

UP CIDS POLICY BRIEF 2022-01

The Informal Labor Carries the Brunt of a COVID-19–induced Economic Recession

The Need for Stronger Transition Policies to Formality

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The COVID-19 pandemic and the implementation of strict mobility restrictions that led to massive business closures have had severe effects on the informal labor. Informal labor is defined internationally as those working in informal or formal enterprises or private households whose activities are not covered or insufficiently covered by labor regulations and social protection (International Labour Organization [ILO] 2003). Therefore, informally employed workers suffer from poor and unsafe working conditions, low wages, and the lack of social protection, collective representation, and access to skills development training, technology, and financial services.

With the Philippines undergoing a deep economic recession, informal workers are exposed to even higher poverty risk. The contraction of the country's economy by 9.6% in 2020 (Philippine Statistics Authority [PSA] 2021) has sharply reduced both employment and work hours. The number of employed was, on average, 4.57 million less for the first two quarters of 2020 compared to the same period in 2019. Apart from acute job losses, there was a huge drop in working hours for those still at work. The year-over-year (YoY) decline in the average number of full-time workers was 12.24 million for the first two quarters of 2020 (from 28.76 million in 2019 to 16.52 million in 2020), of

which nine million were in informal employment. Those who reported themselves to be with a job but not at work showed a YoY increase of 6.76 million in the first two quarters of 2020 (from 0.38 million in 2019 to 7.14 million in 2020), of which 5.21 million were informally employed. Under the principle of “no work–no pay,” workers lost their wages or incomes on unworked days during the pandemic.

This policy brief stresses the urgency of addressing the widespread and persistent informality of the Filipino workforce—a situation that weakens the generation and mobilization of fiscal resources and dampens the development of human capital (World Bank 2019; Ohnsorge, Okawa and Yu 2021). Reversing this trend is imperative for the country's economic recovery and attainment of a sustainable and inclusive development.

This policy brief starts with an overview of the magnitude and characteristics of informally employed workers in the Philippines, followed by a discussion of policy options to transition informal workers to formality.

- (1) **Magnitude and characteristics of informal employment.** Estimates have shown that informal employment has remained largely stable over time with about four out of five workers who are informally employed (Box 1). The risk to informality is not homogenous

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throughout types of workers and is highest (at informality rates of more than 90%) among: (a) family workers in own family farm or business; (b) self-employed workers without any paid employee; (c) employers in own family farm or business; (d) workers in private households; (e) agricultural, forestry, and fishery workers; (f) workers in elementary occupations; (g) workers who are paid in kind, per piece, or pakyaw; and, (h) short-term, seasonal, or casual workers, and workers with no fixed employer.

In 2019, informality rates of at least 85% were found in the following low-productivity industries: agriculture, domestic services, construction, transportation, and wholesale and retail trade. Informal employment was relatively more prevalent among males and rural residents and was more pervasive in agricultural and poorer regions.

BOX 1. Snapshot of Filipino informal labor

Using the *2008 Informal Sector Survey*, Cabegin (2018) estimated that more than 83% of Filipino workers were informally employed, operationally defined as those whose employment is not covered by a written contract or social security or is engaged in unregistered activities or businesses. Informality varied by workers' occupational characteristics. Virtually all workers in agriculture, fishery, and forestry and private households, as well as own-account workers (such as self-employed workers and contributing family workers in family-owned farm or business), were informally employed (figure 1).

Other types of workers with the highest rates of informality include those in elementary occupations (94%), paid in kind, pakyaw, or per-piece arrangements (94%), those involved in seasonal or short-term work, or those with no fixed employer (91%). Indirect estimates of informal employment, using data on worker characteristics in quarterly *Labor Force Surveys*, showed a pervasive and largely stable rate of informality of 82–83% between 2010 and 2020 (figure 2).

FIGURE 1. Percent informally employed by worker characteristics *2008 Informal Sector Survey*

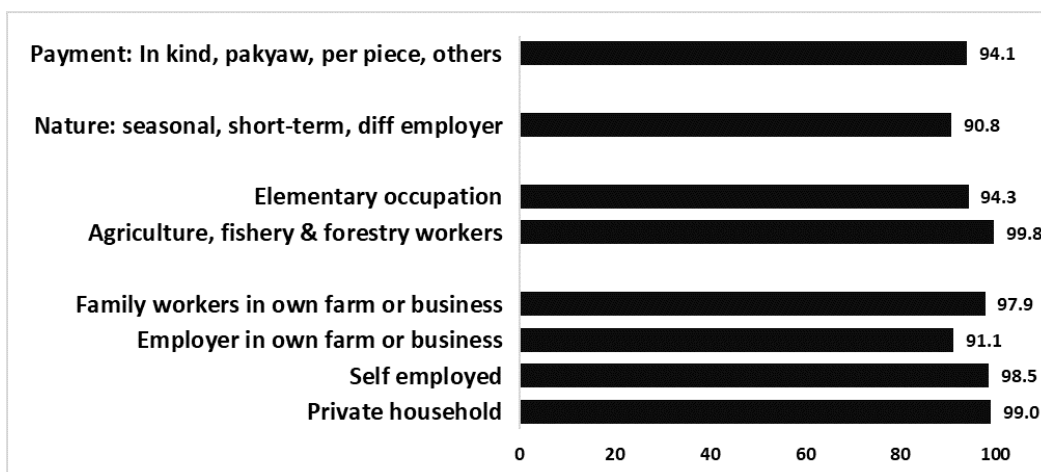
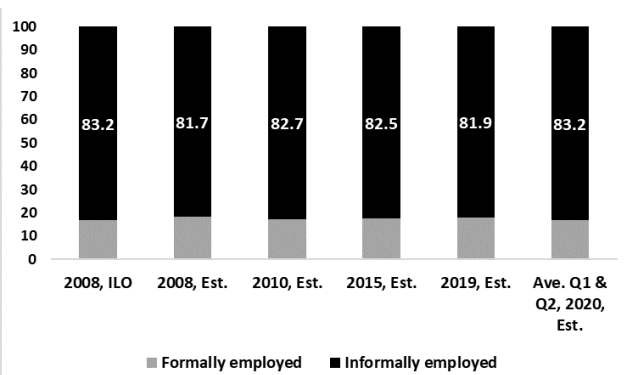


FIGURE 2. Percent informally employed using ILO definition and estimated from worker characteristics

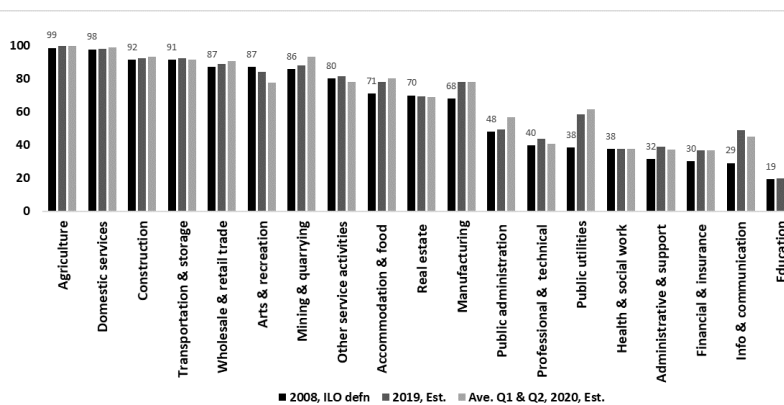


Sources: 2008 Informal Sector Survey and Labor Force Surveys (several quarters, 2008; 2010; 2015; 2019; 2020), PSA; author's calculations

The highest informality rates of 90% or more were in the industries of agriculture, domestic service, construction, and transport and storage (figure 3). More than 65% of workers were informally employed in wholesale and retail trade, arts and recreation, mining and quarrying, accommodation, food, and real estate services, and manufacturing. Meanwhile, the lowest rates of informality were in the industries of health and social work, education, and tradable business services (e.g., administrative and support service activities, financial intermediation, and information and communication services).

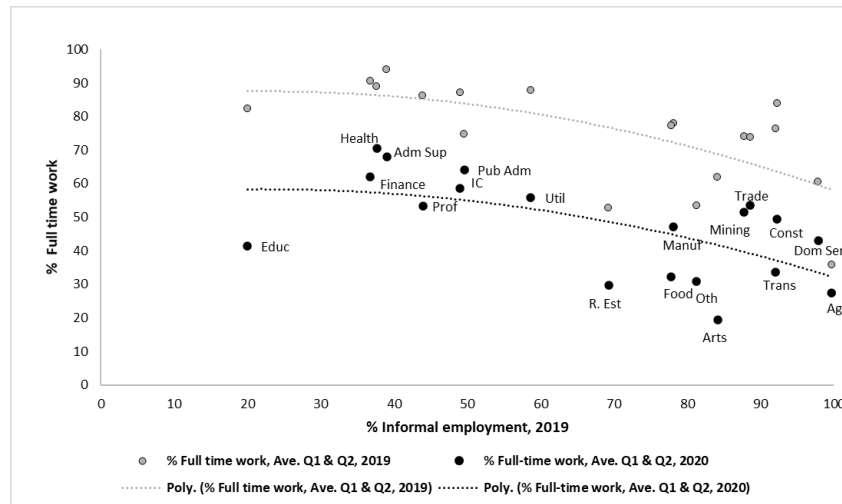
Informality is associated with underemployment, with informal workers almost thrice more likely than formal workers to be underemployed (i.e., workers who want to work additional hours, such as part-time workers who want a full-time job but could not find one). In 2019, the underemployment rate was 15.8% for informal workers and 5.6% for formal workers. Industries with the highest rates of informality also exhibited the lowest percentage of full-time workers, which was worsened by the pandemic (figure 4). A further reduction in work hours because of the pandemic can also be financially catastrophic for informally employed workers who already suffered from low wages and income inadequacy during normal periods, pushing their households deeper into poverty.

FIGURE 3. Percent informally employed by industry, 2008, 2019, and 2020



Sources: Labor Force Surveys (several quarters), PSA (2008; 2019; 2020); author's calculations

FIGURE 4. Percent informally employed and in full-time work by industry, 2019 and 2020



Sources: Labor Force Surveys (several quarters), PSA (2019; 2020); author's calculations

The percent of agriculture workers working full time (i.e., at least 40 hours a week), which was only 36% before the pandemic, dropped to 27% in the first two quarters of 2020. Other industries with pervasive informality that experienced a huge reduction in working hours because of pandemic include tourism-related industries. The percentage of those working full time dropped from 77% in 2019 to 32% in the first half of 2020 in the accommodation and food industry, from 76% to 34% in the transport industry, and from 62% to 20% in the arts and entertainment industry. The construction and manufacturing industries were also hit hard by restrictions on people's movements and disruptions in economic activity, with sharp declines in the percent of those working full time: from 80% to 50% for the construction industry and from 78% to 47% for the manufacturing industry.

Male workers have higher rates of informality than female workers (85% for the former and 77% for the latter). Most informally employed men were in low-productivity industries, such as agriculture (34%), construction (17%), transport (14%), and retail trade (12%). Meanwhile, there is a concentration of informally employed women in retail trade (37%), agriculture (17%) and domestic services (15%).

FIGURE 5. Percent informally employed by sex and place of residence, 2019

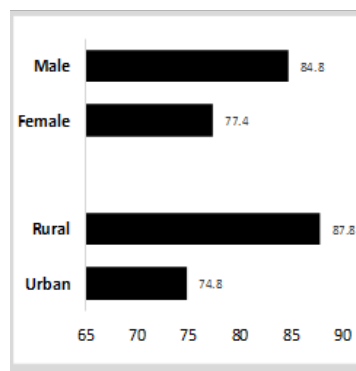


FIGURE 6. Percent industry distribution of male informal workers, 2019

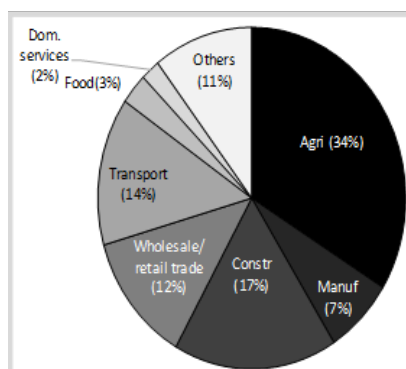
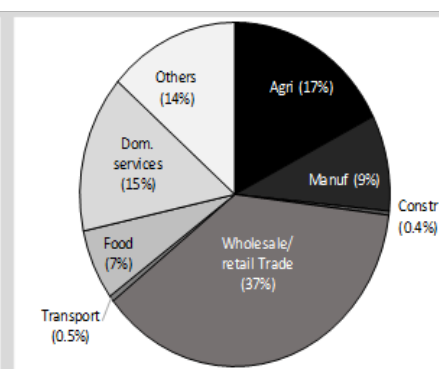


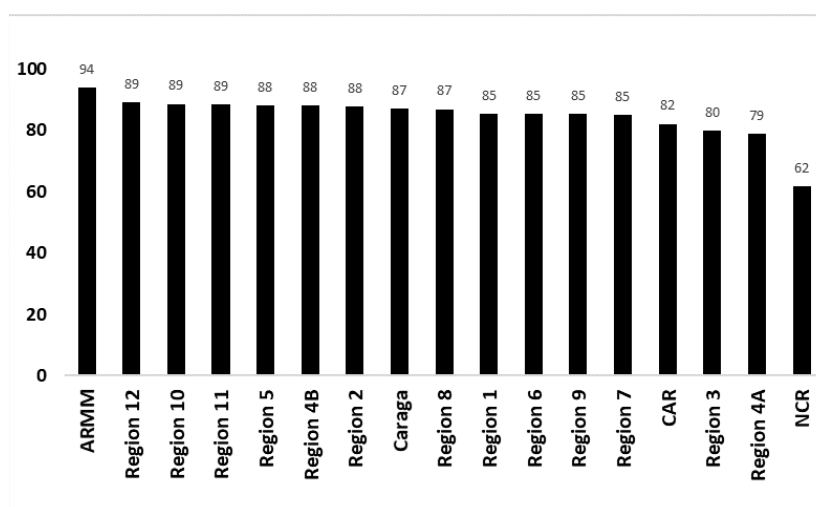
FIGURE 7. Percent industry distribution of female informal workers, 2019

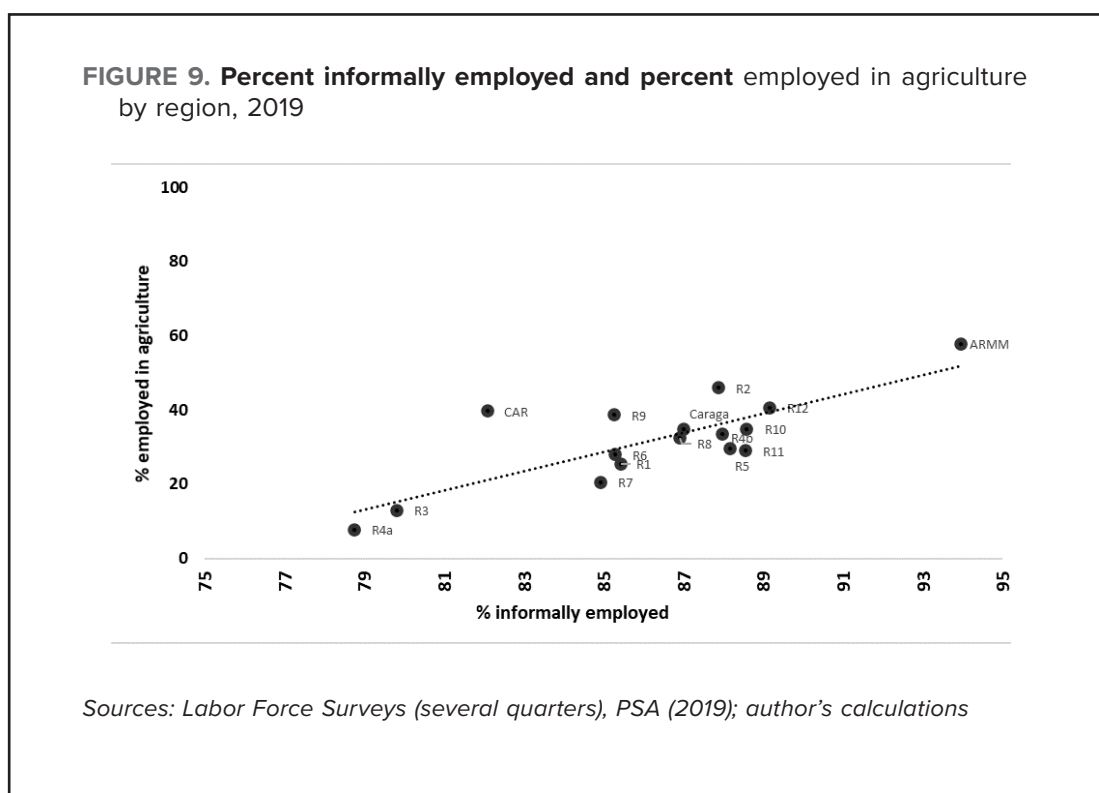


Sources: Labor Force Surveys (several quarters), PSA (2019); author's calculations

Informality is more pervasive in rural areas, which is dominated by agriculture, than in urban areas (Figure 5). Close to nine of ten rural workers were informally employed, compared with seven of ten urban workers. Rural workers are disproportionately represented in agriculture while there is a larger concentration of urban workers in retail trade, transportation, and domestic services. Informality varied throughout regions and is higher in regions with lower per capita income and higher concentration in agriculture (Figures 8 and 9). On one hand, virtually all workers (94%) were informally employed in the Autonomous Region of Muslim Mindanao (ARMM), the poorest region (with per capita gross regional domestic product [GRDP] that was only 30% of the national per capita gross domestic product [GDP] in 2019) and with close to six of ten workers engaged in agriculture. On the other hand, the National Capital Region (NCR), the richest region with per capita GRDP that was more than twice that of the national per capita GDP, as well as with the least employment share in agriculture and the highest share in tradable business services, has the lowest informality rate at 62%.

FIGURE 8. Percent informally employed





(2) **Transitioning policies to formality.** The following are some policy options to facilitate the transition to formality and decent work of informal workers whose rights at work are largely unprotected under existing labor legislation and social protection.

- (a) Provide an enabling legal framework recognizing workers in the informal economy and transitioning them to decent work. The widespread informality of the Filipino workforce highlights the need to prioritize the enactment into law of the Magna Carta for Workers in the Informal Economy (MACWIE), which would entitle informal workers to some rights granted by the Philippine Labor Code only to regular employees.² These rights include: (a) social protection; (b) freedom of association, social dialogue, and collective negotiation; (c) security

of and in the workplace; (d) just and humane conditions of work; and, (e) occupational safety and health.

- (b) Develop a complete and timely data and information base on the informal economy. Timely and reliable data and statistics on the informal economy (e.g., demographics, labor market, and economic characteristics of informal workers and enterprises) are fundamental to designing effective policies and targeted programs and strategies.

There is a need to add to existing regular household surveys (i.e., *Labor Force Survey*, *Family Income and Expenditure Survey*, and *Annual Poverty Indicators Survey*) questions aimed at identifying informality in labor and enterprises (e.g., whether wage employment is covered by a written contract or social security; and

² Article 295 of the Labor Code of the Philippines defines "regular employees" as those who are: (a) engaged to perform activities which are "usually necessary or desirable" in the usual business or trade of the employer; or (b) those who were engaged to render work for at least one year, regardless of employment continuity.

registration status of businesses for nonsalaried workers).

Develop a compendium of indicators and statistics to effectively monitor and evaluate the progress of transitioning informal workers to formality. Harmonize and integrate database systems on the informal economy and promote information sharing throughout local government units and relevant national agencies³.

- (c) Recognize the right of informal workers to collectively bargain. Although the Philippine Constitution grants all workers the right to “self-organization, collective bargaining and negotiations, and peaceful concerted activities, including the right to strike in accordance with law” (Article XIII, Section 3, paragraph 2, 1987 Philippine Constitution), Philippine labor law limits collective bargaining to labor unions whose members are employees (Article 253 of the Labor Code of the Philippines, as amended). Workers who do not have a definite employer or whose employment does not involve an employee–employer relationship, such as self-employed workers, are allowed to “form a labor organization for their mutual aid and protection” but not for the purpose of collective bargaining.

The proposed MACWIE must provide the legal framework that guarantees the right of informal workers to organize a new trade union or affiliate with existing trade unions and confederations, as well as collectively bargain with authorities (e.g., national government agencies, local government units [LGUs]) that wield significant influence over their livelihood, work conditions, business

environment, social and income security, and productivity.

- (d) Provide universal social security coverage for all workers. The high incidence of informal employment in the Philippines engendered a wide gap in social security coverage, particularly since this is largely limited to regular employment. The percent covered by statutory social security schemes (e.g., Social Security System [SSS], Government Service Insurance System [GSIS]) in 2018 estimated from PSA (2019) was only 58% for workers in government and private establishments, 11% for self-employed workers, and 1% for domestic workers.

A wider range of contributory and noncontributory (general revenue-financed) schemes can be applied for different types of workers to broaden the eligibility criteria for membership and make social security contributions more affordable for all workers. Contribution schemes can be made more equitable between self-employed workers who are currently fully self-funded and regular employees who coshare with their employers the burden of monthly social security contribution (i.e., the employer pays 65% of the monthly social security contribution on behalf of the employee). An example of the use of both contributory and noncontributory schemes is that of the National Health Insurance Program, which has two types of members: (a) direct contributors or those who have the capacity to pay (i.e., regular employees, self-earning professional and technical workers, and domestic workers); and (b) indirect contributors (i.e., the rest of the population whose premium

³ For example, the Department of Trade and Industry (DTI), Department of Finance (DOF), Department of Labor and Employment (DOLE), Department of Social Welfare and Development (DSWD), Department of Agriculture (DA), Department of Interior and Local Government (DILG), Department of Education (DepEd), and Technical Education and Skills Development Authority (TESDA).

contribution are either fully or partially subsidized from general taxation) (Department of Health 2019). For self-employed workers, membership to the national statutory social security system can be made mandatory, with employer contribution covered by a public subsidy. This will ensure broad-based participation of self-employed workers and prevent adverse selection that threatens the financial viability of voluntary schemes.

Advancement in technology has engendered diverse forms of nonstandard employment, such as the rising incidence of the gig economy or platform-mediated workers who are categorized as independent contractors rather than employees, eroding the progress toward making social security coverage more universal. Examples of digital platform workers include e-hailing drivers of various transport network companies (TNCs) (e.g., Grab, HYPE, Micab, U-Hop, OWTO) and food delivery drivers of GrabFood and foodpanda. The COVID-19 pandemic, which accelerated digital transformation, will likely spur an upsurge of workers on digital labor platforms.

There is a need to examine whether there has been a misclassification of gig economy workers as independent contractors who are treated as self-employed workers bereft of entitlements accorded by Philippine labor law to regular employees, such as social security benefits (e.g., retirement, death, disability, funeral, sickness, and maternity), payment of at least the legislated minimum wage and wage-related benefits (e.g., overtime, night differential, rest day, and holiday and 13th month pay), security of tenure, and the right to self-organization and collective bargaining.

- (e) Improve informal workers' access to quality education and skills training. Access to formal and nonformal skills training and education is critical to improve employability and increase labor productivity, as well as for micro- and small entrepreneurs to successfully sustain and grow their businesses. Investing in human capital and upgrading the soft/socioemotional skills/noncognitive and hard/technical/cognitive skills of informal workers can develop their economic potential; facilitate absorption in higher productivity jobs; increase entrepreneurial innovation and creativity, and economic competitiveness; and equalize the opportunity to participate in economic development.

Increase investment in both general education and technical and vocational education and training (TVET), strengthen on-the-job training and apprenticeship programs, and increase financing for the acquisition and upgrading of informal workers' skills to match the demand for higher skills. In regions with high informality, there is a need to establish specialized training centers and technical and vocational institutes that provide affordable and contextually relevant education and training to support regional industrialization and agricultural modernization policies and programs.

- (f) Strengthen the provision of inclusive business advisory and facilitation services for increased productivity and sustainable businesses, particularly for microenterprises, which accounted for 89% of the 1,000,506 business establishments in 2019, as mentioned by PSA's *2019 Annual Survey of Philippine Business and Industry* (MSMED Council, DTI 2020, 3). There is a need to expedite the establishment of Negosyo Centers in all the 187 cities and 1,489 municipalities as mandated under Republic Act (R.A.) No. 10644, or the Go Negosyo Act of 2014. The Act offers the full services of business advisory, product development,

entrepreneurship education, business registration facilitation, access to financial service providers, establishing linkages with suppliers, and the promotion of products and services in the regional, national, and international markets. Of the 1,165 Negosyo Centers established nationwide as of June 2021, only 11.46% were operating in full-services capacity (DTI 2021).

- (g) Simplify and lower the compliance costs of business and tax regulations for micro- and small enterprises (including combating corruption) while increasing the benefits of formalization. Although the Philippines has improved its ranking in the World Bank's Ease of Doing Business from 134th place in 2018 to 95th place out of 190 economies in 2019, it remains among the lowest in Southeast Asia, with Singapore ranking 2nd, Malaysia 23rd, Thailand 46th, Brunei Darussalam 72nd, Vietnam 82nd, and Indonesia 91st (World Bank 2020a). The Philippines performed worst in starting a business (171st place) and enforcing contracts (152nd place).

The full process of starting and formally operating an enterprise in the Philippines takes 33 days, involving 13 procedures and costing more than 23% of income per capita (World Bank 2020b). By comparison, the procedure for starting a business in Vietnam, which is at a similar stage of development as the Philippines, takes 16 days, involving 8 procedures and costing 5.6% of income per capita (World Bank 2020c). There is a need to accelerate the digitization of regulatory approaches to streamline administrative and regulatory procedures and encourage the creation, success, and growth of entrepreneurial activities. This can be supplemented by increasing the informal economy's access to digital learning and digital technology (e.g., affordable access to internet services and digital devices, such as smartphones and computers).

In terms of enforcing contracts, the time required to resolve a commercial dispute since the filing of a case until enforcement of a judgment is 962 days in the Philippines compared with 120 days in Singapore (World Bank 2020b, 2020d). In 2017, the *World Economic Forum Executive Opinion Survey* identified corruption in the top three most problematic factors for doing business in the Philippines (World Economic Forum, 2017). The Philippines is among the lowest in the 2020 Corruption Perception Index in the ASEAN, with a score of 34 (with 100 being the highest score). By comparison, the scores are 85 for Singapore, 60 for Brunei Darussalam, 51 for Malaysia, 37 for Indonesia, and 36 for both Vietnam and Thailand. Corruption can occur at the private sector and at different levels of government. The *2020 Global Corruption Barometer (GCB) — Asia Survey* reported that 1 in 5 persons in the Philippines has paid a bribe for public services in the past 12 months (Transparency International 2020). Among the informally employed workers, some street vendors, for example, resorted to bribes to gain access over a public space and earn a living (Almendral 2014; Milgram 2011), reinforcing the need for a legal framework that guarantees informal workers of the right to security of and in the workplace, alongside more effective strategies to curb corruption.

- (h) Organize massive information campaigns at the local and barangay levels to inform and promote, particularly for micro- and small enterprises, the least cost compliance to business registration and other regulations and the benefits of formality, including greater access to manpower education and skills training, markets, credit and finance, entrepreneurship mentoring, and other business development support services. Lack

of awareness poses a threat to a successful implementation of transition policies and programs to formality.

Conclusion

The COVID-19 pandemic and the resulting economic and job crisis have exposed the serious decent work deficits faced by informally employed workers, who comprise more than 80% of the Filipino workforce, intensifying the need for stronger policies to transition them to formality. Of utmost importance is the enactment of the MACWIE, which will provide the legal framework guaranteeing informal workers the right to work and earn a living, the right to a just and favorable work conditions including the provision of social security, and the right to collective representation and voice. Addressing informality is crucial to a speedier transformative recovery from the COVID-19 crisis and toward an inclusive and sustainable development.

References

- Almendral, Aurora. 2014. "Street vendors have a lot to teach us about how urban space works." NextCity, November 26, 2014. <https://nextcity.org/daily/entry/street-vendors-have-a-lot-to-teach-us-about-how-urban-space-works>
- Cabegin, Emily. 2018. "Incidence and micro-determinants of informal employment in the Philippines." *Philippine Journal of Labor and Industrial Relations* 35: 31–58.
- Department of Health. 2019. "Implementing Rules and Regulations of the Universal Health Care Act." Accessed April 24, 2021. <https://doh.gov.ph/sites/default/files/basic-page/UHC-IRR-signed.pdf>
- Department of Trade and Industry. 2021. "2021 Negosyo Center Report." Accessed June 4, 2021. <https://www.dti.gov.ph/negosyo/negosyo-center/reports/>
- International Labour Organization. 2003. "Seventeenth International Labour Conference of Labour Statisticians: Report of the Conference." Geneva, November 24 – December 3, 2003. Geneva: ILO.
- Milgram, Lynne. 2011. "Reconfiguring space, mobilizing livelihood: Street vending, legality, and work in the Philippines." *Journal of Developing Societies* 27 (3–4): 261–293. <https://doi.org/10.1177/0169796X1102700403>
- MSMED Council, Department of Trade and Industry. 2020. "MSME Development Plan 2017–2022: 2019 Accomplishment Report." Accessed March 28, 2021. https://dtiwebfiles.s3-ap-southeast-1.amazonaws.com/BSMED/MSMED+Plan+Accomplishment+Report/MSMED+PLAN+2019+Accomplishment+Report_FINALv2.pdf
- Ohnsorge, Franziska, Yoki Okawa, & Shu Yu. 2021. "Lagging Behind: Informality and Development." In *The Long Shadow of Informality: Challenges and Policies* (Advance Edition), edited by Franziska Ohnsorge & Shu Yu, 125–202. Washington, DC: International Bank for Reconstruction and Development and The World Bank. Accessed June 4, 2021. <https://thedocs.worldbank.org/en/doc/37511318c092e6fd4ca3c60f0af0bea3-0350012021/related/Informal-economy-full-report.pdf>
- Philippine Statistics Authority. 2021. *Annual National Accounts Linked Series* (Table 1.8. Gross National Income and Gross Domestic Product, Annual 2001 to 2020, Growth Rates at Constant 2018 Prices). April 8, 2021. Distributed by Philippine Statistics Authority. https://psa.gov.ph/sites/default/files/01Summary_2018PSNA_Ann_7.xlsx
- . 2019. "Decent Work Statistics: Philippines Publication tables 1995–2018 (Element 10. Social Security)." Accessed March 28, 2021. https://psa.gov.ph/sites/default/files/Compilation%20of%20Decent%20Work%20Statistics%20rev2_1.pdf
- Presidential Decree No. 442. 1974. "A Decree Instituting a Labor Code, Thereby Revising and Consolidating Labor and Social Laws to Afford Protection to Labor, Promote Employment and Human Resources Development and Ensure Industrial Peace Based on Social Justice."

- Accessed March 20, 2021. <https://www.officialgazette.gov.ph/1974/05/01/presidential-decree-no-442-s-1974/>
- Republic Act No. 10644. 2014. "An Act Promoting Job Generation and Inclusive Growth Through the Development of Micro, Small, and Medium Enterprises." Accessed March 20, 2021. <https://www.officialgazette.gov.ph/2014/07/15/republic-act-no-10644/>
- Transparency International. 2020. *The Global Corruption Barometer — Asia 2020: Citizens Views and Experiences of Corruption*. Accessed March 20, 2021. https://images.transparencycdn.org/images/GCB_Asia_2020_Report_Web_final.pdf
- Transparency International. 2021. *Corruption Perceptions Index 2020*. Accessed June 5, 2021. https://images.transparencycdn.org/images/CPI2020_Report_EN_0802-WEB-1_2021-02-08-103053.pdf
- World Bank. 2020a. *Doing Business 2020: Comparing Business Regulation in 190 Economies*. Washington D.C.: International Bank for Reconstruction and Development/The World Bank. Accessed June 5, 2021. <https://openknowledge.worldbank.org/bitstream/handle/10986/32436/9781464814402.pdf>
- . 2020b. "Economy Profile: Philippines." *Doing Business 2020: Comparing Business Regulation in 190 Economies*. Washington D.C.: International Bank for Reconstruction and Development/The World Bank. Accessed June 5, 2021. <https://www.doingbusiness.org/content/dam/doingBusiness/country/p/philippines/PHL.pdf>
- . 2020c. "Economy Profile: Vietnam." *Doing Business 2020: Comparing Business Regulation in 190 Economies*. Washington D.C.: International Bank for Reconstruction and Development/The World Bank. Accessed June 5, 2021. <https://www.doingbusiness.org/content/dam/doingBusiness/country/v/vietnam/VNM.pdf>
- . 2020d. "Economy Profile: Singapore." *Doing Business 2020: Comparing Business Regulation in 190 Economies*. Washington D.C.: International Bank for Reconstruction and Development/The World Bank. Accessed June 5, 2021. <https://www.doingbusiness.org/content/dam/doingBusiness/country/s/singapore/SGP.pdf>
- World Economic Forum. 2017. *The Global Competitiveness Report 2017–2018*. Geneva: World Economic Forum. Accessed March 23, 2021. <http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf>

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