The Impact of the COVID-19 Pandemic on the Construction Industry in the Philippines

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Abstract

Construction emerged as a casualty of the COVID-19 pandemic and the lockdowns imposed by the Philippine government aimed at curbing the community transmission of the virus. Construction activities declined by 34 percent in the second quarter of 2020, and more than half of employment losses in industrial activities came from job losses in construction. The government rolled out several programs that provided income replacement, wage subsidy, and direct cash transfers to affected and displaced workers. However, only a few received financial support from the national and local governments. Meanwhile, construction companies are still reeling from the health and economic impacts of the pandemic. Many are still operating at reduced capacity as they face reduction in the size of their labor force due to a host of factors. Using a uniquely designed questionnaire, the study explored how the COVID-19 pandemic and the lockdowns affected jobs,

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incomes, and working conditions of workers employed in selected construction projects in Metro Manila, and the forms of support they received during the pandemic. The survey findings suggest that the lockdowns resulted in work suspension for a majority of the survey respondents. Those who were able to return to work when lockdowns eased experienced reduced earnings. On the bright side, worker safety during the pandemic appears to be a top priority among the construction projects covered by the survey. Nonetheless, more needs to be done in terms of establishing occupational safety and health (OSH) committees in many workplaces and in instituting worker representation in these committees. Finally, the pandemic may have exacerbated the difficulties faced by trade unions in organizing workers in the construction industry, but the massive infrastructure programs that have been included in the Philippine government's COVID-19 economic recovery program makes the industry a greenfield for organizing. The survey disclosed that construction workers are willing to be organized into various forms of worker organizations for the protection of their rights and security at work, especially during a pandemic.

Keywords: Construction industry, COVID-19, construction workers, unions, Philippines

Introduction

The construction industry is one of the major economic industries in the Philippines. The industry's share in the country's gross domestic product (GDP) has been steadily rising from below six percent in 2010 to about eight percent by 2019. It also contributes significantly to employment creation. In January 2020, one in every 10 workers employed in the country was in construction. The industry's forward and backward linkages remain important; construction supports other economic activities, particularly in providing intermediate inputs to other industries.

In 2017, the Duterte government launched its P8.4 trillion flagship infrastructure program "Build, Build, Build" (BBB). BBB's avowed

objectives are to reduce poverty, stimulate economic growth, and reduce congestion in Metro Manila. BBB contributed to the growth of the construction industry.

As elsewhere, the outbreak of the COVID-19 pandemic and the continuing lockdowns brought the economy to a halt. Many factories and business establishments, including those engaged in construction, shuttered or significantly reduced their operations. Millions of workers lost their jobs and livelihood. In April 2020, the Philippine Statistics Authority (PSA) reported that joblessness soared to a record-high of 17.7 percent; at least 7.3 million Filipinos found themselves unemployed. In October 2020, unemployment slid lower than in April but remained high at 8.7 percent, equivalent to 3.8 million jobless Filipinos. Construction was among the industries hardest hit by the pandemic.

This paper presents the results of a recent study that examined the impact of the COVID-19 pandemic on the construction industry and its workers, the role of the industry in economic recovery, and the potentials and constraints of collective representation of workers in construction.

The next section discusses the methods used in the conduct of the study. This is followed by a discussion on the economic contribution of the construction industry in the Philippines and industry employers' perspective and roadmap for the construction industry. The third section provides a brief overview of the impact of the COVID-19 pandemic on the construction industry and the government responses to mitigate its health and economic effects. The fourth section, the main part of the paper, presents and discusses the key findings of the survey and examines the impact of COVID-19 on construction workers' jobs, incomes and working conditions, including collective representation. This is followed by a discussion on the effects of the pandemic on the unionization of workers and an exploration of the prospects for collective representation or worker organizing in the industry in the time of COVID-19. The last part concludes the paper.

Methods

The research employed a mixed method approach that included analysis of government statistical data, review of related literature,

administration of a survey that used a uniquely designed self-administered questionnaire (in Filipino), and online interviews (via Zoom or telephone) with selected key informants (i.e., leaders of national trade union federations in construction, officers of construction companies, and officers of a construction association). The survey sought to capture how construction workers and their work arrangements and working conditions have been affected by the pandemic and the community quarantines, and the support they have had received from the government, their employers and trade unions. The respondents of the survey were construction workers engaged in public and private construction projects, albeit mostly from the latter.

The survey was conducted between June and September 2020. Before the questionnaire was fielded, it was pre-tested on three workers from three different construction projects. An online orientation about the survey and the questionnaire was conducted for the enumerators who were union organizers of a national construction trade union. They distributed the questionnaire in various construction sites and projects. As COVID-19 health protocols in the construction industry severely limit the entry of non-workers in construction sites, the enumerators had to coordinate with the safety officers for the distribution and retrieval of questionnaires.

The data gathered were encoded and processed using the software R and Excel. Descriptive statistics, particularly frequencies, multiple response tables, and means were used to analyze survey data.

Limitations of the Methodology

The survey covered 152 worker-respondents employed by nine construction companies engaged in seven projects in Metro Manila at the time of interview. Both private and public construction projects were included in the survey. Of the nine construction companies, four were general contractors and five were subcontractors. In this regard, the sample size of 152 construction workers is too small to be statistically representative of the total workforce in construction, and therefore generalizations are not possible. However, the sample is an adequate size for exploratory research. Moreover, recent and

relevant literature and interviews with key informants were conducted to validate and complement the findings of the survey.

The economic contribution of the construction industry in the Philippines

The construction industry is dominated by micro, small, and medium enterprises (MSMEs), which constituted 91.4 percent of all establishments in 2019 (Department of Trade and Industry [DTI], 2019). However, large enterprises still account for majority of the employed workforce in the industry. In 2019, they accounted for 74.2 percent of total employment in the industry. Small enterprises accounted for 14.8 percent while medium enterprises employed 8.5 percent of construction workers. In general, construction firms locate in urbanized regions. The National Capital Region (NCR) hosts the highest number of establishments followed by Region IV-A (CALABARZON), Region VII and Region III.

Contribution to GDP

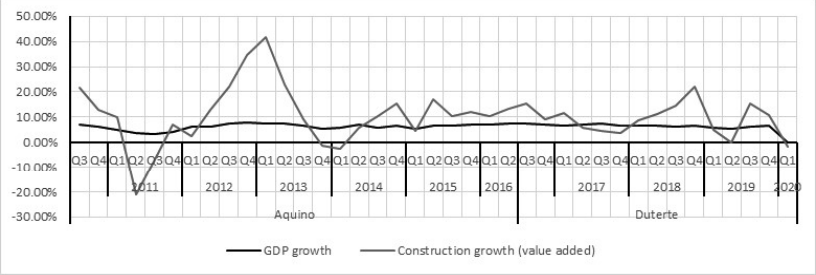
The construction industry is one of the industries the government identifies as key to the economy's long run growth. Economic and sectoral growth is commonly measured in terms of percentage changes in value added.[3] Figure 1 shows the growth of the industry's value added vis-à-vis the growth of the economy in general as measured in terms of GDP growth. While there have been few instances in the past decade where construction value added fell—such as in the second and third quarters of 2011, and in fourth quarter of 2013 and first quarter of 2014—in most of the periods in the past decade, construction value added grew faster and hence pulled GDP growth upward. Moreover, periods of decline in construction output were followed by sharp increases, such as those that occurred in 2012-2013 and in 2014.

The government's attempt to boost infrastructure spending also contributed to the growth of the industry. The government laid its massive BBB infrastructure project in 2017 and this helped sustain construction's growth from 2017 to 2019. Nonetheless, there is no

3 Value added is commonly expressed as the sum in payments paid to factors of production and excludes amount paid to intermediate inputs.

generalizable trend in the growth of construction activities by sector. There were instances when the private sector was leading the growth such as in 2012-2013 and 2014 while there were also episodes when government construction activities led the entire sector such as in 2011-2012 and 2015.

Figure 1: Growth rate of GDP and construction value added, 2010-2020 (in percent, 2018=100)



Source: Based on data from PSA.

The Duterte government initially lined up 75 big-ticket projects under the BBB. However, halfway into Duterte's administration, only two of these projects were completed, according to Macaraeg (2020). She adds that the new BBB pipeline consists of 100 infrastructure projects but has a lower cost of P4.3 trillion. Several existing projects initiated by previous administrations are also included, such as the Tarlac-Pangasinan-La Union Expressway (TPLEX) extension, Light Rail Transit Line 1 Cavite extension, Metro Rail Transit Line 7, and North Luzon Expressway-South Luzon Expressway Connector Road. With the revised list, a little over half (56%) of the projects are expected to be completed by the time Duterte steps down in 2022. So far, only 34 percent of the Duterte administration's flagship infrastructure projects were being implemented as of the end of 2020.

In addition, the BBB has been marred by chronic underspending, according to Suzara et al. (2020). Firstly, infrastructure allocations programmed by Congress for 2019 and 2020, which were set at seven percent of the GDP, were way lower than the targets originally set by the economic managers. For 2019 and 2020, infrastructure spending was pared down to four percent and five percent of the GDP, respectively. Secondly, the Department of Public Works and Highways (DPWH) and Department of Transportation (DOTr) disbursed less than

half of their total obligations in the BBB program in the last three years (2017-2019), resulting in a gap between obligations (i.e., liabilities incurred by the government when an agency enters into contracts for the delivery of projects) and disbursements (i.e., cold cash withdrawn from the Bureau of the Treasury to pay for such obligations).

For 2020, P972.5 billion was allocated for infrastructure development under the BBB program.

The chronic underspending in the BBB program puts into question its role in fueling the country's economic recovery from the pandemic. As Suzara et al. (2020) exhorts: "If key agencies—notably the DPWH and the DOTr—can't deliver BBB projects in normal times, what more in a pandemic?"

Linkages with other industries and multiplier effects

The construction industry is relatively more forward oriented than backward, that is, construction tends to contribute to other industries more as an intermediate input to production. Forward and backward linkages are calculated from the 2012 Input Output (IO) Table as the sum of the industry's forward and backward multiplier effects.

For the construction industry, a P1 increase in final demand generates P1.02 additional demand for other industries that supply intermediate input to construction activities. Based on technical coefficients from the IO Table, the construction industry uses intermediate inputs mainly from the following industries (from highest to lowest)[4]: wholesale and retail trade and maintenance and repair of motor vehicles; basic metal industries; non-metallic mineral products; other mining and quarrying; petroleum and other fuel products; food manufactures; poultry; fabricated metal products; non-bank financial intermediation; computer, electronic and optical products; administrative and support service activities; and rubber and plastic products.

Based on computed multiplier effects of construction, these industries will mainly benefit from increases in final demand for construction. However, except for administrative and support service activities, the

4 Technical coefficients in an input output table is the ratio of values paid to an intermediate input to total value of output (intermediate input and value added).

intermediate inputs of the construction industry are among those that are mostly imported by the country; thus, the leakage, that is, the value flowing out of the economy from increase in demand for construction, must be large.

Meanwhile, a P1 increase in output of construction generates support for the input requirements of other industries by P1.4. The industries that spend the largest on construction activities relative to other intermediate inputs are nickel mining, basic pharmaceutical products and pharmaceutical preparations, real estate activities, copper mining, warehousing and support activities for transportation, air transport, water, gold mining, sewerage and wastewater remediation activities, and professional, scientific, and technical activities.

Contribution to employment and quality of employment

Construction contributes significantly to employment. Over time, employment in construction activities have increased in size relative to total employment. In January 2016, employment in construction activities accounted for only 7.6 percent of total employment. By January 2020, one in every 10 workers employed in the country was in construction. The increase in employment in the industry may be credited to its continuous growth as well as the government's BBB program. Construction is also a major industry as it accounts for more about half of industry employment.

The industry is heavily dominated by males. In 2019, males constituted 98 percent of total employment in the industry, while females only comprised two percent. In construction subsectors, the presence of women workers is greatest in civil engineering works at six percent of the workforce. In the construction industry, women are often employed as laborers in elementary occupation (19%), general and keyboard clerks (29.3%), and engineering professionals (24%).[5] Meanwhile, men are often employed as craft and trade workers (40%), and laborers in elementary occupation (53%).

Employment in the construction industry is by nature mostly project-based owing to the time-bound duration of projects. Department Order (DO) No. 19, Series of 1993, mentions two categories of

5 Computed using averages from LFS 2019 (all quarters).

employees in the construction industry—project employees and non-project employees. Accordingly, Section 2.1 of the DO defines project employees as "those employed in connection with a particular construction project or phase thereof and whose employment is co-terminus with each project or phase or phase of the project to which they are assigned."[6] Non-project employees, on the other hand, "are those employed without reference to any particular construction project or phase of a project."[7] Section 2.2 of the DO provides six indicators[8] of project employment, any of which may be considered as an indicator that an employee is a project employee. Under Section 2.4 of the DO, there are three types of non-project employees, namely probationary, regular, and casual employees. The DO also recognizes the practice of contracting out and subcontracting certain phases of a construction project, pursuant to Article 109 of the Labor Code, as amended.

Thus, a big majority of the industry's workforce is comprised of non-regular workers. In June 2018, rank-and-file workers constituted about 91 percent of the total 284,970 workers (PSA, 2018a). Agency-hired workers, who are not considered employees of construction firms, comprised 2.7 percent of the total rank-and-file workers. Meanwhile, non-regular workers in construction firms made up over half (55%) of rank-and-file workers in 2018. In absolute terms, the number of non-regular workers continued to increase but at a diminishing rate: between 2014 and 2016, non-regular workers jumped by almost 40 percent from 111,627 to 155,629 (PSA, 2018b). However, the increase tapered off to less than one percent between 2016 and 2018.

The biggest group of non-regular workers in construction is either contractual or project-based, as expected. Between 2014 and 2018, project-based workers constituted 83 percent of non-regular employment in construction, according to PSA's Integrated Survey of Labor and Employment (ISLE). The proliferation of non-regular workers in construction is an outcome of the nature of work that only lasts as long as the specified duration of a project.

6 Department of Labor and Employment. (1993). Department Order No. 19, Series of 1993. Guidelines on the Employment of Workers in the Construction Industry. https://bwc.dole.gov.ph/images/Issuances/DepartmentOrder/DO_19_2.pdf.
7 Ibid.
8 For the specific indicators, see Op. cit.

Table 1: Daily basic pay in construction sectors by region, 2019

Region	Construction of buildings	Civil engineering	Specialized construction activities	Average (all economic sectors)	Minimum wage (non-agricultural)
I	404.37	330.92	443.96	435.25	340.00
II	396.01	481.46	430.01	422.60	370.00
III	431.09	607.28	545.58	476.32	420.00
CALABARZON	479.08	736.86	494.62	525.68	400.00
V	376.65	367.82	453.14	409.19	310.00
VI	364.03	373.24	410.13	407.01	395.00
VII	368.71	405.59	511.31	412.47	404.00
VIII	344.95	324.94	378.32	421.02	325.00
IX	317.86	362.63	455.26	396.20	316.00
X	351.21	352.76	378.08	386.87	365.00
XI	401.47	406.84	421.33	428.60	396.00
XII	335.91	342.84	325.68	388.49	336.00
NCR	592.73	738.94	601.04	683.84	537.00
CAR	392.96	420.63	439.68	513.74	350.00
ARMM	283.99	282.62	288.31	349.63	325.00
CARAGA	381.56	363.17	435.43	438.76	320.00
MIMAROPA	373.89	374.02	409.07	424.19	320.00

Source: Based on data from PSA (Labor Force Surveys 2019), NWPC.

Table 1 presents the daily basic pay of workers in the construction industry in 2019. The average daily basic pay in the sector is highest in NCR and CALABARZON, ranging from P592.73 to P738.94 and P479.08 to P736.86, respectively. However, although the average daily basic pay in the construction industry is higher (between 1.06 and 1.20) than the average minimum wages across all sectors, it is lower (between 0.88 and 0.99) than the average daily basic pay across all industries.[9]

The construction industry is relatively capital intensive and based on the 2012 IO table, employees' compensation accounted for 32 percent of value added and 13 percent of expenditures on inputs. Construction

9 Note that a value greater than 1 means that the industry has higher wages while a value less than 1 means that the industry pays lower than average for all economic industries and regional minimum wages. The values were computed based on PSA (Labor Force Surveys 2019) and National Wages and Productivity Commission.

became less labor intensive between 2006 and 2012 as labor share in total inputs fell by eight percentage points in this period.

Occupational safety and health prior to the pandemic

Prior to the issuance of Republic Act No. 11058[10] (Strengthening Compliance with Occupational Safety and Health Standards Act) in 2018, the regulatory framework on OSH in the construction industry had been Department Order No. 13,[11] Series of 1998. This DO mandated the following: creation of a health and safety committee in each project site; a safety and health program; safety signages; employers' provision of all necessary personal protective equipment to workers; having emergency occupational health personnel and facilities; observance of safety guidelines in the use of construction heavy equipment; provision of adequate safety and health information and training to all workers; provision of adequate workers' welfare facilities (e.g., safe drinking water, sanitary and washing facilities, suitable living accommodations as may be applicable, separate sanitary, washing and sleeping facilities for men and women workers). Republic Act No. 11058 integrated all the provisions of DO 13.

Findings from ISLE available in the PSA website suggest a mixed picture of the state of OSH in the construction industry. Between 2013 and 2015, the number of cases of occupational injuries remained the same at 2,115. Most occupational injuries do not result in lost workdays. In 2013, of the 2,115 cases of occupational injuries, 1,590 or 75 percent did not involve lost workdays. In 2015, a lower proportion of occupational injury cases without workdays lost was reported: 1,399 or 66 percent of the 2,115 cases. In 2017, a lower number of workplace injuries was recorded at 1,985 of which 1,159 or 58 percent did not cause workday losses.

Although cases of occupational injuries without workdays lost declined by 12 percent from 1,590 in 2013, to 1,399 in 2015, and

10 The full text of Republic Act 11058 can be downloaded from https://bwc.dole.gov.ph/images/Issuances/RA_11058_OSHLAW.pdf. The law's Implementing Rules and Regulations (Department Order No. 198, Series of 2018) can be downloaded from https://bwc.dole.gov.ph/images/Issuances/DepartmentOrder/DO198_18_IRR_of_RA_11058__AnACtStrengthening-CompliancewithOSHSandProvidingPenaltiesForViolationsThereof.pdf.

11 The full text of Department Order No. 13, Series of 1998 can be downloaded from https://oshc.dole.gov.ph/wp-content/uploads/2020/03/DO_13.pdf.

further by 17 percent to 1,159 in 2017, cases with workdays lost increased by 36.2 percent, from 525 in 2013 to 715 in 2015, and further worsened in 2017 when it increased by 16 percent to 826. There were marked increases as well in the frequency rate (i.e., cases of occupational injuries with workdays lost including fatalities per 1,000,000 employee-hours of exposure) and incidence rate (i.e., cases of occupational injuries with workdays lost per 1,000 workers) of cases of occupational injuries with workdays lost. From 1.18 in 2013, the frequency rate nearly tripled at 3.39. Meanwhile, the incidence rate more than doubled—from 3.06 in 2013 to 8.75 in 2015. However, both frequency rate and incidence rate showed improvements in 2017 as they fell to 1.14 and 3.02, respectively. Even though there was an increase in the cases of injuries with workday losses, the increase in employment between 2015 and 2017 from 243,490 to 284,970 offsets the increase in cases, and therefore explains the decline in both frequency rate and incidence rate.

Cases of occupational diseases went down between 2013 and 2015, from 4,175 to 2,468, respectively, according to the 2015/2016 ISLE. The 2017/2018 ISLE however reported a 17 percent increase bringing the total cases of occupational diseases to 2,886. As work in the construction industry mostly requires physical activities, back pains are the top occupational diseases suffered by workers, accounting for 31.6 percent of total diseases in 2015. Other common occupational diseases include the following: neck-shoulder pains (16.5%); essential hypertension (9.6%), and occupational dermatitis (9.4%). In 2017, essential hypertension became the top occupational disease in the industry (32.8%) along with back pain (22.5%) and neck-shoulder pains (14.5%).

Past data on OSH shows that improvements in OSH can quickly be overturned, so firms cannot be complacent when it comes to safety at work. OSH personnel in construction firms, such as safety officers, are extremely important considering the risks workers face at work. Adequately trained safety officers ensure the proper implementation of OSH programs in construction projects (DOLE, 2001), and hence, their role in preventing workplace accidents and injuries is of extreme importance. However, according to the 2017/2018 ISLE, although almost all establishments have trained first-aiders, one in four construction establishments do not have safety officers. Injuries in the

construction industry are costly for firms, and more importantly for workers who get injured. Having safety officers reduces the exposure of workers to occupational risks.

Unionization and collective bargaining prior to the pandemic

The Philippine Constitution, under Article III, Section 8, guarantees the right of people to form unions and other associations for purposes not contrary to law. The Labor Code (as amended), under Book V, Article 218, declares as a State policy the promotion of free trade unionism and collective bargaining. Therefore, all workers should enjoy the freedom to associate (or organize) and the right to bargain collectively. Even agency-hired workers in the construction industry can in fact organize into a union and bargain collectively with their employer (i.e., the contractor or subcontractor, agency or manpower cooperative), as provided in Section 10 of Department Order No. 174, Series of 2017.[12] In practice, however, workers who are organized into or who join a union are largely regular or permanent employees who are in an employment relationship. As pointed out earlier, the construction industry is dominated by project employees who are mostly on fixed-term contracts.

Table 2: Union density and collective bargaining in the construction industry

Indicator	2010	2014	2016	2018
Union density (%)	2.3	1.0	0.99	1.3
Number of union members	3,043	1,850	2,088	3,697
Collective bargaining coverage (%)	2.7	1.3	1.3	1.3
Number of workers covered by collective bargaining	3,473	2,385	3,234	3,697

Source: ISLE 2010/2011, 2013/2014, 2015/2016, 2017/2018

In light of this, it is not surprising that unionism and collective bargaining remain feeble in the construction industry. In fact, the industry is the least organized among all industries in the economy. Union density was a pittance 0.9 percent in 2016, and an overall decline was recorded between 2010 and 2016 (Table 2). Collective

12 The full text of D.O. 174 can be downloaded from https://blr.dole.gov.ph/news/department-order-no-174-series-of-2017-rules-implementing-articles-106-to-109-of-the-labor-code-as-amended/.

bargaining coverage was puny as well at 1.3 percent in 2016. Union membership increased by 77 percent in 2018. However, because the base figure, i.e., union membership, is small, the resulting union density remains small at 1.3 percent. In 2017, there were only 17 construction establishments with unions out of 1,006 establishments. All these unions have a collective bargaining agreement (CBA). The nature of work—non-regular and project-based—along with management opposition to unions, are commonly cited as the primary causes of low union membership in the construction industry.

Industry perspective and roadmap for the construction industry

Industry players developed the Philippine Construction Industry Roadmap 2020-2030: Tatag at Tapat for the construction sector outlining the plans and goals of the industry in the current decade 2020-2030.[13] The roadmap aspires to a P130 trillion worth of construction activities in the current decade that will be led by the government's interest in infrastructure and the private sector's profit motive. The roadmap contains "7+1 action plans" which aim to revitalize and strengthen the Department of Trade and Industry–Construction Industry Authority of the Philippines (DTI-CIAP) so it can support the interest of the industry players which is its most important goal. The other seven action plans in the roadmap include the following: a communications plan to promote the roadmap in mainstream media; an infrastructure masterplan development advocacy plan; professional, skills and productivity upgrading; digitization and modernization; policy reform involving key legislative agenda; government-industry-academe partnership; and construction services export and outsourcing.

Parts of the roadmap that relate to bringing about new construction activities are beneficial to workers because these will result in job creation. However, there are two items in the roadmap that workers must carefully scrutinize. Depending on how workers respond, these plans can either benefit or harm them.

13 Interview with key officers of the Philippine Constructors Association (PCA). The roadmap was crafted with minimal participation of labor mainly through the consultations organized by the Department of Labor and Employment (DOLE) on some of the action plans. In these consultations, trade unions were invited by the DOLE.

First, construction companies are advocating standardization of skills in the sector. Skills development is important for workers and the economy as a whole because it affects productivity and hence, compensation. Construction companies are advocating skills standards supposedly to encourage workers to acquire more skills and hence, earn more despite the roadmap disregarding the issue of who should shoulder the cost of trainings. While it is true that skills will increase workers' earnings, it is also true that fixing wage rates to levels of skills reduces the space by which workers can influence the level of wages in the sector. This has important implications on collective bargaining. However, skill-wage standardization can also be used by workers and unions as a motivation for industry-level bargaining.

Second, digitization and automation can have negative impacts on workers. The industry is gradually adopting pre-fabrication through Design for Manufacturing and Assembly (DFMA) where manufacturing of individual parts of building structures and assembly of these parts take place separately. Advancements in digital technologies facilitate this method and with emerging technologies on automation and 3D printing, it is likely for a number of construction jobs and tasks to be transformed into manufacturing tasks. This can either be an advantage or disadvantage for organized labor. If construction jobs are outsourced to manufacturing, workers previously carrying out these tasks can still be employed if they undergo appropriate training. These workers can even be organized into unions and engage in collective bargaining because unions are denser in manufacturing. However, if these tasks are automated by, for example increasing adoption of DFMA by the construction industry, it may result to labor displacement if mitigating measures (e.g., retraining of workers to take on other jobs) are absent.

Impact of the COVID-19 pandemic on the construction industry and government responses

Impact on output and employment

When the government imposed an enhanced community quarantine (ECQ) in many regions in the Philippines, construction emerged as a casualty in terms of output and employment decline. The impact of

the COVID-19 pandemic is not yet fully reflected in the first quarter of 2020 growth figure for construction. However, based on second quarter National Income Accounts of the PSA, construction activities declined by 34 percent and it is the hardest hit among industrial activities, after accommodation and food service activities (-68%) and transportation and storage (-59%).

In terms of employment, construction is the hardest hit among industrial activities as more than half of employment losses came from job losses in construction. About 34 percent of employment in construction activities were lost due to the lockdown in response to the COVID-19 pandemic. In the guidelines set by the DPWH for areas under ECQ, construction activities related to priority infrastructure projects and priority private construction projects related to food production, agriculture, fishery, fish port development, energy, housing, communication, water utilities, manufacturing, and BPOs were allowed to operate. The rest of construction activities in areas under ECQ were suspended. As a result, construction activities registered huge employment losses in April 2020.

However, employment in the industry also recovered quickly when the general community quarantine (GCQ) was imposed in many parts of the country by June 2020. The employment level in July 2019 (i.e., 4.018 million) was restored in July 2020 (i.e., 4.033 million) based on the July 2020 PSA Labor Force Survey. Construction is among the few industries that registered positive employment growth, although the increment in jobs is low.

Response of government

Construction, and in particular, the government's massive BBB infrastructure program, is seen not only as a driver of growth but also as a key to economic recovery under the pandemic. Public works are seen as countercyclical interventions that will not only strengthen the country's infrastructure system to support long term growth but also serve as a countercyclical intervention to augment aggregate demand through higher government spending and employment.

Build, Build, Build projects

Public infrastructure projects form a big part of the executive department's recovery agenda with the BBB program at the center. The government announced that current big-ticket BBB projects will push through despite the COVID pandemic (Cabuenas, 2020). Based on the NEDA's February 2020 list of flagship infrastructure projects,[14] majority (i.e., 73 out of 100) are for transport and mobility (NEDA, 2020). Other sectors addressed by BBB are water resources (10), urban development and redevelopment (including disaster risk mitigation) (9), information and communication technology (6), and power and energy (2).

The NEDA (2020) list also indicates that most of the flagship programs are in Luzon with 22, out of 100 targeted to the NCR. Meanwhile, Mindanao and Visayas received 25 and 17 projects, respectively.[15] The DPWH is the implementing agency for 42 out of the 100 flagship infrastructure projects while the DOTr holds 38 projects. The National Irrigation Administration and Manila Waterworks and Sewerage System will implement five projects each, while the DOTr with the Bases Conversion and Development Authority will jointly implement two projects. Other implementing agencies are the National Olympic Committee, Department of Information and Communications Technology, PSA, Department of Interior and Local Government, Housing and Urban Development Coordinating Council, and Department of Energy.

At the time of writing, there were 34 ongoing projects; nine in advanced feasibility studies; 43 that will commence construction in six to eight months; and 14 in advance stage of government approval (NEDA, 2020). Meanwhile, 13 projects are expected to be finished by 2020, 16 by 2021, and 27 by 2022.

Construction works are gradually coming back. As early as April 2020 when the whole of Luzon was placed under ECQ, the government had greenlit the resumption, albeit limited, of 13 big-ticket rail projects of

14 The rest of the projects are expected to be finished between 2023 and 2028. See NEDA (2020). However the revised list of infrastructure flagship projects is not anymore accessible at https://www.neda.gov.ph/wp-content/uploads/2020/03/Revised-List-of-Infrastructure-Flagship-Projects-as-of-2.17.2020.pdf. If needed, the authors can be reached for a copy of the original file.
15 Ibid. Nationwide projects are airports.

the DOTr (Esguerra, 2020). These projects include the following: LRT-1 Cavite Extension; LRT-2 East Extension; LRT-2 West Extension; LRT-2 Fire Restoration; MRT-3 Rehabilitation; MRT-7; Metro Manila Subway; Common Station; PNR Clark 1; PNR Clark 2 and Calamba; Subic-Clark Railway; PNR Bicol; and Mindanao Railway.

Infrastructure development in the 2021 Philippine budget

Infrastructure development is the main strategy for the economy to rebound in 2021. Of the proposed P4.5 trillion national budget for 2021, close to a quarter or P1.2 trillion is allocated to infrastructure development (Laforga, 2021). About P695.7 billion is allocated for public works under the DPWH and P87.9 billion for transportation infrastructure under the DOTr (Department of Budget and Management, 2020). These massive public works are expected to generate more employment in the construction sector and in other sectors for which the former has forward and backward linkages.

Estimated employment impact of BBB

In the absence of complete information about the infrastructure projects, the authors computed the direct employment impact of BBB using prevailing minimum wages, budget allocation for infrastructure projects, duration of the projects, and the share of labor compensation to total input costs in construction activities obtained from IO tables. In calculating the direct employment effects (i.e., total labor expenditure or share of compensation to total cost) of on-going BBB projects at the time of writing, both a low scenario and a high scenario were derived using the 2012 IO matrix and the 2006 IO matrix, respectively. For the low scenario, the share of compensation to total cost is 13.4 percent, while for the high scenario it is 25.4 percent.[16] Thus, the estimated number of direct employment that on-going BBB projects may be able to generate for 2020 to 2022 is between a low of 232,290 and a high of 441,505.

The employment generated by BBB may significantly offset the employment losses as a result of the pandemic, provided that public

16 According to the Philippine Contractors Association (PCA), labor cost is 30 percent of total project cost of private construction projects, most of which are residential structures. Public construction especially infrastructure projects are less labor intensive than most private residential projects.

construction activities are not hampered especially by government's pronouncements regarding COVID-19.

Government support programs for displaced workers

Shortly after the Luzon-wide lockdown, the government rolled out several programs that provided income replacement, wage subsidy, and direct cash transfer to affected and displaced workers.

To assist small and medium enterprises maintain their workforce, the Department of Finance, through the Social Security System (SSS), rolled out the Small Business Wage Subsidy (SBWS) program. The SBWS provides a wage subsidy of between P5,000 to P8,000 (based on the regional minimum wage) per month for two months (March and April 2020) per eligible employee. Establishments that are eligible for the SBWS are those registered with the Bureau of Internal Revenue (BIR) and have complied with tax obligations in the past three years up to January 2020, and those registered with the SSS and have paid SSS contributions for the past three years up to January 2020 (the last recorded contribution). The program expired on 30 April 2020. According to a report, more than half of the estimated 3.5 million workers of small business enterprises that closed failed to submit their salary subsidy applications with the BIR. Under the wage subsidy guideline, the SSS will release the cash aid to individual employees upon the BIR's issuance of proper tax clearance. The SBWS had 2.85 million beneficiaries from the first tranche, as of May 24, 2020. There is no available information, however, that would indicate if displaced construction workers were able to avail of this subsidy. Nonetheless, as construction companies of mega infrastructure projects are neither small nor medium, they were not qualified to avail of this assistance for their displaced workers.

On March 23, 2020, another program was rolled out by the Philippine government, through the DOLE, to support displaced workers—COVID-19 Adjustment Measures Program (CAMP). CAMP provided a one-time cash assistance of P5,000 to displaced workers. According to DOLE, 618,722 formal sector workers from 31,972 micro, small and medium enterprises were extended the cash assistance as of 7 May 2020 (DOLE, 2020). This suggests that not all of the displaced workers, including construction workers, were able to access this assistance.

Recall that for the first quarter of 2020, over a million workers lost their jobs in the construction sector alone.

In addition to CAMP, the DOLE also implemented the Tulong Panghanapbuhay sa Ating Disadvantaged/Displaced Workers-Barangay Ko, Bahay Ko (TUPAD-BKBK) program from May to June 2020. TUPAD is a short-term emergency employment program to help informal sector workers recover from economic displacement and loss of income due to the ECQ. Under the program, beneficiaries were paid the minimum wage in their respective areas for 10 days of work, such as disinfection and sanitation of their immediate dwellings and immediate vicinity, helping local government units in the delivery of essential goods and services, packing relief goods, providing transport services for frontline workers, and setting up mobile markets. The DOLE reported that as of the first week of May, 337,198 informal sector workers were provided short-term employment, out of the more than 540,000 who had sought assistance under the TUPAD-BKBK program (Manila Bulletin, 2020).

The CAMP and TUPAD-BKBK programs were halted due to the depletion of funds. However, with the passage of the Bayanihan to Recover as One II Act or Bayanihan 2 on September 11, 2020, which infused additional funding, these programs resumed in October 2020.

The Bayanihan 2, which aims to help strengthen the health sector and revitalize the country's growth, provides P165.5 billion to finance several government programs such as improvement of health care resources, cash-for-work program, agriculture support, assistance to industries affected by the pandemic, and procurement of coronavirus vaccines. The government also intends to use P13 billion to implement a cash-for-work program (i.e., TUPAD), which includes public infrastructure works, which displaced construction workers could access. About P4.5 billion will also be allocated for the construction of quarantine and isolation facilities, dormitories for front liners and expansion of government hospital capacity.

As a stimulus package, Bayanihan 2 mandates the DPWH and other government agencies to expedite infrastructure projects to generate local employment.

Government-issued safety guidelines for infrastructure projects during the pandemic

Labor inspection, complaint inspection, and occupational safety and health investigation are suspended for the duration of the community quarantine, as provided in Department Order (DO) No. 213 issued by the Department of Labor and Employment (DOLE).[17] According to the DO, routine inspections will remain suspended even after the lifting of the community quarantine. Moreover, in pending labor standards cases, the period to comply is likewise suspended during the community quarantine. All this suggests that data on compliance with general standards and OSH standards of establishments, including those in the construction sector, will be wanting during the pandemic.

Metro Manila and other provinces were placed under GCQ beginning June 1, 2020, but this ended abruptly on August 3, 2020. In areas under GCQ, all public and private construction projects were allowed to operate on full capacity but with strict compliance to the construction safety guidelines issued by the DPWH. On August 4 until August 18, 2020, Metro Manila and four other provinces (Bulacan, Cavite, Laguna, and Rizal) reverted back to the stricter modified enhanced community quarantine (MECQ)as a result of the clamor of health workers for a two-week "time-out" for the government to recalibrate its plans and efforts to stem the exponential rise of COVID-19 cases beginning mid-July. Under MECQ, essential projects,[18] whether public or private, and priority public and private construction projects (i.e., those that relate to food production, agriculture, fishery, fish port development, energy, housing, communication, water utilities, manufacturing, and Business

17 Details of Department Order No. 213 can be accessed at: https://www.dole.gov.ph/php_assets/uploads/2020/05/DO-No.-213-20-_prescribing.pdf.

18 Essential projects include, among others, the following: quarantine and isolation facilities for Persons under Monitoring (PUMs), and suspect and confirmed COVID-19 patients; facilities for the health sector including those dealing with PUMs, and suspect and confirmed COVID-19 patients; facilities for construction personnel who perform emergency works, flood control, and other disaster risk reduction and rehabilitation works; sewerage projects, water service facilities projects, and digital works. Other essential and priority public and private construction projects shall be allowed, subject to compliance with the DPWH construction safety guidelines. However, small scale-projects as defined by the DPWH shall not be allowed. See Omnibus Guidelines on the Implementation of Community Quarantine in the Philippines with Amendments as of June 03, 2020. Available at: https://www.officialgazette.gov.ph/downloads/2020/06jun/20200603-omnibus-guidelines-on-the-implementation-of-community-quarantine-in-the-philippines.pdf?fbclid=IwAR2so1w1KOXT94mv7NhMlROCDNVobGWdrF-bhBbUsqyMjJLZmuO6qTVDWJwU.

Process Outsourcing) were allowed to operate in accordance with guidelines issued by the DPWH. All other construction projects, both public and private, were suspended.

On May 19, 2020, the DPWH issued Department Order No. 39 (DO 39), Series of 2020, on the Revised Safety Guidelines for the Implementation of Infrastructure Projects during the COVID-19 Public Health Crisis. DO 39 repeals the earlier issued Department Order No. 35, Series of 2020, on Construction Safety Guidelines for the Implementation of all DPWH Infrastructure Projects during the COVID-19 Public Health Crisis.

DO 39 reiterates many of the safety provisions of the Occupational Safety and Health Law (RA 11058) and details the safety measures that concessionaires, contractors, and subcontractors should follow prior to and during the deployment of workers in construction sites. Measures prior to deployment include: (1) quarantine of construction workers for 14 days or Food and Drug Administration-approved COVID-19 test; (2) provision by concessionaires, contractors, subcontractors, and suppliers of the necessary welfare facilities and amenities (e.g. quarters for board and lodging, ensuring compliance with social distancing, proper hygiene, etc.) for workers; (3) continuous provision by contractors of vitamins, particularly vitamin C, other over-the-counter medicines, quarantine facilities, and oxygen tanks for emergency purposes, for their personnel and workers; (4) provision by concessionaires, contractors, and subcontractors of disinfection facilities at their respective project sites; and (5) conduct by safety officers of proper information dissemination regarding COVID-19 construction protocols, on top of existing construction safety practices.

Measures during deployment include, among others, the following: (1) conduct of an inventory of works for the construction sequencing to be followed and undertaken to uphold the required social distancing, with break times scheduled in a staggered manner; (2) housing employees in their respective quarters for the entire duration of the project covered by the ECQ, MECQ, GCQ, and MGCQ; (3) regular maintenance and disinfection of field offices, employees' quarters, and other common areas; (4) provision of adequate food, safe/potable drinking water, disinfectants, and hand soaps by the concessionaires, contractors, subcontractors, and suppliers to their in- house personnel; (5) daily monitoring of the pre- and post-work health conditions of

workers, and immediate isolation and quarantine of personnel with manifestations or symptoms related to COVID-19; (6) assignment of a full-time Safety Engineer/Officer at the site who shall strictly monitor work activities and ensure compliance with safety standards and quarantine protocols; (7) provision of transport service for employees whose quarters are offsite; (8) clustered and staggered deployment of employees within the construction to minimize personnel contact and for easier contact tracing; and (8) restricted entry of non-essential personnel, visitors, and the general public in the construction site, employees' quarters, and field offices.

DO 39 also provides general guidelines on monitoring and enforcement. For DPWH infrastructure projects, the head of the concerned DPWH implementing office is tasked to monitor compliance with the order. For local government unit (LGU) implemented projects and private construction projects, the LGU concerned, through its City/Municipal Engineering Office, shall monitor compliance. For infrastructure projects implemented by other national government agencies, government-owned and controlled corporations (GOCC), and other government instrumentalities, the head or representative of the agency, GOCC, or government instrumentality concerned shall monitor compliance with the guidelines.

There are penalties imposed for violations of any provision of DO 39. These range from referral to the Philippine Contractors Accreditation Board, to termination of contract, and to institution of criminal action under Republic Act No. 11469 (Bayanihan to Heal as One Act).

At the time of writing, it is still early to tell whether DO 39 will have a significant impact on the improvement of working conditions in the construction industry. However, based on the findings of the survey, compliance by construction companies with the government-mandated safety protocols in construction sites during the pandemic appears relatively substantial, a point discussed in the next section.

Survey results

As expected, the overwhelming majority (93%) of the respondents are male just as most employed in the industry are males. Most

respondents are below the age 45 years old. The age group 26-35 is the largest followed by 36-45.

An overwhelming majority (84%) of the respondents work in the construction of condominiums. There are also a few respondents who work in water service facilities and sewerage (17), and in the construction of a subway (3), which are among the flagship BBB programs of the government.

A large group of the respondents started working on their projects in either 2019 (18.2%) or 2020 (29%). Only one in five respondents is a regular employee. Contractuals comprise the largest group of workers at 64 percent while casuals and seasonal workers comprise 14.3 percent of the respondents. The prevalence of non-regular employment among the respondents highlights the dominance of contractualization in the sector in general.

Half of the respondents earn at most P545 per day. The average daily wage of respondents is P597.77. The average wage is greater than the median because there are outliers who earn more than P1,000 per day. The average daily earnings of male construction workers is P601.22 while female workers earn less at an average of P569.10. Excluding those who earn more than P2,000, the average male earnings is P568.80 which is close to the average for females. The average daily basic pay in the sector is also higher than the daily minimum wage in the NCR, which was P537.00 per day as of November 2020.

Work disruption and effects on wages

The respondents were asked about their situation at work from mid-March to September 2020 during the pandemic. The questionnaire covered workers' perspective on the impact of the pandemic on their work, the adjustments done by the workers and their employers, and health and safety issues and company policies related to COVID.

Construction is among those directly affected by the lockdown, particularly in mid-March to June 2020. From March 15 to May 15, 2020, the ECQ, the strictest quarantine level, declared in Metro Manila halted construction projects and displaced construction workers.

Based on the survey, a majority (65%) of the respondents said that all work in their projects were suspended while nine percent said that a skeletal force was maintained in their projects. Meanwhile, more than half (55%) of the respondents said that their work stopped because of the lockdown, while only five percent said that their work continued. This meant that only five percent of the respondents continued receiving wages, as most construction workers are daily wage earners.

In some construction projects, workers stayed in barracks so they will not need to travel to work. When ECQ was imposed, many construction workers were prevented from leaving their barracks because of travel restrictions. Based on the survey, 13 percent of the respondents stayed with other workers in construction sites for the entirety of the ECQ period (March 15 to May 15, 2020). Meanwhile, seven percent left the construction site voluntarily, and 24 percent were sent home by their employers.

Some construction projects resumed when Metro Manila was placed under MECQ from May 16-31, 2020. According to results of the survey, 31 percent of the respondents reported that work in their construction projects resumed, albeit at limited capacity. About one in five said their work resumed while the number of workers whose work was still suspended fell (55 percent in ECQ to 26 percent in MECQ). There were also fewer respondents whose wage income fell and more workers who received wages. Meanwhile, the number of workers not receiving wages increased slightly (19 in ECQ to 20 in MECQ). There were also fewer workers who left their work during the MECQ period.

Construction work resumed fully under the GCQ period (June 1, 2020 to the present), although with strict health and safety protocols as prescribed (DPWH, 2020). Under the GCQ, only five percent of the respondents said that construction projects they work in had not resumed operations yet and more respondents have returned to work. Consequently, there were more workers earning wages because work had resumed.

According to some officers of the Philippine Constructors Association, Inc. (PCA) interviewed by the authors, some construction companies kept their workers in barracks during the lockdown. For workers who cannot leave, the employers needed to provide for them which implies

additional cost. However, some employers also found advantage in letting workers stay in the barracks throughout the lockdown. Because their pool of labor was intact, construction firms were able to immediately resume their operations when the lockdown was relaxed.

Overall, the survey found that work was continuous for a majority (88%) of the respondents who were able to return to work in the construction projects. Most of these workers (71%) also did not experience reduction in work hours and wages. Nonetheless, one in three (33%) worker-respondents experienced reduction in wages and the average reduction in wages was 14 percent (38%).[19]

These findings indicate that the lockdowns imposed by the government to arrest the community transmission of COVID-19 resulted in work suspension and income losses for about five and a half months for a majority of the respondents. While it is possible that some of the respondents were able to receive their wages for a few months while work was suspended,[20] this is not the case for all. Moreover, many construction workers totally lost their jobs during the pandemic. The leaders of union federations we interviewed pointed out that although construction activities started to resume in June 2020, not all workers were able to return to work as companies used fewer workers. According to Sonny Matula, President of the Federation of Free Workers (FFW), the four companies where they have a union remained on skeletal force (Matula Interview, 2020), at the time of interview. Moreover, a number of unionized companies laid off workers, particularly union members and leaders, or simply closed down. For example, two unionized companies terminated the employment of workers who were leaders of the union (Matula Interview, 2020). One unionized company, which is a supplier of construction materials, shuttered during the pandemic, resulting in job loss for 200 workers (ibid).

19 The lowest reduction in wages is one percent while the highest is 50 percent.

20 In the case of an aqueduct/water distribution project, for example, there was a temporary suspension of work during the ECQ period which lasted for two and a half months (from March 15 to May 31, 2020). This work suspension affected 400 of the close to 800 workers employed by the construction company before the pandemic. All the affected workers were each given a one-time financial assistance of P8,000 plus one and a half months' salary. The work suspension however lasted for two and a half months. This means that the workers did not receive wages for one month of the work suspension. (Nolla Interview, 2020)

Relief, return to work, and adjustments done by workers

More than half of the participants (61%) said they received relief from their local governments. Almost one in five (19%) respondents said they received food relief, as well as financial support from their employers. Only four percent received relief from the unions. It should be noted that none of the projects or companies covered in the survey are unionized. Meanwhile, over one in five (22%) respondents received financial support from the local government, while almost 20 percent of the respondents said that they received food relief from other people. Meanwhile, 14 percent of the respondents were able to benefit from DOLE's CAMP.

The pandemic created additional costs for employers. The budget allotted for construction projects is fixed before any work even starts. In the case of projects that started before the pandemic, contractors and project proponent did not have enough financial space to shoulder the additional costs of providing for their stranded employees (PCA Interview, 2020).

Based on the survey, 86 percent of the respondents said that they have returned to work at the time of interview. Most of the respondents were able to return to work in June 2020 when the GCQ was imposed in NCR and many parts of the country.

At the time of writing, construction firms were operating still at reduced capacity. More than half of the respondents said that at most, their companies operate at 50 percent of their workforce. Meanwhile, about 41 percent of the respondents said their companies are utilizing all of their workforce.

The practice of operating below full capacity is inevitable. Solon et al (2020) note that while construction is among the most important source of economic growth and is a key to recovery, it is also among the industries that have a high risk of transmitting COVID-19. It follows intuitively that physical distancing is more plausible in the construction sector when firms reduce their workforce.

Employers, however, have a different opinion. According to the PCA officers interviewed, it is possible for contractors to fully operate

at 100 percent. However, most of them experienced a decline in the size of their labor force. The employers argue that the decline in labor supply is due to the decision of workers rather than company policies. First, workers fear COVID and so they refuse to return to work to avoid getting sick. Some workers who went to their provinces may have found alternative work, perhaps in agriculture, and considering the health risk involved in construction, have decided to stay. Second, employers also argue that they can provide on-site or near-site accommodation to workers. However, workers must stay in the accommodations when work for the day is done, and on site to work. Such practice keeps workers from having physical interaction with people outside their workplace and thus prevents possible transmission of COVID from external sources. However, many workers refuse this arrangement and will find a reason to go back home occasionally. This defeats the purpose of putting construction projects under "quarantine" or in a "bubble."

Health and safety policies and practices in construction projects

Worker-respondents had to comply with certain health protocols to return to work. Keeping workers under quarantine before letting them take part in construction projects is expected especially in projects carried out in a "bubble." Over half (54.5%) of the respondents said they underwent a 14-day quarantine before they were able to return to the construction sites. COVID testing is also becoming a widespread practice and according to DOLE-DTI (Department of Trade and Industry) guidelines, the cost of testing must be shouldered by employers. Eighty percent of the respondents said they also took a COVID-19 test, and their companies shouldered the cost of testing, while 12 percent of the respondents said they paid for the cost of their testing. Meanwhile, about one-third (34.5%) of the respondents said they had to secure a health clearance from medical doctors before returning to work.

COVID-19 testing is costly. Employers estimated the current rate of swab test to be between P3,000 and P7,000 (PCA Interview, 2020). Existing construction projects did not include this expense in their budgets and because of government guidelines, employers had to shoulder the cost if they want to test their workers. However, it is likely that in the future, the burden of testing will shift to workers in

the construction sector because employers have the prerogative to require workers to undergo a swab test at their expense prior to their hiring. Because work in the sector is mostly project based, companies are liberated from the responsibility of testing their workers when their contracts expire or when the project is done.

Almost all respondents observed that their companies conducted an orientation on COVID-19 for workers and provided sanitation facilities such as toilets, wash and shower areas, and disinfectants (Table 3). Four in five (81%) indicated the presence of a facility for drinking water, and the same proportion noted that physical distancing was enforced at the work areas. Almost 80 percent of the respondents also said their companies provided accommodation and living quarters and drinking facility. Physical distancing was also observed in workplaces, according to 80 percent of the respondents. Other policies observed by more than half of the respondents include a ban on accepting visitors in sites and in accommodations, strict policy against leaving the site, provision of personal protective equipment, and constant monitoring done by safety officers.

The importance of safety officers in workplaces cannot be overemphasized especially during the pandemic. It is worth noting that almost all (97%) of the respondents said their construction sites have safety officers to monitor and implement OSH policies. However, companies may need to allow more participation of workers in observing health and safety guidelines in construction sites. Less than half (46%) of the respondents said that their sites have OSH committees. Only one in four respondents said that workers are represented in these committees. The minimal participation of workers in OSH committees in construction firms may be explained by the absence of a workers' organization, such as a union which can articulate the collective interest of workers. All of the construction projects and companies covered in this survey are non-unionized, and in non-unionized workplaces, it is commonly the case that company policies are issued on a top-down unilateral approach (i.e., only the management determines policies).[21]

21 This is not only observed within individual firms. In an interview with PCA officers, during the crafting of the construction sector roadmap, because workers are not well represented due to low unionization rate in construction sector, the construction firms assumed the role of articulation on behalf of workers as if they fully understand their interest.

Table 3: Currently, what arrangements, facilities and conditions do you observe in the construction site?

Responses	Frequency	Share
There are facilities for disinfection (alcohol, soap, handwash, etc.).	106	96.4%
We were given sufficient orientation/training on the prevention of COVID-19 infection in the construction site.	105	95.5%
There are hygiene and sanitation facilities (e.g., sink with faucet, toilet and bathroom, etc.).	102	92.7%
There is a facility for drinking water.	89	80.9%
Physical distancing while at work is enforced.	89	80.9%
We have our own barracks/quarters inside the construction site.	87	79.1%
There is a canteen.	86	78.2%
Our quarters and common areas are being cleaned and disinfected every day.	83	75.5%
Our employer or the safety officer monitors our health before and after working.	82	74.5%
Going out of the project site is strictly enforced.	80	72.7%
Visitors and other non-workers are restricted from entering the construction site, workers' quarters and field offices.	80	72.7%
There is a quarantine facility.	75	68.2%
We are provided Personal Protective Equipment (PPE).	71	64.5%
There is a store where we can buy our daily needs.	68	61.8%
If tools or equipment need to be shared, they are first disinfected before others can use them.	62	56.4%
We do not share tools or equipment with co-workers.	58	52.7%
We do not take our break time all at once.	54	49.1%
Workers do not work at the same time. There is a work schedule for each cluster or group.	53	48.2%
Our employer provides us vitamins and other medicine.	43	39.1%

Almost 30 percent of the respondents said that workplace accidents have occurred in their construction sites during the pandemic. More detailed responses show that these accidents occurred in one project site only, involving the construction of an aqueduct, and the accident reported involved the drowning of a worker. According to respondents, the company shouldered the cost of burial of the casualty.

COVID-19 prevention in the construction sector

According to the ILO (2020), COVID-19 can be considered a work-related injury if it is contracted as a result of work. Thus, under ILO conventions 121 and 102, workers who contract COVID-19 at work are entitled to compensation. Because COVID-19 can be contracted by workers in workplaces, the International Trade Union Confederation (ITUC) and global union federations have launched campaigns across different countries urging governments to classify COVID-19 as an occupational disease.[22] If COVID is considered an occupational disease, workers who become sick are automatically entitled to compensation unless it is proven that the worker contracted it outside work. Moreover, acknowledging COVID as a new OSH risk will compel governments to update their labor regulations and standards at work, and force compliance from firms.

Almost 28 percent of respondents reported case detection of COVID-19 symptoms among workers in their construction sites. The projects where workers with COVID-related symptoms were recorded involve the construction of an aqueduct, a bridge, and residential condominiums. According to the respondents, the immediate action of employers was to put workers exhibiting symptoms of the disease under quarantine for 14 days (35% of respondents), test the worker for COVID-19 (23%), or take the worker to a treatment facility outside of the construction site (22%).

About three in four (74%) respondents considered the facilities and workplace adjustments carried out by the management to prevent COVID transmission adequate. Regardless of whether the response of management to COVID is adequate or not, Table 4 presents what respondents think the company must do to prevent the transmission of the disease. The most cited actions are payment of hazard pay (52.5%); restrictions on ingress and egress of workers and on accepting visitors (48.5%); conducting orientation on COVID (46.5%); regular disinfection and sanitation of quarters, toilets, and common areas (36.6%); and strict enforcement of physical distancing (35.6%).

22 The ITUC released a statement on COVID-19 as an occupational disease: https://www.ituc-csi.org/covid-19-occupational-disease. Note that as a result of continued pressure from trade unions in the Philippines, the Employees' Compensation Commission approved in April 2021 the inclusion of COVID-19 as an occupational disease.

Table 4: What should your employer do more to prevent the transmission of COVID-19 in the construction site?

Responses	Frequency	Share
Provision of hazard pay.	53	52.5%
Restrictions on the entry and exit of workers, visitors, and other people in construction site.	49	48.5%
Provide us with adequate orientation/training on the prevention of COVID-19.	47	46.5%
Daily cleaning and disinfection of our work areas, quarters, toilets, and common areas.	37	36.6%
Active enforcement of physical distancing in work areas.	36	35.6%
Daily monitoring of our health, such as taking of body temperature before and after work.	29	28.7%
Regular disinfection of tools at equipment.	27	26.7%
Regular provision of PPEs, alcohol, disinfectants to workers.	24	23.8%
Implementation of different schedules for break time to avoid crowding.	23	22.8%
Provide us with good quarters where physical distancing could be observed.	22	21.8%
Have a store where we can buy our daily needs.	21	20.8%
Installation of washing facilities in strategic places in the construction site.	20	19.8%
Our employer or supervisor should talk to us or to our leaders about arrangements and/or modifications in our work areas.	19	18.8%
If we cannot be provided with good quarters inside the construction site, our employer should provide transportation service from our home to the worksite and vice versa.	19	18.8%
Have a good quarantine facility for workers with COVID-19 symptoms.	16	15.8%
Our employer should sign a legal agreement that they will follow and spend for all the DOLE guidelines to make the workplace safe for workers.	16	15.8%
Provide us with a good clinic where we can get tested for COVID-19 for free and where workers who tested positive can quarantine.	15	14.9%
Have a clean canteen inside the construction where we can buy cheap food.	12	11.9%

More than half of the respondents thought that the items listed in Table 14 must all be provided by their employers. However, there are more respondents (67.8%) who thought that management must pay the wages of workers who need to quarantine themselves when they become infected, as well as shoulder the expense of hospitalization (66.4% of respondents). Meanwhile, more than half (59.2%) of respondents pointed out that employers must pay compensation to the family of a worker who got infected with COVID-19 at the worksite and who eventually died. Another half (54.6%) said that employers should also pay compensation to a worker who cannot go back to work due to COVID-19 contracted in the worksite.

Collective representation of workers in the time of COVID-19

Workers in the construction industry are among the least organized, and this can be explained by the proliferation of short-term and non-regular employment, which follows from the nature of construction projects. However, even non-regular workers can organize themselves into unions, or at least, workers' associations.

Some labor federations in the country have organized workers in the construction industry. For instance, the National Union of Building and Construction Workers (NUBCW) has members[23] in a number of companies that were covered in the survey. However, although the union has individual members in one company, the latter remains non-unionized in the legal sense. The Associate Labor Unions-Trade Union Congress of the Philippines (ALU-TUCP) and FFW also have few affiliated unions in the sector.

There is difficulty in organizing unions in the construction industry primarily because employment arrangements in construction firms have fixed terms and workers are dispersed in various construction projects and locations. Apart from this, leaders of labor organizations who were interviewed by the researchers cite opposition of employers, as well as the image problem of unions as other causes of low unionization rate. The COVID pandemic adds another level of difficulty in organizing because the mobility of organizers is severely limited by the varying quarantine regulations of various local governments,

23 Construction workers can directly become a member of NUBCW.

government regulations related to COVID-19, the lack of public transportation, and the health risk involved in meeting workers.

The survey identified the channels through which workers can air their grievances in the workplace. More than half (55%) of the respondents said they communicate to their foreman problems or issues they encounter at work. Almost half (48%) of respondents communicate their grievances to their team leaders. Over one in three (35%) talk directly to their employer (e.g., subcontractor), while about one in three (32.9%) respondents share grievances directly with the principal of the construction project.

On whether grievances are addressed, 45 percent of the respondents said their issues in their workplaces are sometimes addressed, while close to 40 percent said their issues are always addressed. Only less than 10 percent said their issues are left unaddressed.

Results of the survey show that respondents understand the value of workers' organizations in the construction industry. Three in four respondents (75%) thought that a workers' organization will be useful in protecting their rights and security at work, while 12.3 percent averred otherwise. The rest were unsure about the value of workers' organizations. Nevertheless, that majority of workers are aware of the value of workers' organizations should help facilitate organizing of workers.

When asked which type of organizations are appropriate in the context of the construction industry, most respondents (64.5%) chose a worker association, while less than half chose either a union (38.2%), cooperative (38.2%), or guild (34.2%) (Table 9). Although a worker association can still be instrumental in winning benefits and labor standards for workers especially in terms of public policy, unlike unions, a worker association cannot engage in collective bargaining.

Why more respondents chose a worker association over a union may be explained by the fact that there are very few successes in union organizing in the construction industry. The leaders of ALU-TUCP and FFW interviewed admit difficulties in organizing construction workers. Moreover, union members of NUBCW, TUCP, and FFW are those who are regularly employed by construction firms. There are very few regular

workers in construction firms, and they are mostly skilled workers, or are supervisors. Because most of the respondents are non-regular workers, they may think that unions are not appropriate in their case because of their employment status. The adversarial nature of industrial relations does not help either, if not to expose non-regular workers who attempt at union organizing to termination.

Labor federations are aware of the difficulties of union organizing in the construction industry. While by default unions are preferred, in the case of construction, worker associations may be more practical. One of the advantages of worker associations is that membership is not limited to a certain enterprise. In fact, it may be easier to build solidarity among workers across separate construction projects with worker associations because of the flexibility in terms of membership. However, deviations from organizing enterprise-based unions toward organizing worker associations implies reorientation of priority from enterprise-based collective bargaining to industry-wide bargaining. Industry bargaining has advantages over traditional enterprise-based bargaining especially in terms of coverage. If the organizing of worker associations is successful, the construction industry may become the first industry in the country to do industry-wide collective bargaining.

Impact of the pandemic on unionization and prospects for worker organizing in the time of COVID-19

Indeed, the COVID-19 pandemic and the health and safety regulations imposed by the government to prevent the transmission of the coronavirus in workplaces and worksites have exacerbated the difficulties in organizing workers in the construction sector where the unionization rate remains low. The survey findings and the information gathered from the union leaders interviewed underscored this situation. Moreover, in some of the unionized construction companies that retrenched workers at the height of the pandemic outbreak, union membership declined as workers who are union members lost their jobs. For example, in one construction company where there is a union affiliated with ALU-TUCP, the number of union members shrank to 174 from 500 before the pandemic (Seno Interview, 2020). In another unionized company, the number of union members was halved from 300 before the pandemic to just about 150 members (ibid).

Some unionized construction companies are also using the pandemic as a cover to break the union. At a company which supplies construction materials, the employment contracts of union leaders who were working in the warehouse were terminated; the company claimed they were project employees. This occurred amid an on-going collective negotiation (Matula Interview, 2020). Similarly, the FFW filed a case at the National Labor Relations Commission in San Fernando, Pampanga against another construction company because the union leaders employed in this company were laid off (ibid).

In another construction company where the union is affiliated with the NUBCW and has won a CBA, there was mass lay-off (Nolla Interview, 2020). Regular workers who were union leaders and members were the first to be retrenched. Meanwhile, project employees who were not union members kept their jobs. NUBCW has filed a complaint with the DOLE alleging union busting by the company. In another unionized company that manufactures flooring materials, union members of NUBCW, who are granite floor installers, have not been called back to work by the company (ibid). The union has won the certification election in this company.

Another construction supplies company whose union is an FFW affiliate closed down during the pandemic. Prior to the outbreak, the FFW filed a petition for voluntary recognition in DOLE Region IV-A, as majority of workers of the company are union members (Matula Interview, 2020). The FFW launched an investigation whether the company used the pandemic as a cover to bust the union. The workers however accepted the separation pay offered by the company against the advice of the FFW, as they needed money especially during the pandemic. The FFW negotiated for an additional one-month pay for the 30-days separation notice requirement.

All these suggest that not only has the pandemic aggravated organizing difficulties in the construction industry, but it has also been used by some employers to break unions.

Nonetheless, for some unions, the pandemic provided an opportunity to launch an organizing initiative in unorganized companies. This is the case of the NUBCW which had a breakthrough in terms of establishing initial contacts with workers of a big construction consortium. Although

access to the worksite is much more restricted in view of the DPWH protocols, the NUBCW constantly communicates with these workers through text messages to gain more information about their working conditions, the construction project and to inform them of their rights, monetary benefits under the law, and some of the initiatives of the NUBCW in policy-making processes. The union has also conducted different online awareness programs on the Occupational Safety and Health Law and IATF health and safety protocols. Consultations and legal advice about retrenchment and flexible work arrangements have also been provided.

According to Santiago Nolla, NUBCW Secretary-General, the union will continue organizing these workers using the COVID-19 agenda. The union will soon hold a general assembly involving not just workers in the joint venture construction company where it has an on-going organizing initiative but also workers in the other construction projects. As the NUBCW is represented in the Construction Industry Tripartite Council (CITC), it can use the results of the study to propose and push for some reforms of existing regulations and security measures for construction workers.

The NUBCW envisages organizing the workers into an association or a union in the future. As mentioned, the survey found that construction workers are receptive to the idea of collective representation.

What else could be done to facilitate a concerted organizing campaign during this time? We gathered the following from our interviews with union leaders.

- Organize workers into an association, instead of a union, as an initial form of organization.
- Rethink organizing strategies. Improve communication with workers and members through more frequent use of online/digital platforms/social media.
- Engage and train more organizers. This may require funding.
- Beef up organizing tools and equipment: laptops, mobile phones and load, and vehicles (e.g., motorcycles).
- Maintain a union Facebook page where workers can exchange information about job vacancies in construction projects.
- Engage government agencies to make sure that companies do not use the pandemic to undermine workers' and union rights.

- Trade unions, through the Building and Wood Workers' International (BWI), a global union federation of unions in the construction, building materials, wood, forestry, and allied sectors, may enter into a memorandum of agreement or seek certification from the DOTr to "enter" government infrastructure projects.
- Use labor's representation in the CITC to get the DOTr's greenlight to enter government projects via the unions' safety and health training for workers. [NUBCW conducts health and safety training quarterly.]
- Lobby/advocate for workers' health and safety at the regional/national tripartite councils and through the help of the Trade Union Congress Party (TUCP Party List).
- Revive the Construction Workers' Association of the Philippines, which was initiated by BWI.
- Put pressure on the DOLE to provide more assistance and budget for CAMP and TUPAD.
- Partner with institutions that can provide funding and program support for construction unions.

Despite its challenges to the construction industry, the COVID-19 pandemic has put construction at the center of the economic recovery agenda of the country. A large chunk of the 2021 budget of the Philippines has been allocated for infrastructure development. This makes the construction industry a greenfield for organizing. As pointed out by Matula (Interview, 2020), there are lots of opportunities for organizing in the sector as union density is very small (at 1.3% in 2018), yet there are many construction projects. That a big majority of workers are aware of the value of workers' organizations in protecting their rights and security should help facilitate organizing of workers. Although a majority of the survey respondents preferred a workers' association, many welcome other forms such as a union, cooperative, and guild as well.

Conclusion

Construction emerged as a casualty of the COVID-19 pandemic and the lockdowns imposed by the Philippine government aimed at curbing the community transmission of the coronavirus. Construction

activities declined by 34 percent in the second quarter of 2020. In terms of employment, construction is the hardest hit among industrial activities; more than half of employment losses in industrial activities came from job losses in construction. About 34 percent of employment in construction activities were lost due to the lockdown in response to the COVID-19 pandemic.

Due to the small number of respondents and construction projects involved, the survey findings may not be representative of the work experiences of all construction workers during the pandemic. Nonetheless, important insights may be drawn from the experiences of the respondents in terms of how the COVID-19 pandemic and the lockdowns affected their jobs, incomes and working conditions and the forms of support they received during the pandemic.

The lockdowns resulted in work suspension and income losses for about five and a half months for a majority of the survey respondents. While it is possible that some of the respondents were able to receive their wages for a few months while work was suspended, this may not be the case for all construction workers. In addition, many workers who have been able to return to work still experienced reduced earnings at the time of interview. One in three survey respondents pointed this out. The reductions averaged 14 percent of their wages.

Many construction workers totally lost their jobs too during the pandemic. Leaders of the union federations we interviewed pointed out that although construction activities started to resume in June 2020, not all workers were able to return to work as companies used fewer workers or totally shut down operations.

The government rolled out several programs (e.g., CAMP, TUPAD, SBWS) that provided income replacement, wage subsidy, and direct cash transfers to affected and displaced workers. Only a few (14%) of our survey respondents acknowledged they benefitted from CAMP. About one in five respondents received financial support from local governments.

As quarantine levels gradually relaxed beginning in June 2020, employment in construction recovered quickly. The employment level in July 2019 was restored. In fact, construction was among the

few sectors that registered a positive employment growth, although the increment in jobs is low. It is possible that the employment generated by the Duterte government's BBB program addressed some of the employment losses because of the pandemic. At any rate, infrastructure development is at the core of the economic recovery program of the Duterte government. Of the proposed P4.5 trillion Philippine national budget for 2021, close to a quarter or P1.1 trillion is allocated to infrastructure development. Massive public works are expected to generate more employment in the construction sector and in other sectors linked to construction.

Worker safety during the pandemic appears to be a top priority as well, at least in the construction projects covered by the survey. Results of the survey reveal that overall, there is a substantial level of compliance with government-mandated safety guidelines and protocols specific to the construction industry among the projects where the survey respondents worked. However, there is one OSH-related area where more needs to be done: the absence of an OSH committee in their workplace, which was reported by less than half of the survey respondents. Moreover, in workplaces where an OSH committee is organized, only 20 percent said that workers are represented in this committee.

The pandemic may have exacerbated the difficulties faced by trade unions in organizing workers in the construction industry where union density was a pittance 1.3 percent in 2018. Nonetheless, the massive infrastructure programs that have been included in the Philippine government's economic recovery program from the pandemic make the industry a greenfield for organizing. From our survey, we found that construction workers are aware of the value of having a workers' organization in protecting their rights and security at work. Several forms of organizations have been identified as well—worker association, union, worker cooperative, and guild—albeit with preference to worker association. All this should help facilitate organizing of workers in the construction sector.

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Anthony Mariano, Program Director; Ronaldo Elepaño, Jr. (DMCI), 1st Vice President; and Ferdie Mangali (Ayala), Member, Board of Trustees, Philippine Constructors Association, Inc. (PCA), Zoom interview, 16 October 2020.

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Jun Soriano, Construction Workers Solidarity (CWA), telephone conversation, 12 September 2020.