show in the next sections, despite the perceived gloomy past versions of BP2, we highlight some important silver linings: the potential role of the private sector – particularly the real estate development sector – in aiding the program by providing BP2 with a more cooperative framework with the private sector and also a source of value-added for the macroeconomy, which is important in these difficult times. Moreover, the participation of the real estate development sector will be important as a conduit of job creation and promoting economic redundancy, virtues that are important in times of economic recession, taking into consideration that the pandemic is a health crisis that is inducing economic depression, unlike in recent history where local, regional, or global economic crises were of solely financial origin. We will also demonstrate that population data for Metro Manila continue to indicate congestion, despite government efforts to address this issue through previous versions of BP2, which further were supported by the demographic trends discussed by the UPPI (2020).

While BP2 is a developing program, and given the developments of the Philippines's response to the pandemic, the paper uses reports as indications of program development, as these provide up-to-date progress of BP2. The paper covers the state of the real estate sector in the Philippines as reported by official national data, and analyzed alongside population data particularly in Metro Manila which is the subject of BP2 implementation. Note also that the paper is limited in terms of accessing data and sources owing to mobility constraints as part of community quarantine restrictions, and also the time necessary for real estate data to be updated by the national repository.

To date, the COVID-19 pandemic in the Philippines continues to affect the macroeconomy as well as the real estate sector, as the national government imposes various degrees of community quarantine across various regions of the country. The pandemic has crippled the economic momentum of the Philippine economy, and infections continue to rise. As workers lose their jobs and economic opportunities become bleaker, the real estate sector is also affected by the decline in demand for real properties, rentals, and prospects of real estate construction projects.

■ 2.0 METHODOLOGY

To facilitate the discussion of BP2 in light of the COVID-19 pandemic, macroeconomic data was obtained from the Philippine Statistics Authority. Quarterly data from 1998q1-2020q2 (90 quarters) covered real gross domestic product (GDP), gross value-added of the total real estate sector and its components (real estate, ownership of dwellings, and renting and other business activities). Additionally, we also obtained data on population growth – actual and projected – coming from various years of the Census of Population and Housing. We also obtained data on official growth rates, with some growth rates obtained through authors' calculations (as some of the data are also reconciled given updates on national reports). Guided by the literature on demography and in population economics, we employ some computations on the gathered population data.

We also reported descriptive statistics for the whole data set, as these were needed to justify some of the indications of the property cycle (Mueller, 1999; Mueller, 2002) – one of the fundamental models in real estate economics. Additionally, we showed statistical relationships of the economic variables obtained through correlation analysis. This was earlier done by Simbire (2019) in claiming an "empirical study", although the paper only reported simple correlations of annual data over a 20-year period⁴.

It must be noted that as more recent government reports revise their data series on the same set of economic variables, it would require some method to reconstruct various reported data series of a certain economic variable into a complete time series data covering the

indicated period. To do this we employed methods of backcasting, guided by the techniques in the UN Statistical Division's *Handbook of Backcasting*.

As the pandemic continues to progress, the national government revises its programs of actions and plans to mitigate the effects of the pandemic, particularly with respect to the economy. To monitor the developments, we used reports coming from credible media sources, and mentioned as they are needed⁵. This is to address delays in the reporting of national official sources and some errors uncovered *post facto* in earlier reports. It is also noteworthy to highlight that these media reports also provide details that are non-economic in nature that aid in understanding the program using the next technique of analysis.

With the data analysis and accounting for the multi-stakeholder nature of the BP2 program, we used the tenets of institutional economics to analyze the interrelationships of various institutions that affect the whole real estate industry in particular and the macroeconomy in general. Such analysis is not easy, since it requires economic understanding of historical events – as argued in Schumpeter (1954) and Corpuz (1997). In the case of BP2, we try to understand the interactions of institutions⁶ from an economic history perspective, which contributes to the formation and implementation of the program. Through this analysis, we propose adopting a township model-concept inculcated in the BP2 program that is adept to the economic situation brought forth by the pandemic. It will also attempt to capture the economic opportunities that will arise despite the abounding adverse effects of the community quarantine.

■3.0 REAL ESTATE AND MACROECONOMIC PROFILE

While the COVID-19 pandemic is a health crisis inducing a global economic recession, specifically a Philippine economic recession, it must be noted that economic managers have used responses that were learned from crises that are of economic or financial origin, such as the Asian Financial Crisis (AFC) in 1998 and the Global Financial Crisis (GFC) in 2008. Note that despite being related to real estate bubbles (the former in Thailand, affecting the ASEAN bloc) and the latter emanating in the United States, the Philippines has had a good management of the economy due to the lessons learned from the AFC applied to the macroeconomic fundamentals (Dacanay et al., 2018). It is also noteworthy to highlight that the COVID-19 pandemic resulted to an all-time historical low economic growth since the country started its national income accounts in 1946: much lower than any other local or global recession of financial or economic origin⁷.

It is with this important characteristic of the COVID-19 pandemic that we begin this section by providing trends and salient points of the Philippines' macroeconomic performance in the previous decades. The Philippines' economic managers had only conscious memory of economic management as late as after the 1983-85 political crisis of the Marcos era, or to some extent minute recollections of childhood experiences of the early years after the Second World War. The bottom line is that the last epidemic that struck the country was the Spanish Flu of 1918, a time in which probably none of today's economic managers and policymakers were alive. This is why possibly some of the economic responses that the government and the general public may have thought of may not be fully applicable, effective or welfare-improving in this version of a health-crisis-induced economic downturn. In addition, recent controversies in the national vaccination program (the dengue vaccine scare, leading to measles outbreak and re-emergence of polio) have negatively impacted the national health capacity of the country (Abueg, 2020a).

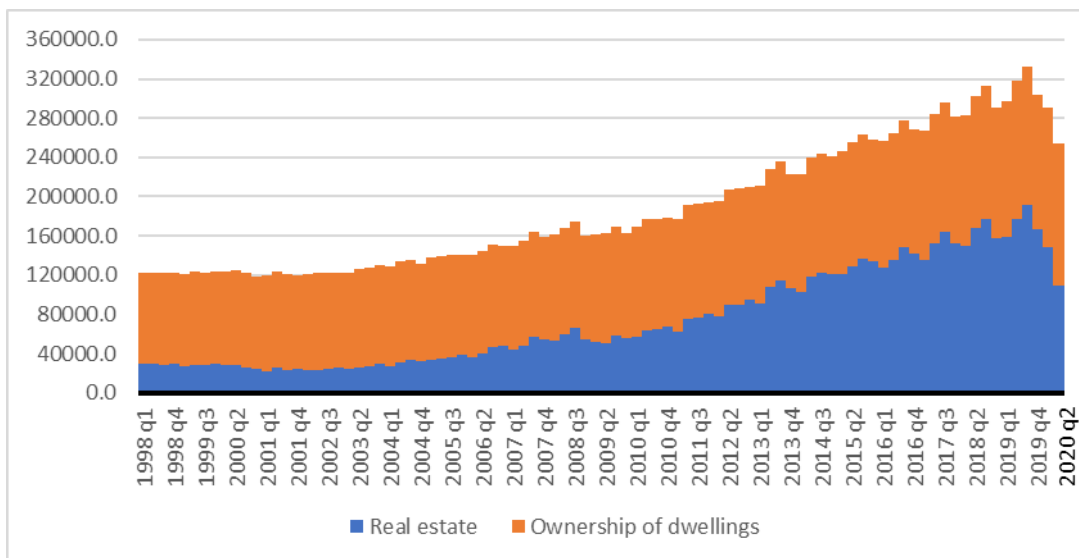


Figure 1 Gross value-added of real estate and ownership of dwellings in PHP million at 2018 prices, 1998q1-2020q2
(Source: Philippine Statistics Authority)

It is imperative to revisit some of the macroeconomic indicators that describe this sector in the context of the macroeconomic performance of the Philippines. The Philippines has had its own share of macroeconomic disasters; however, the building of macroeconomic fundamentals by previous administrations has contributed to the country's remarkable performance in the past years. As

noted earlier, a good indication is the resiliency of the economy during the GFC. This increasing trend in the context of the real estate sector can be seen in Figure 1.

Real estate investment has continued to increase significantly over at least two decades. While ownership of dwellings has had small growth in these two decades, real estate has proven to be a significant source of investments in the country. This has been supported by private initiatives, even in the last quarters before the COVID-19 pandemic. In spite of the crises the Philippines has had experienced in the last two decades – whether local, regional, or global – steady growth in real estate gross value-added has provided the country a source of income for the macroeconomy. Looking at the growth rates of every quarter, Figure 2 supports the trends shown in Figure 1: ownership of dwellings has grown at an almost constant but minimal rate. Real estate, covering other components apart from ownership of dwellings has shown volatile growth. It even has had quarters that saw it post negative growth (in 2001-2002, 2008-2009, and in the first two quarters of 2020). At the minimum, real estate industry growth may be sourced from ownership of dwellings.

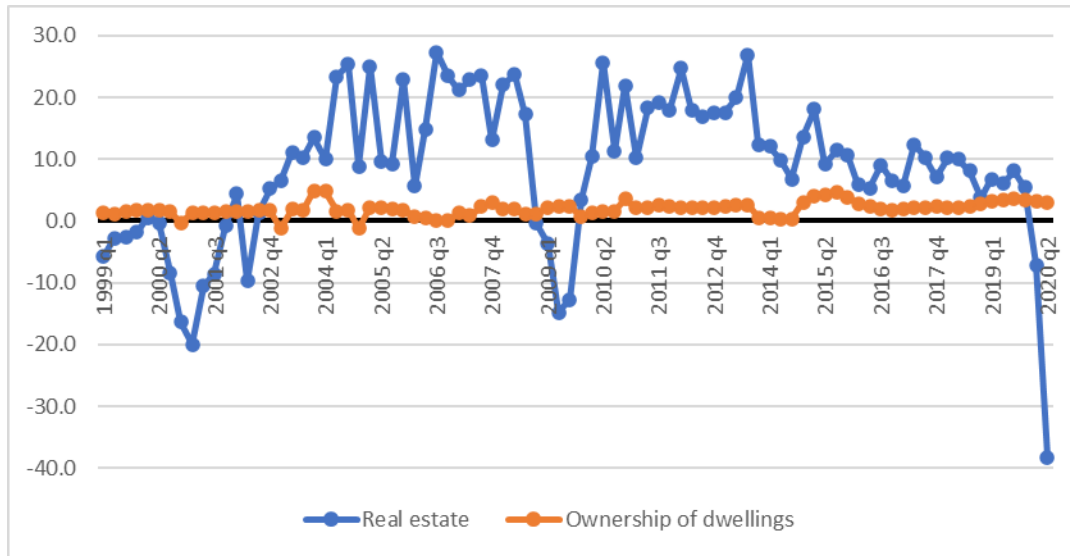


Figure 2 Year-on-year growth of real estate and ownership of dwellings in percent, 1999q1-2020q2 (Source: Philippine Statistics Authority)

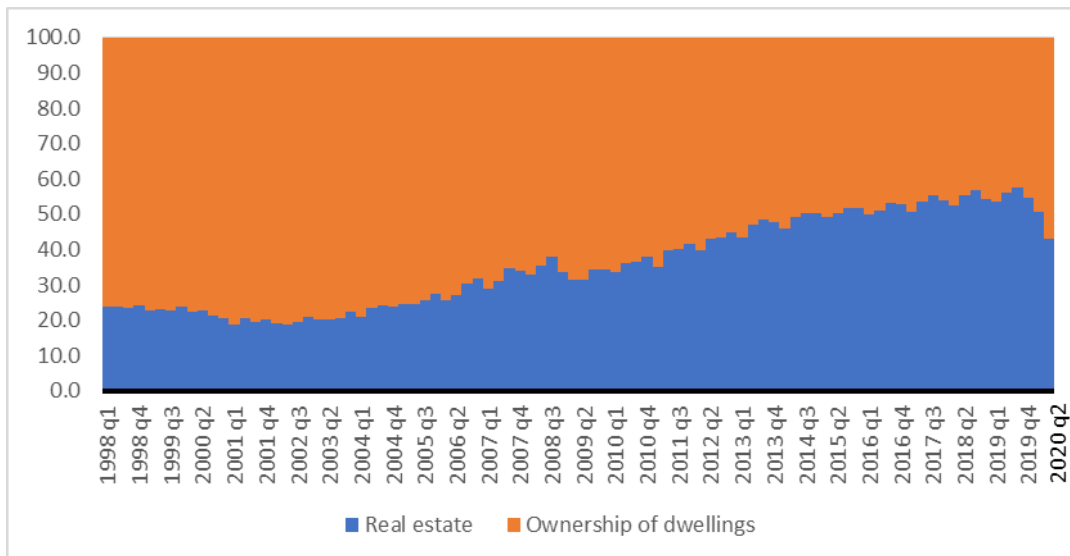


Figure 3 Share of real estate and ownership of dwellings to total gross value-added of industry in percent, 1998q1-2020q2 (Source: Philippine Statistics Authority)

Observing carefully Figure 1 and Figure 2, ownership of dwellings as part of the total real estate industry increased minimally and almost steadily, and that real estate has dominated the industry in the last two decades while having volatile growth. However, the share of real estate against ownership of dwellings has reversed; while in the beginning of 2000 ownership of dwellings had a major share in the total gross value-added of the industry, this was completely reversed in the beginning of 2020, reflected in Figure 3. This suggests that the

industry has diversified its sources of value-added apart from the ownership of dwellings, which is much of a sure demand, given that the Philippines' population has increased in the last century (Abueg & Calub, 2020).

As we have noted in Figure 2, growth in the gross value-added of real estate had a significant share in the total private investments of the macroeconomy, given its continuous increase in total value-added shown in Figure 1. However, the volatility of real estate growth may have contributed to movements in GDP growth. Note that total macroeconomic growth in the last two to four decades were influenced by economic booms and more significantly, recessions of various origins. As the trend suggests, GDP growth in the last two decades share similar directions of ups and downs with respect to growth in gross value-added of the real estate, as shown in Figure 4. The results of a correlation test, the details of which are to be found in the appendix, show significance, indicating a moderate positive linear relationship.

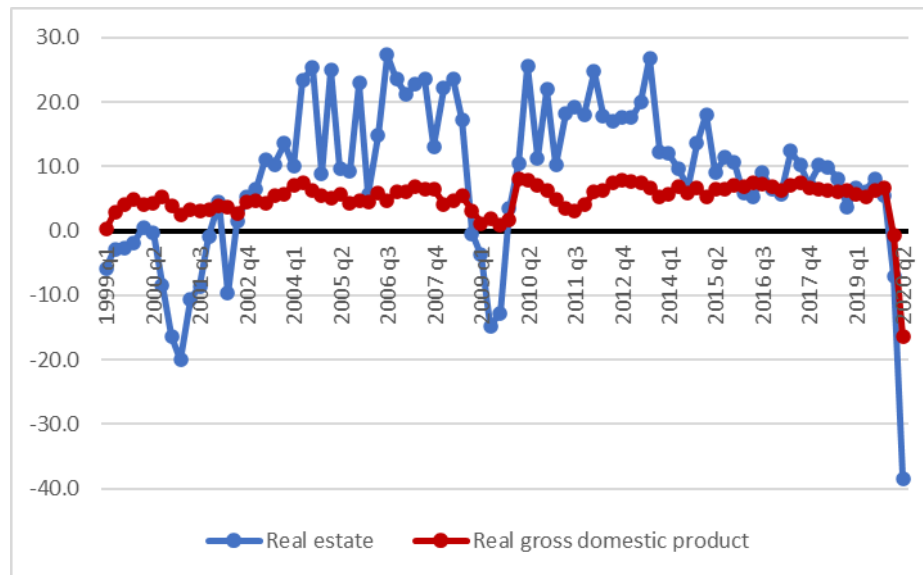


Figure 4 Year-on-year growth of real estate and real gross domestic product in percent, 1999q1-2020q2
(Source: Philippine Statistics Authority)

To further provide insights on the covered period, we provide some period averages of the last 90 quarters in Table 1. These statistics support the observations we have from Figure 1 to Figure 4. While ownership of dwellings grew minimally at 1.97% and has reduced its share in the industry's gross value-added in the last years, it has remained large in terms of contribution to total gross value-added in the industry at 64.01%. This is corroborated by the average level of gross value-added at PHP112.3 billion of the PHP187.7 billion value-added of the whole industry. However, the macroeconomic conditions of the last two decades have provided real estate some opportunity to grow at 8.64%, as shown in the average growth of the period: more than twice of total industry growth at 4.26%, and fourfold higher than the growth in ownership of dwellings.

Table 1 Period averages of select indicators using data from the Philippine Statistics Authority.
Numbers are authors' calculations using the data series.

Indicator	Real estate	Ownership of dwellings	Industry total
Gross value-added in million PHP (1998q1-2020q2)	75,349.06	112,328.03	187,677.09
Percent growth (1999q1-2020q2)	8.64	1.97	4.26
Percent share to total gross value-added (1998q1-2020q2)	35.99	64.01	100.00

Such growth of real estate may not have completely been a cause for celebration, as we have learned from the factors that precipitated the AFC and the GFC. While the macroeconomy enjoys an increasing growth of real estate gross value-added, this must be looked at with caution, as suggested by the property cycle in Figure 5. The property cycle is a much-recognized figure in real estate economics, which explains the trends in boom and bust in the real estate sector. Mueller (1999) and Mueller (2002) argue that there are even more specific cases of property cycles: the demand real estate property cycle and the financial real estate property cycle. Mueller (1999) and Mueller (2002) even noted that he estimated that a complete cycle would last eighteen years, and that there is a lag between the demand and financial property cycles, due to delays in payments of buyers and reported revenues of brokers and sellers.

From the period averages, total industry gross value-added average in Table 1 is close to almost double of the period average, as reflected in Figure 1. Given that the period average growth of real estate is already at double digits with comparisons to ownership of dwellings growth and total industry growth stated above, it is possible that in the next years, total industry value-added may have reached twice the period average.

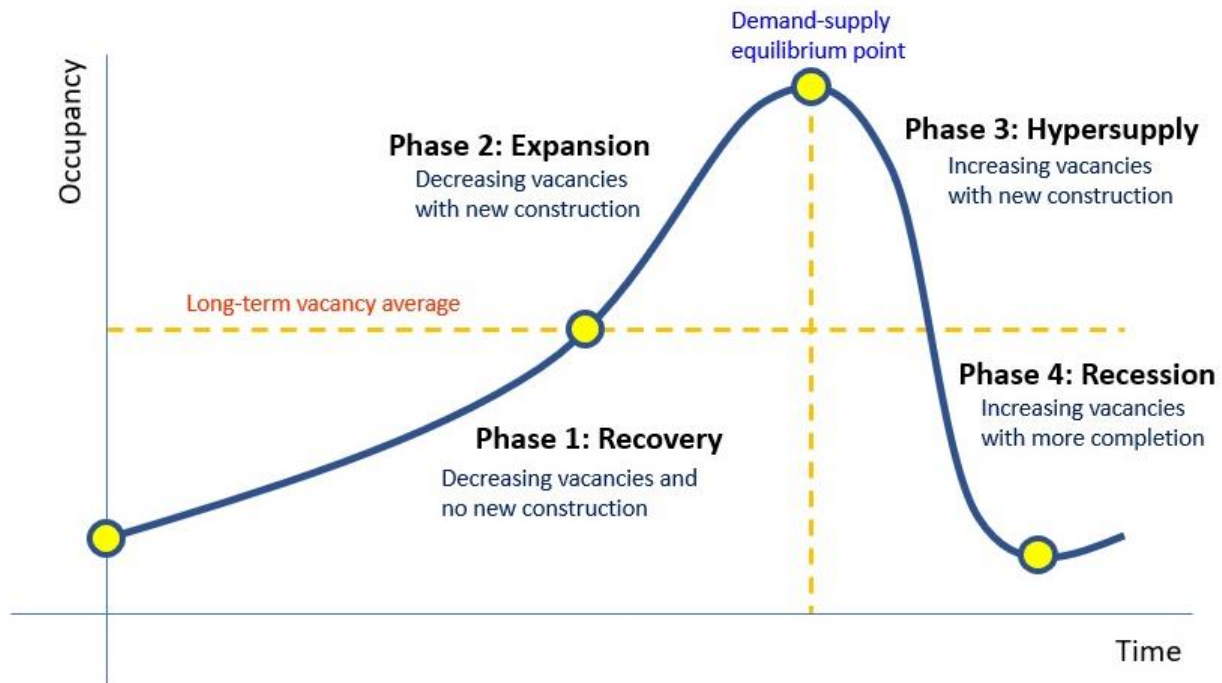


Figure 5 The property cycle and the four quadrants. Adapted from Exhibit 1 in Mueller (1999) and Mueller (2002).

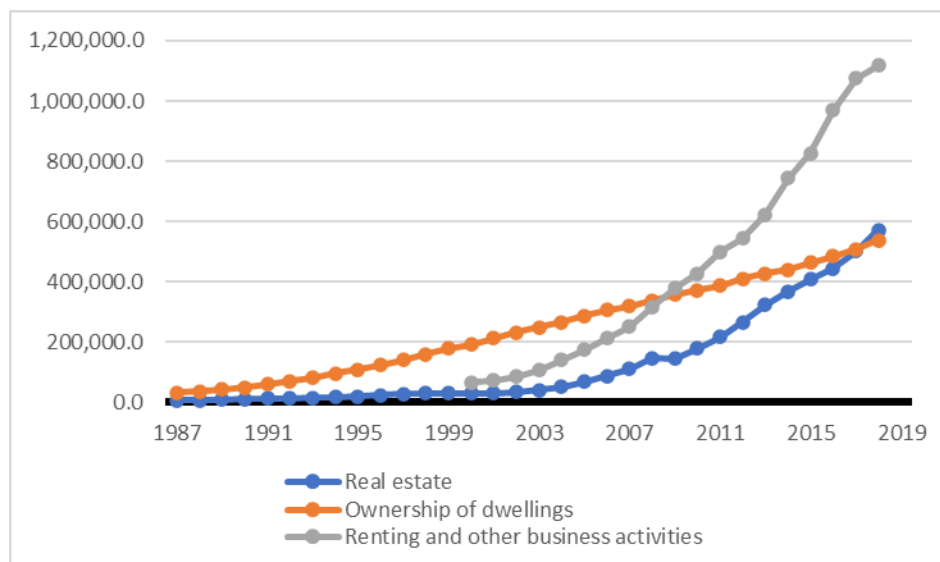


Figure 6 Renting and business activities (RBA) annual data, 2000-2018; data series revised using backcasting methods. RBA data series is compared with real estate, and ownership of dwellings (1987-2018). All data in current million PHP. (Source: Philippine Statistics Authority)

Apart from real estate and ownership of dwellings sub-components, a third component of the total real estate industry in the Philippines that is renting and other business activities (related to real estate, Figure 6) showed an increase in growth in the last two decades. The said trend also suggests that renting businesses – whether residential, commercial, or other purposes – also creates value-added for the economy. While the data series are continuously updated in succeeding official national reports, we employed backcasting methods to reconcile the reported series in various years (UN Statistics Division, 2018).

Renting and other business-related activities in the total real estate sector have been booming in the last two years, more than the real estate and ownership of dwellings sub-components. This is attributed to the growing population in the Philippines, particularly in urban centers. As we will see in the next section, efforts of the previous administration to curb population increases in urban centers remain unsuccessful as the economic lure of Metro Manila continues to attract migrants coming from other provinces in the hopes of better economic opportunities. Moreover, renting being cheaper than buying property would further induce demand for the former, particularly for residential motives. While there is a continuous influx of migrants, population growth also consistently rises. The migration-growth nexus sustains growth, particularly in Metro Manila, which is a logical reason for increases in renting and the boom in real estate activities in urban centers.

■4.0 PANDEMIC EFFECTS AND POPULATION DYNAMICS OF METRO MANILA

The attractiveness of Metro Manila to migrants was seen in recent years to be unsustainable over the long term. The continuous influx of people to migrate, look for work, study, conduct business, or permanently reside causes significant strains in social services provision, infrastructure quality, and worsening traffic conditions (UPPI, 2020).

Although it has been usually argued in development economics that worsening traffic conditions may be attributed to economic growth in the region, it has negative effects that may burden public infrastructure, and inhibit growth due to travel delays and mobility constraints, among others (Sweet, 2011). As early as 2015, Metro Manila has been reported by the Waze Global Driver Satisfaction Index as being the worst city in terms of urban traffic. This was further supported by a report by the Japan International Cooperation Agency (JICA)⁸ in the following years, where the average daily cost to the economy of traffic conditions in Metro Manila was estimated at PHP5.4 billion daily in 2035 if conditions continue to worsen. Additionally, in Metro Manila there is a poor road network, a worsening road infrastructure, and an inefficient public transport system. A World Economic Forum report indicated the Philippines slipping from 92nd to 96th in terms of infrastructure quality out of 141 countries (Schwab, 2019). The worsening traffic conditions, the deteriorating quality of infrastructure, and constrained delivery of social services were the initial issues for the national government in its contemplation of reviving a program on reversing the rural-urban migration. The effects of the COVID-19 pandemic, with the health standards requiring physical distancing⁹, paved for the proposal and launching of BP2.

To provide some indication of the persistent rural-urban migration experienced by Metro Manila, we show the population data in various census years beginning 1990. Population figures for the Philippines are given in Table 2, while those for Metro Manila are given in Table 3. The Philippine Statistics Authority, which will conduct the seventeenth Census of Population and Housing this year, expects increasing population trends to remain. These figures are also shown in Table 2 and Table 3.

Table 2 Philippine population as recorded in the indicated census years, data from Philippine Statistics Authority, with computations following Abueg & Calub (2020), and Corpuz (1997)¹⁰. The absolute changes and percent changes, and average annual growth rates are the authors' calculations. The last two years use medium¹¹ projection data.

Census year	Interval in years	Population	Absolute change	Percent change	Average annual growth in percent
1990	-	60,703,810	-	-	-
1995	5	68,616,536	7,912,726	13.03	2.48
2000	5	76,506,928	7,890,392	11.50	2.20
2007	7	88,304,615	11,797,687	15.42	2.07
2010	3	92,337,852	4,033,237	4.57	1.50
2015	5	100,981,437	8,643,585	9.36	1.81
2020	5	109,947,900	8,966,463	8.88	1.72
2025	5	117,959,400	8,011,500	7.29	1.42

Table 3 Metro Manila population as recorded in the indicated census years, data from Philippine Statistics Authority, with computations following Abueg & Calub (2020), and Corpuz (1997). The absolute changes, percent changes, average annual growth rates, and the share to the total Philippine population are the authors' calculations. The last two years use medium projection data.

Census year	Interval in years	Population	Absolute change	Percent change	Average annual growth in percent	Percent share to total population
1990	-	7,948,392	-	-	-	13.09
1995	5	9,515,490	1,567,098	19.72	3.66	13.87
2000	5	9,873,397	357,907	3.76	0.74	12.91
2007	7	11,491,464	1,618,067	16.39	2.19	13.01
2010	3	11,866,975	375,511	3.27	1.08	12.85

2015	5	12,877,253	1,010,278	8.51	1.65	12.75
2020	5	13,280,900	403,647	3.13	0.62	12.08
2025	5	13,755,200	474,300	3.57	0.70	11.66

While the average annual growth rates for the Philippine population in the indicated census years show a generally declining trend, the increasing trend in actual numbers of the population is due to the phenomenon in economics of population and demography known as the “hidden momentum of population growth”. In biology and life sciences, increases in population species is also known as the “doubling time problem” which is also used in epistemology and transmission models – that is, in analyzing trends of infections of the COVID-19 pandemic. This means that it will take more than one generation to realize the decline in population given that there is a decline in the population growth rate. This argument also is supported by the computed share of Metro Manila population relative to the overall country population in Table 3. Recent studies and reports regard the City of Manila (among all the cities of the National Capital Region) as having the highest population density (Asian Development Bank, 2019; Brodie, 2017). The increasing Metro Manila population clearly shows that the region remains to be attractive to migrants and settlers, and earlier efforts of the government to keep down congestion through previous versions of BP2 may not have been successful. Evidences of intra-regional migration to Metro Manila over the decades have been found to be consistently present and increasing (UPPI, 2020).

Earlier in Figure 1 and Figure 2, we presented the levels of gross value-added for ownership of dwellings and its stable growth rate. It would be logical to pursue the argument that such growth in ownership of dwellings may be correlated with the population growth of the period. For validation, trends of growth for the gross value-added for ownership of dwelling in Figure 2 are casted against the computed average annual growth rate of the Philippine population, reflected in Table 2. These are shown in Figure 7. The results of a correlation test, the details of which are to be found in the appendix, show significance – indicating a weak negative linear relationship.

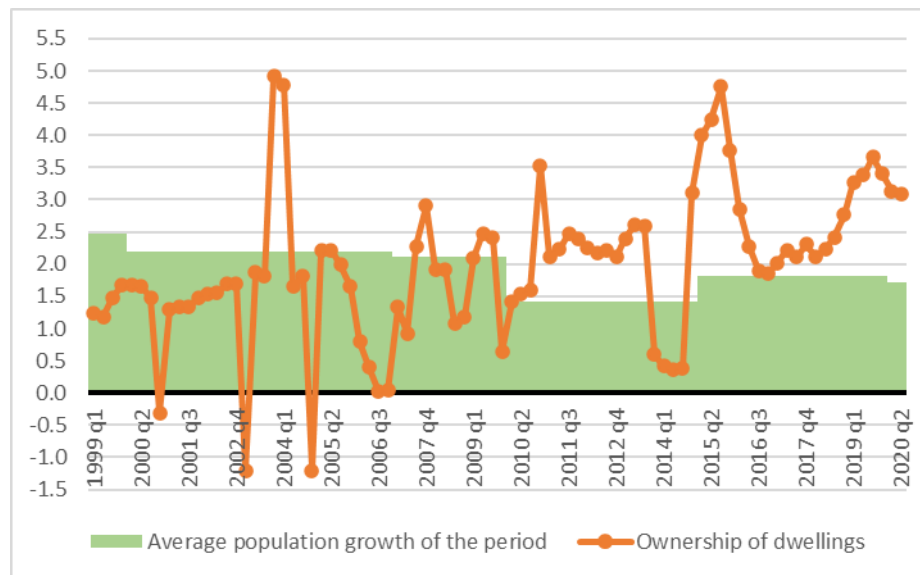


Figure 7 Year-on-year growth of gross value-added of ownership of dwellings, and average population growth rate, 1999q1-2020q2 (Source: Philippine Statistics Authority)

Note that the refined intervals in the growth rates in Figure 7 may suggest a “volatile” growth rate for the gross value-added of ownership of dwellings. However, this remains consistent with the trends shown in Figure 2. More particularly, the fluctuations in the ownership of dwellings generally fall below the average population rate for years before 2010, and growth rates are generally above the population growth rates after 2010. As population is generally increasing in counts, Figure 7 together with Table 2 and Table 3 suggests that there is a relative increase in affordability of owning houses and properties for dwelling in the last decade. Roughly, Figure 7 shows that growth in gross value-added of ownership of dwellings gravitate around the relatively constant population (average) growth rates between census years.

While migration in Metro Manila has shown to be continuously growing in the last decades, it has signaled a problem of uneven economic growth in the country. Until this time of the COVID-19 pandemic, the country’s leading regions – Central Luzon, CALABARZON, and Metro Manila – have contributed the bulk of economic value-added to the macroeconomy, and growth (National Economic Development Authority, 2020). This is the reason why the community quarantine has affected the economy significantly, posting a negative GDP growth rate in the first quarter of 2020 (at -0.7%) since the AFC, and contributed to an unemployment rate of 17.7%, the highest in the history of Philippine unemployment data¹² (Philippine Statistics Authority, 2020; Rivas, 2020). It continued in the second quarter 2020 report of GDP growth and unemployment rate, with preliminary growth reported at -16.5%, and double-digit unemployment is expected to persist as the economy is officially in recession. Such migration is explained by the celebrated Harris-Todaro model (Harris & Todaro, 1970), which explains the effect of valuing present and future stream of income over present and future costs of migration and relocation. This even extends to the overseas contract workers’ phenomenon beginning in the 1970s, creating a market for

foreign labor. Consistently, Metro Manila has been the economic capital of the Philippines apart from it contributing other non-economic factors that project the national capital region as a prime destination for residence, work, education, and other socio-economic opportunities.

Despite the potential hazards of the pandemic, workers continued to report to work to stay economically afloat. The lifting of the ECQ in Metro Manila beginning June 1, 2020 revealed the numerous adjustments and adaptive mechanisms done by the affected workers even without reliable public transport. This is even supported by Sweet (2011), who asserted that traffic congestion may provide new ways of adaptation for people deciding to embrace the worsening traffic conditions. For example, the pandemic has seen the enunciation of proposals to use bicycles as transportation of people going to work, as well as revisiting public transport systems and mechanisms. However, those who cannot afford to buy bicycles or other conveyances do their best to keep their jobs, reporting to work by walking from home to work, even at significant distance and physical exertion. Such dynamics in employment-unemployment especially in the time of pandemic supports the more complex problem of the employment situation of the Philippine economy. The underemployed, being a subset of the unemployed, contribute to the employment dynamics in the Philippine labor market (de Dios & Dinglasan, 2014).

In addition to the struggle to keep jobs secure, domestic constraints of implementing physical distancing also arise. As the housing conditions in the Philippines cater generally to extended families with small housing provisions, it may be nearly impossible to implement such minimum health standard. A visual graphic of the household size and housing area size in Metro Manila is presented below in Table 4. This housing situation may have contributed somehow to Metro Manila becoming the epicenter of community infections during the ECQ¹³, as seen in Table 5. Also, the persistence of affected workers in keeping their jobs and having domestic constraints in implementing minimum health standards may have contributed to the record of the country to have the highest cases of infection, high death rate, and low recovery rate. This is on top of the lack of mass testing of the national government during the lockdown, while the scientific community is racing for a vaccine and cure.

Table 4 Housing data of Metro Manila, from 2010 Census of Population and Housing
(Source: Philippine Statistics Authority)

Housing floor area (in square meters, sqm)	1 to 9 sqm.	10 to 19 sqm.	20 to 49 sqm.	50 to 89 sqm.	90 to 199 sqm.	200 sqm. and more
Number of housing units in the National Capital Region	372,436	390,859	1,028,213	451,141	239,858	100,131
Percentage of homes in the National Capital Region	14.4	15.1	39.8	17.5	9.3	3.9
Average number of occupants	4	4	5	5	5	5
Estimated space available per occupant (floor area per occupant)	2	2 to 4	5 to 11	11 to 19	19 to 42	42 or more

One contention in support of the BP2 program is the timing of its implementation, as local government units have been very careful to keep their localities free from cases of infection, taking into consideration the healthcare capacity of their respective localities. The immediate response of the national government while on the initial stages of BP2 is to help stranded tourists by bringing them home to their respective provinces, as well as overseas workers requesting repatriation. These efforts are argued to have contributed to the increase of the number of infections beginning the last half of the month of May. While this immediate response is dubbed by the government as “Hatid Probinsya” (translation: “Take to the Province”), this is argued by the national government as dissimilar to BP2.

The above discussions on macroeconomic profile and population dynamics have provided evidence that indeed, Metro Manila remains to be an economic center that continuously attracts residents from various parts of the Philippines. This is even supported by the arguments in the Harris-Todaro model (Harris & Todaro, 1970), as well as the findings in UPPI (2020) attributing to uneven poverty and economic opportunities in the country. While the government sees the immediate need of decongesting Metro Manila through BP2, we discuss in the next section some real estate development-centered models with short-term and long-term interventions to contribute to the program’s success. These models also include sustainability elements and also the need for collaboration of the national government and the private sector (through the real estate industry as a whole), as the BP2 program is multi-stakeholder in nature.

■5.0 TOWNSHIP MODEL AS A SOLUTION TO DECONGESTION, AND ITS ROLE IN ECONOMIC REDUNDANCY

For real estate to thrive and contribute to the economy and society, it requires various resources to be invested via the real estate development sector. Large-scale real estate developments are more often than not geared towards the attainment of long-term objectives, whether physical, financial or even social in nature. As early as 1981, James Graaskamp described real estate development as a complex process composed of interlaced relationships between various groups and resources. As shown in Figure 8, there are three interacting groups that make up a real estate development: (1) the Space Consumer Group generally is composed of end users who rent or purchase real property to meet a specific need, (2) the Space Production Group make up those with expertise in assembling the real estate business (in terms of capital, material, knowledge), and lastly (3) the Public Infrastructure Group involves all entities that provide tangible or

intangible services to support end users whether via physical infrastructure (e.g., roads, utilities), off-site centralization of administrative operations, and economic-environmental oversight functions.

Sustainability of a real estate development in the short-term and long-term requires connection and collaboration among all three groups, with each group benefitting from both the understanding of the needs and the major limitations concerning the other two groups. Graaskamp further emphasized the idea that a group is an enterprise of its own fueled by a cash cycle operation – with cash solvency being the impetus for nurturing relationships and credibility with other groups and cash surplus as the main measure for enterprise survival.

In the Philippines, one implementation of the real estate development process mentioned beforehand is best epitomized by the township model. By definition, townships can be briefly described as large-scale, integrated, and mixed-use (i.e., residential, commercial, office, industrial, and leisure) developments with no absolute definition on the size of a development (Luna, 2019).

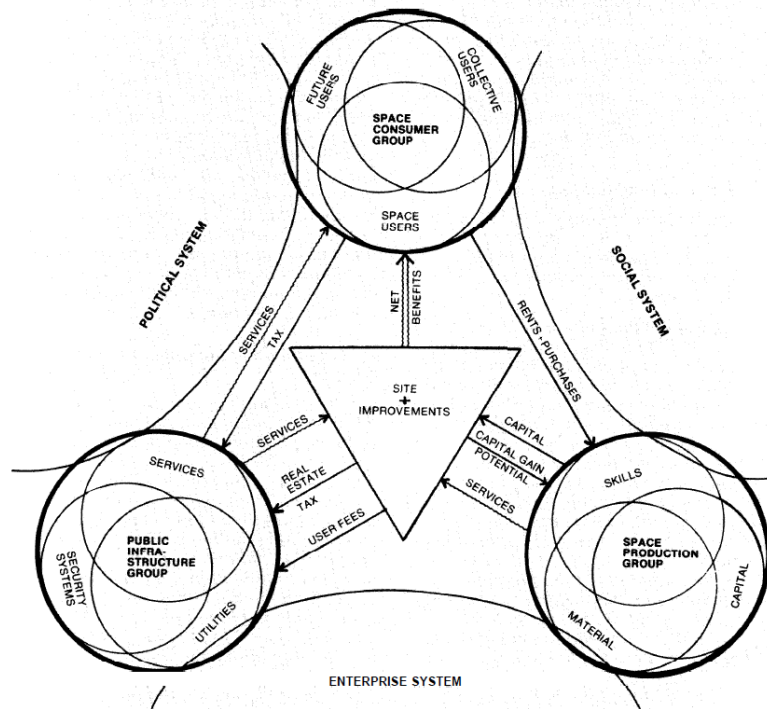


Figure 8 Real estate development process showing the inter-relationships between individual cash-cycle groups
(Source: Graaskamp, 1981)

These township developments started from vast tracts of raw lands acquired by private developers usually located in the fringes of established megacities (e.g., Metro Manila, Metro Cebu, and Metro Davao¹⁴), with such proximity allowing convenient economic linkages as well as mobility for people and goods (i.e., major airport and seaport access). In terms of the shift from rural to urban via land development, townships spur a polycentric pattern of development that breaks the tendency of uncoordinated dispersion that is evident in primordial cities such as Metro Manila. Such type of development propagates economic activity in seemingly remote areas, thus reducing dependence on and possible congestion in the main cities, enhancing housing-jobs balance in the outskirts (e.g., suburbs), and capturing vital economic investments (Luna, 2019). Depending on the real estate developer, careful planning is considered for the buildout of such large land parcels often with a long-term vision that is supported by key development attributes such as low-to-medium-density residential dwellings, strategic commercial/industrial sections, and inclusive socio-cultural amenities, among others, already laid out. Such carefully planned, or in colloquial terms “master-planned,” development in itself exudes a feeling of inclusion within a complete community; thus attracting space consumers with the promise of the development being the next “mega city” complete with enticing propositions such as the achievement of work-life balance, capital appreciation of real property, and pioneer status in terms of economic opportunities within the same area—as embodied by the adage “live where you work, play, and pray”¹⁵.

The Philippine township formula then generally revolves around the following observed components and their linkages:

1. Acquisition of raw land and master planning its development by the private sector (via a real estate developer).
2. Government units (national and/or local) complement the township development by reviewing then subsequently approving the project via zoning development-related permits, supporting public service delivery to the immediate site or vicinity as well as providing public policy (i.e., laws and ordinances including taxation and user-funding) oversight and execution¹⁶.
3. End users, whether private individuals or juridical entities, accept the buy-in proposition and proceed to settle in the development either as owner-residents or as owner-investors.

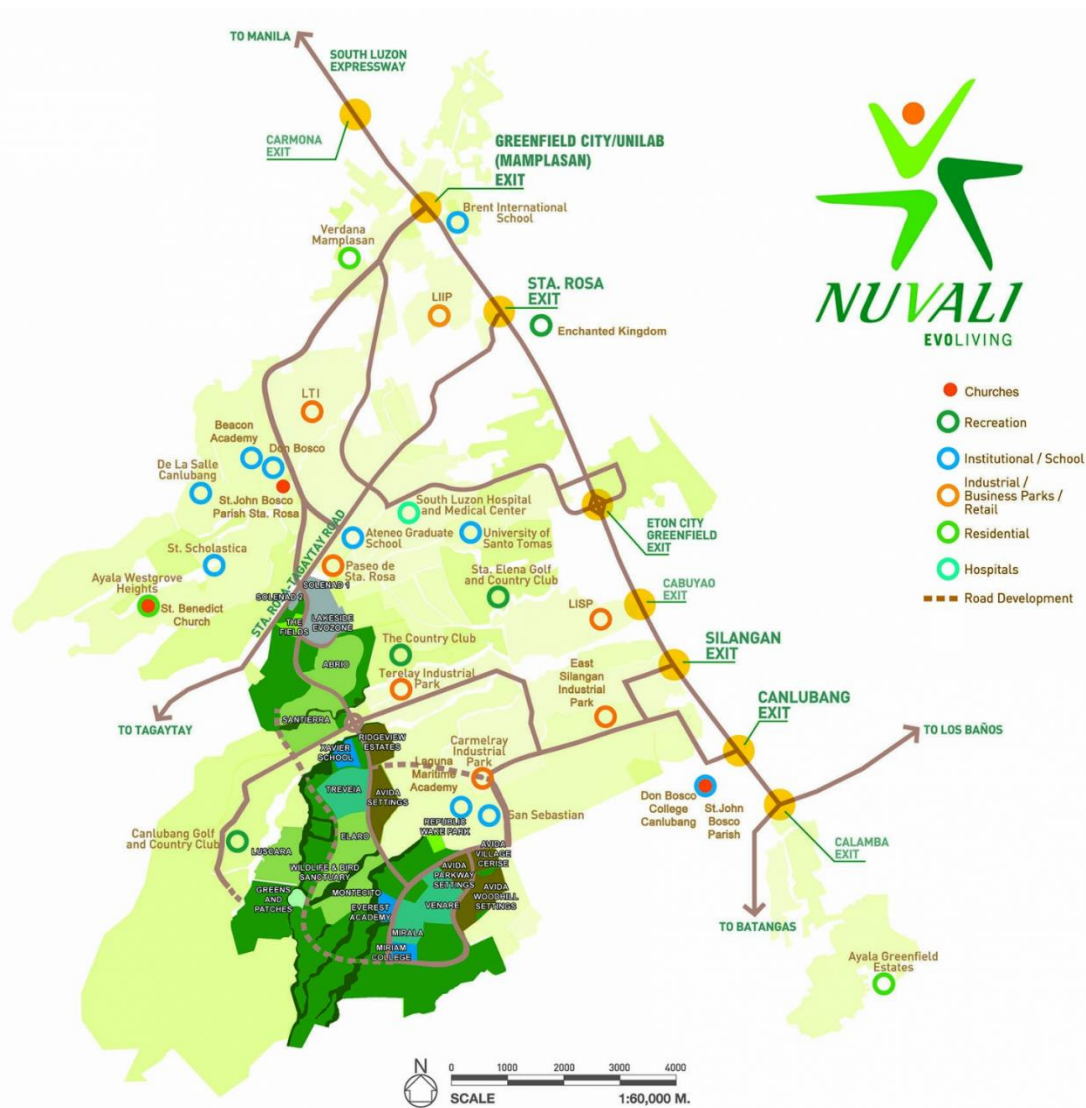


Figure 9 NUVALI township development vicinity map
(Source: Venare NUVALI, 2010)

One prominent example of a township development in the Philippines is NUVALI, the country's first eco-city development built and planned by one of the largest private real estate developers in the country. This pioneer township is also the country's first large-scale township development situated outside a megacity (Metro Manila) that adopted sound principles of built-up environments to meet the ever-changing demands of human and capital markets with environmental sustainability also in mind. Built in 2009, it is a 2,290-hectare mixed-use development that stretches within the cities of Sta. Rosa, Cabuyao, and Calamba in Laguna – a province just 30 kilometers away from the southern border of Metro Manila (see Figure 9). Sta. Rosa was once a rural town highly-dependent on agriculture and family-owned enterprises for livelihood, but the opening of a major road infrastructure (South Luzon Expressway, abbreviated as SLEX) during the late 1970s enabled the transformation of Sta. Rosa into a city in 2004, resulting in it being favored by both local and foreign investors; it now currently holds the prestige of a major residential, commercial, and industrial hub in Southern Luzon. Sta. Rosa also breached the one-billion-peso-mark in terms of local government revenue as early as in 2007, mostly coming from business and realty taxes from existing developments such as those found in the six special economic zones (SEZs) in the city – notable of which is the Laguna Technopark (established in the 1980s), the country's first privately-owned industrial estate which accommodates major local and foreign manufacturing companies. These special economic zones are established as independent customs territories enjoying tax incentives in order to draw local and foreign investments to generate employment, business, and other outcomes. With these achievements, Sta. Rosa has entered the elite "Billionaire's Club" and at present continues to maintain this status as a regional hub of economic productivity (Roa, 2019). NUVALI has already developed 78 percent of its land area, the bulk of which is located in Sta. Rosa City; and continues to grow and contribute to the locality as an eco-friendly community with over 12,000 residential dwelling units, two business process outsourcing (BPO) buildings, retail and office spaces, and hotel rooms. Within its mixed-use green urban district are special-purpose properties such as an events center, two schools, several recreational attractions, a wildlife and bird sanctuary, and various commercial shopping centers focusing on retail

brands with “factory outlet” pricing, all eyed to complement an envisioned new central business district south of Metro Manila. A relatively new and privately-owned tertiary hospital dedicated to serving COVID-19 patients within the area is also located inside NUVALI near its commercial district, as well as other existing public and private healthcare institutions ready to serve various medical needs of the community (I. Gonzales, 2020). The township is also hailed as the best realty taxpayer in Sta. Rosa, Laguna and also provides an estimated 4,000 jobs in the locality; with about 2,500 more job openings to be added both due to the recently launched and upcoming projects inside the development for the next few years (Ayala Land, 2016).

Aside from having the distinction of being the pioneer ecologically-friendly township built in the country, it must also be noted that the abundance of land and space in NUVALI allows for the market dominance of horizontal-type small-to-medium-density residential development (i.e., single-attached house, single-detached house, townhouse or rowhouse configurations) with isolated ingress or egress points; as opposed to high-density vertical-type residential buildings (i.e., mid-rise to high-rise condominiums) that house common-use areas, which in turn can be considered as potential zones for COVID-19 transmission. The minimum floor area (building interior) of one of NUVALI’s single-detached residential dwelling unit is measured at 30 square meters with a selling price starting at PHP1,300,000 (Avida Village Cerise NUVALI, 2018). With the COVID-19 pandemic currently experienced by the country, the added appeal of low-to-medium-density residential dwellings that complies with physical distancing standards set by the WHO particularly found in townships such as NUVALI and similar developments have made Filipino households to consider relocating to these townships as opposed to staying in highly-populated and dense major cities that are prone to large uncontrollable outbreaks of the disease. NUVALI’s abundance of green open-spaces has also helped in containing the direct and indirect risks associated with the current pandemic (Ranada, 2020). Metro Manila remains to be the epicenter of the pandemic, while Cebu City had been a regional epicenter in June and July (see Table 5), even as the rest of the country’s cities and municipalities have reported lower case numbers, or even an absence of such. With high population densities and minimal land area available in megacities coupled with existing urban sprawl, the idea of relocating individuals and/or households outside established metropolitan areas seems a good proposition, albeit only with sound and sustainable plans and objectives.

Table 5 COVID-19 cases in the Philippines, as of October 31, 2020. Percentages are authors’ calculations, and infection cases as reported from the Department of Health COVID-19 tracker website (Department of Health, 2020).

Period covered, from first case (January 30) to month-end	Metro Manila	Share to total cases, in percent	Cebu City	Share to total cases, in percent	National total
March	1,544	74.09	20	0.96	2,084
April	5,782	68.12	575	6.77	8,488
May	11,031	60.99	1,772	9.80	18,086
June	18,689	49.82	4,906	13.08	37,514
July	50,689	54.30	8,375	8.97	93,354
August	123,837	56.08	9,656	4.37	220,819
September	163,812	52.56	10,186	3.27	311,694
October	185,776	48.79	10,489	2.75	380,729

Other townships offered by private developers within the Philippines are currently in the pipeline: Northern Luzon has The New Clark City and Clark Green City located in Tarlac and Pampanga respectively; Visayas has the Cebu Business Park and Citta di Mare, both within near proximity of Metro Cebu; and Mindanao has already begun with the initial development of a mixed-use township located in Davao City, with its proponent boasting of the project delivering academic, residential, commercial, office, hotel and convention components to further contribute to the metropolis’ potential as a world-class, premiere central business district (BusinessWorld, 2018).

However, a township development is not a panacea that will transform any location into a highly urbanized central business district—as real estate developments primarily depend on existing zoning ordinances set by the state which may change depending on evolving public need and/or vision. There are prerequisites needed to increase the probability of a successful and sustainable township development (Luna, 2019). One is the presence of an existing population base in the area, as these localities rely on mature economic markets. By plotting various townships outside Philippine megacities, it can be seen that these developments materialize at localities with a sizable population where a ripe residential market supports high-intensity commercial activity. While individual townships may thrive independently in the short-term as an economic enterprise, regional accessibility in terms of transportation is the other critical requirement for townships to interact with other business districts. The movement of people, products or services and information is crucial not only in the real estate development process but also in the master-planned township adapting as a resilient entity. This will support future users and contribute to local and national level objectives in the long term. In essence, large-scale real estate sector-driven endeavors such as but not limited to townships rely on a noble vision supported by concrete plans and carefully implemented with collaboration between different socio-economic sectors or stakeholders in order to be successful and sustainable.

■6.0 PROPOSED INTERVENTIONS OF THE REAL ESTATE SECTOR TO COMPLEMENT THE BP2 PROGRAM

BP2 primarily involves relocating and resettling people from the urban to rural regions. For it to be successful, the paper highlights the importance of the need to adopt a proven framework focusing on the real estate development sector as its primary driver. It should also be noted that real estate development encompasses a host of inter-connected sectors or disciplines such as (but not limited to) planning and management, construction, architecture, finance, marketing, and public governance: Graaskamp’s real estate development process model

has shown these as key components and principles that help develop projects such as townships in the microscale perspective – of which these principles when translated into the macroscale would be applicable to most if not all potential relocation sites for BP2 beneficiaries, whether the development is existing or still in the pipeline.

An existing framework that would boost the chances of BP2's success would be that of Singapore's Livability Framework (SLF), as shown below in Figure 10. An astute assessment of SLF reveals that it is a brief, concise framework supported by well-planned systems that complement the intended outcomes of the initiative.

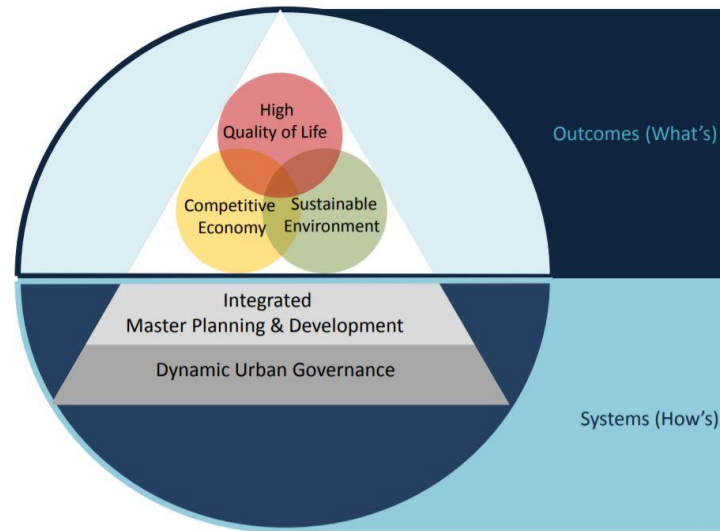


Figure 10 Singapore livability framework
(Source: Tan, 2013)

It can be deduced from the Singapore Livability Framework in Figure 10 that the top half of the diagram consisting of three overlapping circles are outcomes aspired by the component groups described in Graaskamp's real estate development model, while the bottom half are the two pillars that need to be intrinsically-established in order to support the desired outcomes. The SLF has proven to be a main driver of Singapore's overall growth through the years, an idea stemming from its pioneering leaders' (government and non-government) efforts to study other city models and adopt what works for the country in terms of factors such as physical characteristics and socio-cultural norms. Adopting the SLF into BP2 would result in a concrete long-term direction for the latter – as it would no longer be a mere accompaniment or “drop-off” service to resettlement areas in the province but rather a directive for citizens to stay and settle into a new community that is well-planned and can sustain their needs in the foreseeable future.

A two-pronged parallel-run approach focusing on real estate sector-driven interventions is suggested in this paper. One approach highlights the solutions that can be implemented in the short term (within three years or less) and the other focuses on the long term (more than three years) actions that can be implemented to bolster the proposed SLF framework adoption and ensure the success of BP2. These are further elaborated in the next subsections.

6.1 Short-term Interventions

One outcome that needs to be addressed in order to lure populations to the provinces is to first establish the local area's economy. On one hand, there is a need to create secure means of livelihood first and foremost in order to convince people to move from a mega city with perceived abundant job opportunities like Metro Manila towards expected relocation areas. To do so would require laying the groundwork to accommodate such economy of scale. On the other hand, there must be an effort to incentivize end users thru affordable real property acquisition to ease the move to the intended relocation area.

Supporting the short-term interventions would be the completion of Comprehensive Land Use Plans (CLUPs) – these are blueprints, crafted by and required from all local government units, that provide guidance on how to use land resources, guided by requirements such as food production, human settlements, and industrial expansion as stated in Section 20c of the Local Government Code of the Philippines (Republic Act No. 7160, 1991). These CLUPs are crucial in identifying existing areas that can be developed or further developed (e.g., idle and raw lands) to complement desired outcomes of initiatives such as BP2. By prioritizing land utilization and development (whether agricultural, industrial, or commercial, among others) as indicated in the plan, areas for potential relocation within a particular region can be readily identified, thereby unlocking land value. It should be noted however that CLUPs, and the zoning ordinances they contain, are not tantamount to a master development plan *per se* as the former focuses on planning the geographical aspects of land use while the latter incorporates various development components (e.g., physical, economic, social) which emanate from the development of the such land. Even before the COVID-19 pandemic struck the country, local government units especially those in the regional areas have always been burdened with numerous obligations to the national government, including crafting their very own CLUPs. This specific encumbrance can be alleviated by the immediate allocation of fiscal resources as well as technical assistance through grants from the national government or

collaboration with the private sector. Should a government unit lack a CLUP, now would be the best time to develop it in collaboration with various stakeholders (public and private) bearing in mind the application of the suggested adoption of the SLF-based framework. Implementing “framework-centric” plans, coupled with customized community-centric initiatives, highlights the important role of local government units in promoting capital investments needed to sustain a livable socio-economic habitat.

A stable economy in the regional areas can be achieved by first studying the unique characteristics of the region in terms of economic product output. As examples, the Negros Island area in the Philippines is considered to be the sugar capital of the country while the northern area of Davao is considered the banana capital of the Philippines. Local government land use plans must focus on contributing to improving food production especially as the COVID-19 pandemic has unveiled the importance of food supply security in sustaining populations (Ordinario, 2020b) – and this can be done by maximizing the number of agricultural lands available for production of food and other products unique to the region. Surplus production can then be directed towards trade exports, which can translate into better financial viability for all the groups involved.

Complementing an agriculture-centered economy would be unlocking industrial lands involved in processing these products and by-products, thereby establishing and/or improving synergistic agriculture-centered businesses. Such lands can then be applied for as Special Economic Zones (SEZs) or can be modified to accommodate additional SEZs. By setting up synergistic businesses inside SEZs where companies could enjoy various fiscal and non-fiscal incentives, direct (i.e., end user) or indirect (i.e., real estate developers) local and foreign investments can be tapped, which in turn could translate into job opportunities for locals and even the immigrating population identified as BP2 beneficiaries. These economic zones can also complement free trade agreements (FTAs) with other nations in order to draw in more foreign investment in the country, particularly in the manufacturing and service sectors (Canivel, 2020). This move is also timely in anticipating opportunities arising because of an increasing number of countries intent on economically decoupling their manufacturing hubs with China, considering recent events brought about by COVID-19 and other factors (Tsuji & Furuyama, 2020). With the land and industries in place set up by the space production and public infrastructure groups respectively, value chain players composed of users under the space consumer group can now engage in commerce, thus expanding the area’s economy scale.

As a form of economic redundancy, utilizing SEZs to accommodate BPO centers would cater to a population geared away from the agribusiness sector. The Philippines remains competitive as one of the top destinations for multinational companies to set up outsourced or contracted work (Valencia, 2020), from information technology to human resource-oriented tasks, perfect considering the demographic characteristics of the Philippines and its workforce’s competence in terms of business language fluency and industry-specific skill sets. Commercial lands dedicated for retail and other profit-generating endeavors can be thrown in the mix once a steady economy has been established to meet the expanding needs of end users.

The second short-term intervention relies on granting incentives for end-users of residential dwellings. Bai et al. (2015) emphasized the importance of first-time homebuyers as the “lifeblood” of the housing system. What remains as the story on the ground is that the slow uptake of residential properties in provinces is not just entirely due to inaccessibility and lack of economic opportunities in the area but also because of costly selling prices of existing housing options. According to the Department of Human Settlements and Urban Development (DHSUD), BP2 beneficiaries may avail of over 3,000 housing units that have yet to be claimed in the provinces; however, a sizable number of these units are subject to strict selection criteria primarily based on the housing applicant’s income and attainable only via home loans from the private or government sector. Home loans remain elusive to low-income earners even though state-run lender’s interest rates have fallen (The Manila Times, 2020), partly due to perceived inadequate financial literacy of home loan consumers as well as other fees associated with loan take-outs that further weaken the disposable income of the minimum-wage up to the middle-class Filipino home buyer. The current minimum wage in Metro Manila is at PHP537 per day while other regions such as Western Visayas only receive PHP310 per day at the lowest (Department of Labor and Employment, 2020). Affordability of township homes in the country remains elusive to the country’s minimum-wage worker and indigent population (Arcilla, 2019), as property prices of homes within master-planned developments such as NUVALI near Metro Manila start at a minimum of PHP1,300,000 and above – such selling price falls under the economic housing tier as defined in Table 6. The state-owned Home Development and Mutual Fund (HDMF, better known as “Pag-IBIG Fund”) only lends minimum-wage earners a maximum of PHP750,000 under its affordable housing program (Pag-IBIG Fund, 2019); this loan is seemingly not enough to acquire the minimum required selling price of a property available in a township development such as NUVALI.

As a pragmatic solution, we recommend that BP2 beneficiaries be given a “first-time homebuyer subsidy” from the national government; much like the Social Amelioration Program cash subsidy given to families greatly affected by COVID-19 that was met with much demand from the citizenry. The draw of having a significant subsidized amount to cover at least half of the equity required by developers (in the Philippines, usual home equity required from buyers starts at 20% of the property’s selling price) is a compelling offer that would be hard to refuse for buyers especially in a consumer-oriented society wired towards maximum savings and better deals. This subsidy program has had successful precedents in other countries such as in the United States via the American Recovery and Reinvestment Act that offers homebuyer tax credit of up to USD8,000 to promote home ownership and housing recovery (Bai et al., 2015). Australia’s First Homeowner Grant program entitles qualified applicants to a subsidy from the provincial government ranging from 13% to 16% of the total cost of the land and building, subject to eligibility requirements, most notably having a minimum residence requirement that entails actual occupancy of the property for a period of time (NSW Government, 2013). Philippine government financial institutions (GFIs) and other real estate sector-related government-owned-or-controlled corporations (GOCCs) would be candidates in facilitating the planning and implementation of such a grant program to complement BP2. Adopting such an incentive scheme tailored into the Philippine fiscal setting would result in the much-awaited buy-in of end users that will fuel the relocation area’s economy with the groundwork already laid out in place by the private sector (space production group) and government (public infrastructure group).

Table 6 Philippine housing classification by the Housing Land Use Regulatory Board (HLURB)¹⁷ and selling prices.
(Source: Philippine Statistics Authority)

Housing classification (categories)	Estimated minimum selling price, in PHP	Estimated maximum selling price, in PHP
Socialized Housing, Horizontal Development	480,000	580,000
Socialized Housing, Vertical Development	600,000	750,000
Economic Housing	450,000	1,700,000
Medium-cost Housing	1,700,001	4,000,000
Open Market Housing	4,000,001	None indicated

Furthermore, large-cap private developers who have accepted the local government unit's land development proposition must be compelled to offer affordable housing options as a significant part of their property sale inventory within township developments. They must also fully comply with the conditions of such offer as set by the Philippine Urban Development and Housing Act (UDHA) with focus on socialized to economic housing tier options (see Table 6). While this proposition seems initially unappealing to some private real estate investors who have acquired raw land at higher valuations, this acquisition cost can be offset by the national government giving and sustaining fiscal and non-fiscal incentives to real estate developers apart from those enjoyed by the latter through the UDHA, such as tax holidays (Ballesteros, 2010). Such government incentives should be granted not only to UDHA-compliant developers, but also to those real estate proponents who have a true vision of making decent shelters within a sustainable environment that is affordable to the poor and minimum-wage earner. Once a large section of the population has acquired their respective dwellings, home ownership and maintenance come into the picture. These then have direct and indirect positive effects on both the economy (i.e., value chain) and the government (in terms of tax revenue) – such low-hanging fruits must be grasped by BP2 as primary stimuli for the program to be feasible in the short-term and likely in the long run as well.

Maximizing productivity of the land starts with identifying sites that are conducive to specific socio-economic activities and at the same time conform to plans set by the national and local regulatory bodies – these concepts, inherent in real estate via the highest and best use (HABU) principle, are catalysts in drawing stakeholders into a planned relocation site.

6.2 Long-term Interventions

Parallel to the short-term interventions mentioned in the preceding section, this paper offers insights on possible long-term interventions encompassing outcomes and systems needed to make a “revitalized” BP2's goals come into fruition. As a preamble, the BP2 initiative should align with a country's vision for governance, of which such an endeavor exists via The Philippines' “AmBisyon Natin 2040” (translation: “Ambition with Vision 2040”; shorthand, Vision 2040) (National Economic Development Authority, 2017).

In terms of outcomes, it is worth mentioning that critical components of Vision 2040 involve the Filipino family living in their “own modest home with simple amenities” as part of the general narrative that no Filipino should be poor, as well as the goal of putting attention to underserved regions in the country such as those in Mindanao. This ownership of a comfortable and safe home is further described in the vision as a goal that every citizen should aspire for, together with a high degree of mobility in the form of transportation. Possible solutions that will help the common Filipino attain a modest home has already been mentioned in the previous section (6.1), and the succeeding component (linkages) would require interventions that would be best incorporated within the grand scheme of things.

As mentioned in Vision 2040, one of the desired goals to realize a prosperous economy is to focus on building and improving transport and communication network infrastructure for linkage to dwellings. Metro Manila has been notoriously labeled as the “most congested city” in terms of traffic as perceived by local and international end users alike, and the claim has been substantiated in previous and current studies such as one conducted by the Asian Development Bank in a 2019 report. Urban planners in the Philippines (see Luci-Atienza & Cahiles-Magkilat, 2019) and even overseas development assistance (ODA) entities such as JICA cannot help but criticize how Metro Manila has declined as a metropolis because of its seeming lack of an efficient and comprehensive public mass transportation system. A good look at Metro Manila's existing light rail system would reveal that train stations were built close to exclusive communities in which majority of end users do not use public transport as their main mode of transportation, add to the fact that scalability and expansion of these train lines were not given due importance and instead building more road networks were given priority—again adding to the argument that traffic congestion in Metro Manila is caused primarily by the sheer number of private vehicles occupying roads with limited vehicle volume capacity (Rappler, 2020). New townships, regional urban centers, and rural areas should best learn from the precedent that Metro Manila has set in terms of a seeming lack of integrated mobility planning. CLUPs should be modified to include land availability to ensure infrastructure build-up for inter-regional connectivity and accessibility. Administrative processes when it comes to expropriations (local and national level) and right-of-way claims should be overhauled so as to shorten preliminary proceedings, so infrastructure developers can initiate linkage development right away. Worthy of mention is the improvement of farm-to-market roads in order to support and augment an agriculture-centered economy, though building more road networks is not enough as not all of the population can afford vehicles. It is high-time to focus on investing in and reviving railways as an efficient means of transporting people and cargo complemented with air-based and sea-based transportation, all to serve as linkages to different regions and economic hubs within the archipelago. Communication infrastructure is also vital in order to connect underserved areas to the rest of the country: a component very crucial in today's pandemic situation where most of the population depend on internet connectivity as the main source of information dissemination critical to daily living, most importantly as a means to livelihood. Though the national government has been trumpeting its “Build, Build, Build” Program as an infrastructure-centered solution to spur economic activity, analysis of government data

shows that the program is not as effective in stimulating the economy during the pandemic as it could be – due to factors such as infeasibility of major projects, low spending allocations, and chronic underspending (Suzara et al., 2020). Suzara et al. (2020) further revealed that government construction projects have not been a key driver of growth, as public construction projects' contribution to the economy's construction sector has shrunk consistently from 2017 to 2019. This apparent lag of the public sector in supplementing the private sector's real estate development via infrastructure building (i.e., transportation and communication) has implicitly placed the burden on private developers to solve a systemwide multi-sectoral linkage problem – a burden oftentimes too heavy to bear particularly for small-sized to medium-sized real estate developers.

The establishment of these well-planned, scalable linkages between various enterprises will also contribute to unlocking the vast land value potential of other regions. A model of this can be found in various first-world countries such as Japan where vast networks of railways serving inter-regional routes have succeeded in increasing land values in areas surrounding train stations (Asian Development Bank, 2017). While the capital requirements for such infrastructure would be on a much larger scale compared to that of localized projects, higher land valuations can result in more revenues for the government, which in turn can augment such needed funding requirements. Sustainable real estate developments, whether small scale or large scale (e.g., cities or other population centers) in nature, require adequate roads, railways, public utility facilities as well as green spaces, leisure, and other modern amenities not just to bolster an area's economy, but to also improve its end users' overall quality of life (Lin et al., 2018).

In terms of the systems needed to attain desired outcomes of the SLF, we would want to emphasize the importance of integrated master planning in realizing the desired outcomes of the framework. Looking at the current BP2 program stakeholders, it can be deduced that only national and local government agencies are included in the BP2 implementation council (Ordinario, 2020a). While it is perceived that urban planners in the Philippines are mostly involved in real estate developments as private-for-profit entities (as in the case of NUVALI), their participation as a stakeholder in the BP2 program should be compulsory via a Public-Private Partnership (PPP) engagement – or until such time that the national government could institute and sustain the permanent engagement of urban planning or community development professionals. By including experts in urban planning and regional development, a livability program will be better equipped to handle an ever-changing economic, social, and political climate (Centre for Liveable Cities, 2014). Aside from the private sector, local governments units could further contribute to this intervention by revising and/or updating their CLUPs, bearing in mind the goals or outcomes of the vision and real estate development framework to be adopted: identifying potential development areas near regional urban centers (within 30 to 50 kilometers proximity) to provide a great starting point for various provincial governments to plan for their CLUP revisions. Communication and collaboration between real estate developers (capital), civil society (expertise), and the government (oversight) is crucial in translating the desired BP2 program outcomes from mere paper into reality through careful execution and follow through.

The dynamic urban governance pillar is built on the country having a vision for the future, of which the Philippines already has through its Vision 2040. Being dynamic may also refer to involving various community stakeholders into the very system and institutions that hold up the framework: this may involve independence of policy-making bodies from those who handle the technical aspects of the program, as well as a bottom-up approach in terms of listening to the very people who work on the ground in order to generate instantaneous feedback as well as to integrate their insights and solution ideas for the success of various programs such as BP2.

Looking back at the bigger picture, most if not all of the goals set by Philippines' Vision 2040 could be attained if BP2 (or other similar relocation and livability programs) would instill a development framework similar to that of Singapore's. The BP2 program of the national government should be more than just a short-term population relocation initiative but rather steered to a long-term development and rehabilitation of the land and all enterprises attached to it in order to make an ideal location for populations and their future generations to settle in and live on.

■7.0 CONCLUSIONS, POLICY MORALS, AND SOME WAYS FORWARD

The Philippines is one of the countries of the world that is deeply affected by the COVID-19 pandemic, registering two quarters of negative growth in national product, worse than how it did during the Asian Financial Crisis. It currently also has a record-high unemployment rate. With the longest lockdown of around 200 days and going, the country is 20th in the world in number of infections, and first in the Southeast Asian bloc.

As the country struggles with health and economic balance, one of the measures implemented by the national government is to revive an old program of decongesting Metro Manila. Dubbed as the *Balik Probinsya, Bagong Pag-asa* Program (BP2), it aims to lessen congestion in line with physical distancing protocols of the government and international health community standards. While it has been recognized as one of the programs in the past that did not deliver the expected results, the pandemic has caused the national government to revive the program in the context of the “new normal”.

This paper highlights the pre-pandemic trends in economic growth, real estate sector performance, and population trends and dynamics in Metro Manila. These indicators show that the real estate sector contributes significantly in economic growth. As the “new normal” has caused all sectors of the economy to rethink existing economic and business models, BP2 is not an exemption in trying to capture elements that will respond to the health standards, while keeping the health of the macroeconomy. As we have seen given the trends in the economic indicators and in the real estate sector, BP2 may be an opportunity to tap real estate and its related sectors in creating new sources of value-added, and also in promoting collaboration to make the program successful and sustainable.

While we look at the economic indicators before the COVID-19 pandemic, we also analyze the development of the program's implementation through the course of the community quarantine. The published reports and media releases have significantly indicated that BP2 has issues that cut across multiple stakeholders. As has been shown, we look at the multi-stakeholder model of Graaskamp (1981) and look at the economic elements of migration through Harris-Todaro (Harris & Todaro, 1970), plus the property cycle models of Mueller (1999) and Mueller (2002).

This paper proposed adopting a proven and easily comprehensible sustainable living framework derived from Singapore (an ASEAN neighbor) for the *Balik Probinsya* Program or BP2, aligning its outcomes with the country's overall governance vision and at the same time promoting equitable collaboration between various stakeholders from the government and private entities, with the real estate development sector as the catalyst. While the Philippines already has an existing National Urban Development and Housing Framework (Housing and Land Use Regulatory Board, 2017), the authors argue that such framework was prepared years before the pandemic – a thorough review and/or possible revisions of its key provisions and principles should be considered as the pandemic has in one way or another discernibly confuted existing policy and business execution models of various industries and organizations, including those of governments. NUDHF's execution leaves a lot to be desired as well since the framework has yet to yield perceptible output to its intended beneficiaries since its inception, including recipients coming from localities ravaged by mass casualty incidents and/or natural calamities.

Parallel interventions were also suggested in this paper, ranging from short-term actions (e.g., CLUP completion, first-time homebuyer incentives, affordable housing) bringing instantaneous perceptible effects to direct and indirect program beneficiaries as well as long-term solutions (e.g., improving transport and communication infrastructures, master planning developments and collaboration between government and private stakeholders) intended to realign various resources towards all related sectors and groups. Combined, these interventions should work on delivering sustainable results and achieve the intended goals of the BP2 program. Consolidating these interventions, we suggest that initiatives focusing on large-scale real estate development, rural-urban migration, or urban planning should adopt an approach centered on affordability (especially for consumers earning near or at minimum wage), accessibility (via public transportation and utilities), and adaptability (in terms of economic and environmental sustainability through master planning and effective implementation)—key principles that we believe would align with the country's governance vision and best contribute to the success of a “renewed” BP2 program. While the BP2 program highlights real estate in the form of dwellings as one of its key success indicators, this paper emphasizes that real estate development (land and its contribution as a built-up environment) should be one of the key focus areas of the program for it to be successful in the current iteration.

While Metro Manila (or the National Capital Region) has been attracting migrants due to the prospects of work, education, social services, and leisure (beginning the aftermath of the Second World War¹⁸), the congestion of the National Capital Region has exacerbated the adverse effects of the COVID-19 pandemic. Transmission rates have been consistently high since the first incidence of local transmission in March 2020, and until today the national capital remains the epicenter of the pandemic in the country. Cebu City in Region 7 emerged as an epicenter for the months of June and July, but became a model of containment after national government's aggressive stance. The high population density, particularly in Metro Manila, plus the fact that much of the workers of the region also come from the nearby Regions 3 and 4A can explain the high transmission rates. The pandemic has again called for the renewal of interest in relocating people away from the national capital. However, as argued in the paper, the timing of the relocation plus the sustainability issues (learned from previous attempts) have created much doubt as to whether this new attempt will be successful.

As we have propounded, previous private sector initiatives on real estate development may aid in sustainability efforts in the long term. While the government hopes to revive the economy through its infrastructure and construction spending initiatives through the “Build, Build, Build” Program, we see the need for cooperation from private sector developers to connect these efforts to the BP2 program. Through this cooperation, there is a collective effort of the whole economy through the real estate development sector in stanching economic losses due to the pandemic and later on providing economic opportunities in the long run. This is also a running concept in the last decade in economic development: to incorporate as many stakeholders as possible in pushing further for economic development and sustainability, called inclusive development.

As the authors hope for the success of BP2 through the role of the real estate development sector in the Philippines, this would not be possible without a careful rethinking of existing township models as well as updating and applying such rethinking in the context of the new pandemic. This is even supported by macroeconomic data reported in the early sections of the paper, and also the population trends in Metro Manila. These observations remain consistent with the Harris-Todaro model (Harris & Todaro, 1970) which explains the continuous surge of people to urban centers particularly in Metro Manila, despite efforts of the national government to bring them back to the provinces. Uneven poverty drives mobility to urban centers for economic opportunities. The paper's suggestions for a holistic township model-concept given the effects of the pandemic to real estate in particular and to the national economy in general is supported by the UPPI (2020):

The “Balik Probinsya” program should recognize the economic triggers of population movements and should put in place regional development programs that will address the prevailing regional poverty differentials. Unless and until people perceive a more balanced regional development that address these socio-economic inequalities, it may be difficult to draw them back to the provinces. And when migrants indeed move back, we need to give them enough reason to stay there for good.

Notes

- (1) As conditions change (improve or worsen) in various parts of the country, the IATF-EID devised various classifications of community quarantine: an enhanced community quarantine (ECQ), modified ECQ, a general community quarantine (GCQ), and a modified GCQ. Some local government units have also devised their own versions of lockdowns as a response to the increasing number of infections in their respective localities.
- (2) The word “*bayanihan*” in Filipino refers to a cultural trait even in early Philippine society that depicts the concerted and simultaneous effort of a community in helping a member when moving to a new place of residence. This has become a symbol of community unity and solidarity until today. Given the severity and the length of the community quarantine in many parts of the country, the Philippine legislation enacted a follow-through law, the *Bayanihan to Recover as One Act*, or Republic Act no. 11494, commonly known as the *Bayanihan 2 Act* (Official Gazette of the Philippines, 2020b).
- (3) Wuhan, China was placed under lockdown from March 9 to May 3 (55 days), while Italy was placed under lockdown from January 23 to April 7 (76 days).

- (4) Note that as in recent papers in real estate economics, standard data requires quarterly data to employ some empirical analyses. Mueller (1999) and Mueller (2002) even noted in his papers that there is a lag effect in the property cycle, especially if we are reporting the reported demand versus the financial revenues of the total real estate sector. Simbre (2019) even claimed a time series analysis, when in fact there are no regression methods employed to analyze his data on gross domestic product, gross value of the real estate sector, and employment data that are time-bound. Correlations were only used and insinuated other economic arguments not indicated by data and even the resulting correlations (e.g., role of overseas Filipino workers, savings, and investments).
- (5) An example of this method is seen in the case of analyzing government policy on banning second-hand clothing in the Philippines, in Abueg (2005), and in another comprehensive paper by Sing and Esquivias (2019).
- (6) By “institutions,” we refer to both codified and non-codified sets of norms, rules, and practices observed by a group of people, or an organized community. They do not mean physical structures, as the layman would believe.
- (7) There have been at least five crises in the Philippines of various origin in the last forty years. A quick discussion of these may be found in Abueg (2020b).
- (8) As early as 2012, JICA estimated that the Philippines incurs losses of about PHP2.4 billion per day due to Metro Manila traffic congestion. This was revised up to PHP3.5 billion in 2017, accounting for the increase in population of Metro Manila and adjacent provinces of Laguna, Bulacan, Rizal, and Cavite. Such worsening traffic conditions paved the way for the neologism “carmageddon” (i.e., Armageddon brought about by cars).
- (9) Initially called “social distancing” but was described by sociologists and social scientists to be politically incorrect.
- (10) The computation of the inter-censal absolute change and percentage change are done as if the censal years are adjacent. Computation for average annual growth rates during the inter-censal period use the annual compounding formula. All of the computations are standard rates when reporting changes in population, as used in studies in demography and in population economics.
- (11) The Philippine Statistics Authority reports three projection data: low, medium, and high.
- (12) This unemployment rate is an all-time high per historical records beginning 1987. The report further asserted that all Philippine regions posted double-digit unemployment rates, and that the labor force participation rate was at 55.6%. These are the lowest figures in the entire data series as well. The last time the Philippines posted a double-digit unemployment was in second quarter of 1991, at 14.4%.
- (13) Apart from Metro Manila, Cebu City in the province of Cebu also recorded high rates of community transmission infection.
- (14) While Metro Manila is the National Capital Region (composed of 16 cities and the Municipality of Pateros), Metro Cebu is composed of seven cities and six municipalities with Cebu City as its core. Metro Davao is composed of five cities and two municipalities with Davao City as its main hub. Although the congregation of these two megacities are patterned similarly to Metro Manila, these are not legislated regions as in the case of the National Capital Region.
- (15) Since the start of the Philippine real estate boom of the late 2000s, this has been a popular advertising spiel by a number of real estate developers particularly in vertical real estate projects (e.g., mid-rise and high-rise condominiums) found inside megacities, specifically those inside or near central business districts.
- (16) Private developments and their management in the Philippines are expected to conform to national and local laws; which are also practices in other countries with real estate management and development sectors.
- (17) By virtue of Republic Act No. 11201 of 2019, the Department of Human Settlements and Urban Development (DHSUD) has become the central housing authority in the Philippines and has absorbed the duties and functions of the Housing and Urban Development Coordinating Council (HUDCC) and the Housing and Land Use Regulatory Board (HLURB); it has also become attached to other housing-related government agencies such as the Home Development Mutual Fund (HDMF), among others, for policy and program coordination.
- (18) By design, the City of Manila (and later the National Capital Region) has been the economic and political century of the country since Spanish colonial rule. The migration from the provinces to the national capital has been heightened in this period since much of the postwar developments in the Philippines (mostly due to US agreements) benefitted the national capital. The national capital has shared similar urbanization trends with other cities in the world (Ritchie & Roser, 2018).

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References

- Abueg, L. C. (2005). The economics of secondhand retail trade: An analysis of the market for ukay-ukay. *Philippine Journal of Development*, 32(1), 53-77.
- Abueg, L. C. (2020a). *Extended, enhanced, and extreme: Macroeconomic implications of the community quarantine in the Philippines due to the COVID-19 pandemic* (CEM Discussion Paper). Retrieved from <https://www.researchgate.net/publication/341966849>.
- Abueg, L. C. (2020b). *Ekonomiks: Ang Pilipinas at ang sandaigdigan [Economics: The Philippines and humanity]*. Manila: St. Augustine Publications.
- Abueg, L. C., & Calub, R. A. T. (2020). *Applied economics*. Malaysia: Oxford Publishing (Malaysia) Sdn Bhd. Retrieved from <https://opm-resources.oup.com/shsapplieconomics>.

- Arcilla, C. A. (2019). Ensuring the affordability of socialized housing: Towards liveable and sustainable homes for the poor (UP CIDS Policy Brief 2019-15). Quezon City: Center for Integrative and Development Studies University of the Philippines. Retrieved from <https://cids.up.edu.ph/publications/policy-briefs/2019-series/2019-15/>.
- Asian Development Bank. (2017). *Meeting Asia's infrastructure needs*. Metro Manila: ADB. Retrieved from <https://www.adb.org/publications/asia-infrastructure-needs>.
- Asian Development Bank. (2019). *Asian development outlook (ADO) 2019 update: Fostering growth and inclusion in Asia's cities*. Metro Manila: ADB. Retrieved from <https://www.adb.org/sites/default/files/publication/524596/ado2019-update.pdf>.
- Lin, J. Y.-f., Morgan, P. J., Wan, G. (Ed.). (2018). Slowdown in the People's Republic of China: Structural factors and the implications for Asia. Tokyo: ADBI. Retrieved from <https://www.adb.org/sites/default/files/publication/407726/adbi-slowdown-prc-structural-factors-and-implications-asia.pdf#page=200>.
- Avida Village Cerise NUVALI. (2018, November 5). Retrieved from <https://www.atayala.com/avida/laguna/avida-village-cerise-nuvali/house-and-lot>.
- Ayala Land. (2016, January 6). NUVALI: By the numbers. *ABS-CBN News*. Retrieved from <https://news.abs-cbn.com/advertorial/business/10/12/15/nuvali-numbers>.
- Bai, B., Zhu, J., & Goodman, L. (2015, May). *A closer look at the data on first-time homebuyers* (Housing Finance Policy Center Brief). Washington, DC: Urban Institute. Retrieved from <http://www.urban.org/sites/default/files/publication/49876/2000210-A-Closer-Look-at-the-Data-on-First-Time-Homebuyers.pdf>.
- Ballesteros, M. (2010, March 27). Reforming housing for the poor in the Philippines. Retrieved from <https://www.eastasiaforum.org/2010/03/27/reforming-housing-for-the-poor-in-the-philippines/>.
- Brodie, C. (2017, May 22). These are the world's most crowded cities. *World Economic Forum*. Retrieved from <https://www.weforum.org/agenda/2017/05/these-are-the-world-s-most-crowded-cities/>.
- BusinessWorld (2018, June 27). Notable townships in Visayas and Mindanao. Retrieved from <https://www.bworldonline.com/notable-townships-in-visayas-and-mindanao/>.
- Canivel, R. S. C. (2020, June 1). 51 percent of German firms holding back investments in PH, but not because of COVID-19. *Philippine Daily Inquirer*. Retrieved from <https://business.inquirer.net/298843/51-percent-of-german-firms-holding-back-investments-in-ph-but-not-because-of-covid-19>.
- Capacio, J. L. D., De Dios, E. S., de Guzman, R. V., & van Tulder, R. (2020). *Creating inclusive institutions: An analysis of the experience of three agricultural value chain models* (UP CIDS Discussion Paper 2020-03). Retrieved from <http://hdl.handle.net/1765/127106>.
- Centre for Liveable Cities. (2014). *Liveable and sustainable cities: A framework*. Singapore: CLC. Retrieved from <https://www.clc.gov.sg/docs/default-source/books/clc-csc-liveable-sustainable-cities.pdf>.
- Corpuz, O. D. (1997). *An economic history of the Philippines*. Quezon City: University of the Philippines Press.
- Dacanay, S. J. O., III, Hapitan, R. B., & Abueg, L. C. (2018). Macroeconomics and industry analysis. In R. R. Santos (Ed.), *Essentials of investments in the Philippine capital market* (3rd ed., Chapter 7). Las Piñas City: Southville Global Education Network.
- Department of Health. (2020). *Updates on novel coronavirus disease (COVID-19)*. Retrieved from <https://www.doh.gov.ph/2019-nCoV>.
- Department of Labor and Employment. (2020, July 9). Summary of current regional daily minimum wage rates by region, non-agriculture and agriculture. Retrieved from <https://nwpc.dole.gov.ph/stats/summary-of-current-regional-daily-minimum-wage-rates-by-region-non-agriculture-and-agriculture/>.
- de Dios, E. S., & Dinglasan, K. (2014). Just how good is unemployment as a measure of welfare? A policy note (UPSE Discussion Paper No. 2014-01). Quezon City: University of the Philippines. Retrieved from <https://www.econstor.eu/bitstream/10419/93540/1/775215015.pdf>.
- Gonzales, C. (2020, May 13). 10,000 Filipinos apply for 'Balik Probinsya' program – NHA. *Philippine Daily Inquirer*. Retrieved from <https://newsinfo.inquirer.net/1274132/10000-filipinos-apply-for-balik-probinsya-program-so-far>.
- Gonzales, I. (2020, April 21). Ayala, Qualified to convert Laguna hospital into COVID facility. *The Philippine Star*. Retrieved from <https://www.philstar.com/nation/2020/04/21/2008577/ayala-qualified-convert-laguna-hospital-covid-facility>.
- Graaskamp, J. A. (1981). *Fundamentals of real estate development*. Washington, DC: Urban Land Institute.
- New South Wales Government (NSW Government). (2013, November 10). First home owner grant. Retrieved from <https://www.revenue.nsw.gov.au/grants-schemes/previous-schemes/first-home-owner-grant>.
- Harris, J. R., & Todaro, M. P. (1970). Migration, unemployment and development: a two-sector analysis. *American Economic Review*, 60(1), 126-142.
- Housing and Land Use Regulatory Board. (2017). *National urban development and housing framework 2017-2022*. Retrieved from <https://hlurb.gov.ph/wp-content/uploads/services/igu/clup-guidebook/NUDHF%20Full%20Version%20-%20FINAL.pdf>.
- Luci-Atienza, C., & Cahiles-Magkilat, B. (2019, October 17). It's urban planning.... *Manila Bulletin*. Retrieved from <https://mb.com.ph/2019/10/17/its-urban-planning/>.
- Luna, J. (2019, July 27). Townships: Peek into future cities. *Philippine Daily Inquirer*. Retrieved from <https://business.inquirer.net/275561/townships-peek-into-future-cities>.
- Minnery, J., Argo, T., Winarso, H., Hau, D., Veneracion, C. C., Forbes, D., & Childs, I. (2013). Slum upgrading and urban governance: Case studies in three South East Asian cities. *Habitat International*, 39, 162-169.
- Mueller, G. R. (1999). Real estate rental growth rates at different points in the physical market cycle. *Journal of Real Estate Research*, 18(1), 131-150.
- Mueller, G. R. (2002). What will the next real estate cycle look like? *Journal of Real Estate Portfolio Management*, 8(2), 115-125.
- National Economic Development Authority. (2017). *AmBisyon 2040*. Retrieved from http://2040.neda.gov.ph/wp-content/uploads/Vision2040_final.pdf.
- National Economic Development Authority. (2020). *Addressing the social and economic impact of the COVID-19 pandemic*. Retrieved from http://www.neda.gov.ph/wp-content/uploads/2020/03/NEDA_Addressing-the-Social-and-Economic-Impact-of-the-COVID-19-Pandemic.pdf.
- Official Gazette of the Philippines. (2020a). *Republic Act No. 11469*. Retrieved from <https://www.officialgazette.gov.ph/2020/03/24/republic-act-no-11469/>.
- Official Gazette of the Philippines. (2020b). *Republic Act No. 11494*. Retrieved from <https://www.officialgazette.gov.ph/2020/09/11/republic-act-no-11494/>.
- Official Gazette of the Philippines. (2020c). *Executive Order No. 114, s. 2020*. Retrieved from <https://www.officialgazette.gov.ph/downloads/2020/05may/20200506-EO-114-RRD.pdf>.
- Ordinario, C. (2020a, May 14). NHA bares plan to move 1-million Metro residents to regions in next 6 months. *Business Mirror*. Retrieved from <https://businessmirror.com.ph/2020/05/14/nha-bares-plan-to-move-1-million-metro-residents-to-regions-in-next-6-months/>.
- Ordinario, C. (2020b, May 6). AdMU economists suggest agri-driven economy for PHL to deal with pandemic. *Business Mirror*. Retrieved from <https://businessmirror.com.ph/2020/05/06/admu-economists-suggest-agri-driven-economy-for-phl-to-deal-with-pandemic/>.
- Pag-IBIG Fund. (2019). *Affordable housing loan for minimum-wage and low-income earners - Frequently asked questions*. Retrieved from https://www.pagibigfund.gov.ph/FAQ_AHL.html.
- Philippine Statistics Authority. (2020, June 5). Employment situation in April 2020. Retrieved from <https://psa.gov.ph/statistics/survey/labor-and-employment/labor-force-survey/title/Employment%20in%20April%202020>.
- Ranada, P. (2020, October 7). Parks will save us: Pandemic highlights lack of Metro Manila green, open spaces. *Rappler*. Retrieved from <https://rappler.com/newsbreak/in-depth/covid-19-pandemic-highlights-lack-metro-manila-green-open-spaces>.
- Rappler. (2020, October 14). Metro Manila's traffic problem explained. Retrieved from <https://www.rappler.com/newsbreak/explainers/explanation-metro-manila-traffic-public-commute-problem>.
- Reganit, J. C. (2020, May 8). 6 provinces ready for 'Balik Probinsya' pilot testing. *Philippine News Agency*. Retrieved from <https://www.pna.gov.ph/articles/1102337>.
- Republic Act No. 7160. (1991). Retrieved from <https://www.officialgazette.gov.ph/1991/10/10/republic-act-no-7160/>.
- Ritchie, H., & Roser, M. (2018). Urbanization. *Our World in Data*. Retrieved from <https://ourworldindata.org/urbanization>.
- Rivas, R. (2020, June 5). PH unemployment at all-time high with 7.3 million jobless in April 2020. *Rappler*. Retrieved from <https://www.rappler.com/business/262948-unemployment-rate-philippines-april-2020>.
- Roa, A. (2019, July 13). Sta. Rosa: steady figure in 'Billionaire's Club'. *Philippine Daily Inquirer*. Retrieved from <https://business.inquirer.net/274558/sta-rosa-steady-figure-in-billionaires-club>.
- Schumpeter, J. A. (1954). *History of economic analysis*. New York, NY: Oxford University Press.

- Schwab, K. (Ed.) (2019). *The global competitiveness report 2019* (Insight Report). Cologny/Geneva: World Economic Forum. Retrieved from http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
- Simbre, R. M. (2019). An empirical study on the real estate industry and the economic growth performances of the Philippines. *International Journal of Real Estate Studies*, 13(2), 59-63.
- Sing, L., & Esquivias, M. (2019). *The impact of the importation of second-hand clothing in the Philippines*. Retrieved from <https://www.fashionrevolution.org/wp-content/uploads/2019/04/POLICY-PAPER-1.pdf>.
- Suzara, Z.-Z., Mangilit, R., Punongbayan, J. C., Abad, L., & Villanueva, L. (2020, May 14). [Analysis] Why we can't Build, Build, Build our way out of this pandemic. *Rappler*. Retrieved from <https://www.rappler.com/thought-leaders/260867-analysis-why-we-cannot-build-our-way-out-of-coronavirus-pandemic>.
- Sweet, M. (2011). Does traffic congestion slow the economy? *Journal of Planning Literature*, 26(4), 391-404.
- Tan, B. P. (2013, March). *Centre for livable cities Singapore: The liveability framework*. Paper presented at the Fourth High Level Seminar on Environmentally Sustainable Cities 2013, Hanoi, Vietnam.
- The Manila Times (2020, March 31). 7 trends in Philippine real estate in 2020. Retrieved from <https://www.manilatimes.net/2020/03/31/business/real-estate-and-property/7-trends-in-philippine-real-estate-in-2020/708241/>.
- Tsuji, T., & Furuyama, K. (2020, May 18). Japan preps first subsidy to company moving production out of China. *Nikkei Asian Review*. Retrieved from <https://asia.nikkei.com/Spotlight/Coronavirus/Japan-preps-first-subsidy-to-company-moving-production-out-of-China>.
- Valencia, C. (2020, May 16). Philippines remains competitive as BPO destination — Chua. *The Philippine Star*. Retrieved from <https://www.philstar.com/business/2020/05/16/2014433/philippines-remains-competitive-bpo-destination-chua>.
- Venare NUVALL. (2010, May 31). Retrieved from <https://www.atayala.com/alveo/laguna/venare-nuvali/lot>.
- Veneracion, C. C. (2008). *Capacity building for urban slum upgrading: Views from the five communities in Quezon City*. Quezon City: Ateneo de Manila University.
- UN Statistics Division. (2018). *Handbook on Backcasting*. Luxembourg: United Nations.
- University of the Philippines Population Institute (UPPI). (2020). "Balik Probinsya" in time of COVID-19 (Research Brief No. 5). Retrieved from <https://www.uppi.upd.edu.ph/sites/default/files/pdf/COVID-19-Research-Brief-05.pdf>.

APPENDIX Correlation Tests for Figure 4 and Figure 7

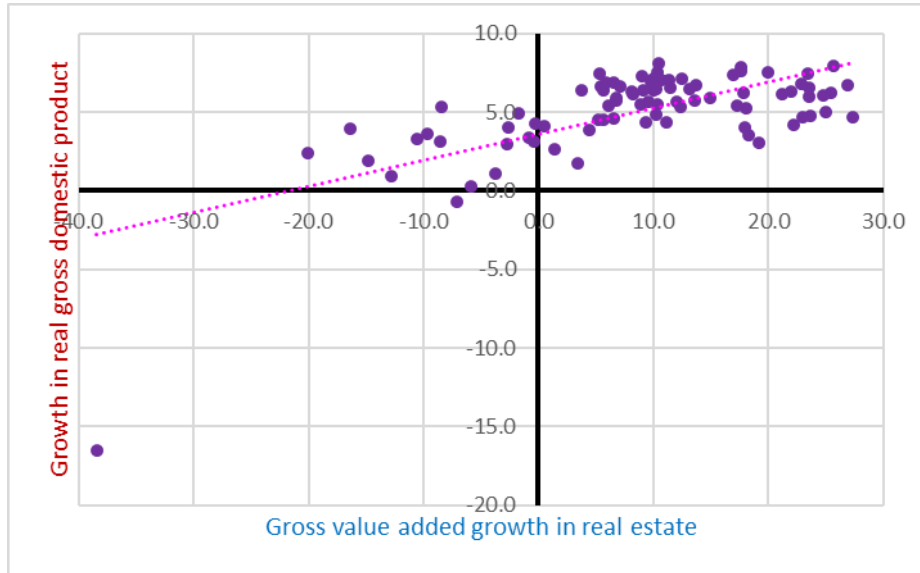


Figure A-1 Scatterplot for Figure 4 data (on growth of gross value-added on real estate, and real gross domestic product, 1999q1-2020q2)

Estimated Pearson product moment correlation, $r = 0.6635$. Since the absolute value of the critical- t is $7.8320 > 1.9917$ (the t -value with 84 degrees of freedom at the 5% level of significance), we reject the null hypothesis (note: p -value = 0.0000). Hence, there is statistical evidence indicating a moderate positive correlation between growth in the gross value-added of real estate and real GDP growth (which is significant even at the 1% level).

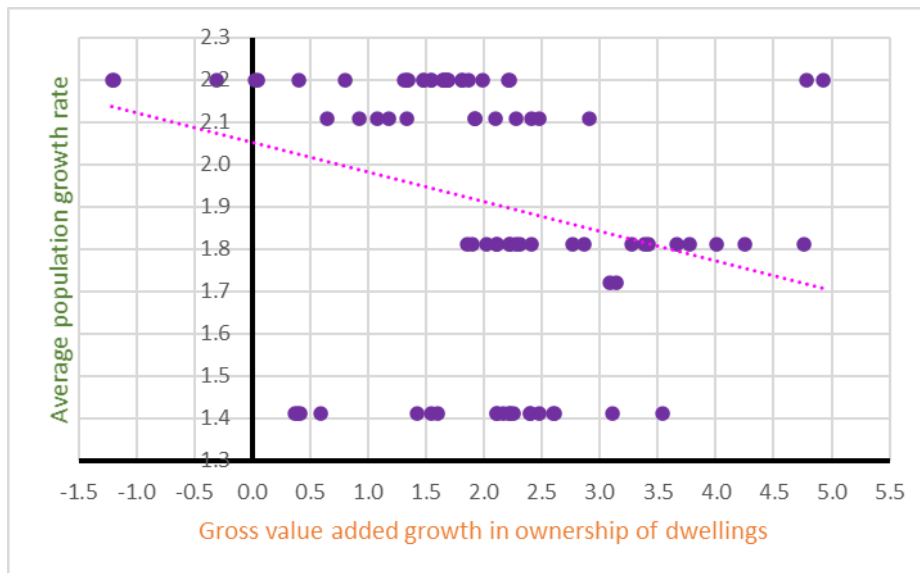


Figure A-2 Scatterplot for Figure 7 data (on growth of gross value-added on ownership of dwellings, and computed average population growth rate of Philippines, 1999q1-2020q2)

Estimated Pearson product moment correlation, $r = -0.2442$. Since the absolute value of the critical- t is $2.2237 > 1.9917$ (the t -value with 84 degrees of freedom at the 5% level of significance), reject the null hypothesis (note: p -value = 0.0285). Hence, there is statistical evidence indicating a weak negative correlation between growth in gross value-added of ownership of dwellings and average population growth.