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Assessing Indonesia's Inclusive Employment Opportunities for People with Disability in the COVID-19 Era

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Abstract

Providing access of decent work for all can push the attempt of poverty eradication. However, the decent works will not be attainable without the support of inclusive and equitable education, particularly for people with disability (PWD). To date, PWD still faces challenges in obtaining minimum education, decent work, and adequate supporting infrastructure. Thus, this study aims to analyze; (1) the probability of PWD in getting employment; (2) how much the earning handicap of PWD compare to PWOD group, and (3) how the pandemic of COVID-19 affects the PWD workers. Our study suggests that more experienced, educated, and trained labour force will improve the likelihood of working and having wages. PWD tend to have lower educational attainment and training participation compared to PWOD which provide barriers to achieve jobs that are more productive and end up earning lower wages. Moreover, the reduction of wages are highest among PWD with mobility-related disabilities. Yet, the discussion of factors affecting the low wage of PWD remain inconclusive. Further, in the time of COVID-19 pandemic, all participants of *Kartu Prakerja* Program from PWD group, who managed to finish the training, perceived that the program increased their skill. Despite of other remaining issues, this is encouraging as the value-added skills can be useful in the labour market, particularly for PWD.

JEL Classification: C34; J21; J24; J31; J38

Keywords

COVID-19 — *kartu prakerja* — labor market — people with disability — wage

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1. Introduction

In the effort to support the acceleration of the Sustainable Development Goals (SDGs) by 2030, the people with disabilities (PWD), which comprised 15% of global population (World Health Organization [WHO] & World Bank, 2011b), have the equal rights to the people without disabilities (PWOD). The achievement of SDGs will be interrelated from one point to another. For instance, the access of decent work for all (SDGs #8) can push the attempt of poverty eradication (SDGs #1). However, the decent works will not be attainable without the support of inclusive and equitable education (SDGs #4). Unfortunately, the PWD has not received the attention they deserve (Burke & Siyaranamual, 2019; McAlpine & Alang, 2020), even though the SDGs carry the value of “no one left behind”.

The employment inequality of PWD vs PWOD occurred in most countries around the globe. The severity of employment gap is worsening in developing and low-middle income countries, compared to developed and high-income countries (WHO & World Bank, 2011b; Mizunoya & Mitra, 2013). The global estimate by World Health Survey and Global Burden of Disease showed that male disability prevalence rate was relatively higher than female (WHO & World Bank, 2011b). The burden of PWD is even greater when the PWD is male and the head of household because their condition will impact the whole family as well. Nevertheless, the female disabled-headed households do not get any better

condition. Despite of their disabled condition, females tend to get lower wages primarily due to the gender issue instead (Mizunoya & Mitra, 2013). Further, public tends to give label and stigma to PWD that they have low productivity which presumably due to the lack of employment and affect the lifetime accumulated human capital (WHO & World Bank, 2011b). In fact, the International Labour Organization (ILO) estimates that PWD has the potential to contribute around 3–7% of GDP in the economy (Buckup, 2009).

In 2011, Indonesia joined other 106 countries in ratifying the UN Convention on the Rights of Persons with Disabilities (CRPD). According to the Indonesian Ministry of Health (Risikesdas, 2018), the current prevalence of PWD in Indonesia is 22% for adult population (18–59 years old). The Government of Indonesia has passed Law No. 8/2016 concerning Persons with Disabilities to support the inclusiveness of PWD to take part in social and economic activities. However, there has been no significant effort to support this goal (Bella & Dartanto, 2016). PWD still faces challenges in obtaining minimum education, decent work, and adequate supporting infrastructure (Halimatussadiah et al., 2014; Cameron & Suarez, 2017). In the issue of workforce, only small proportion of PWD in Indonesia enters the labour market. The population aged 15–64 years who are not included in the labour force are outside the population who currently attend school or are housewives. These workers classify themselves as no longer able or incapable to do work. Labour force participation rate (LFPR) of PWD

is 45%, lower than PWOD which up to 70% (BPS, 2021). Meanwhile, from the entire LFPR of PWD, only around 24.5% has opportunity to join formal sector. Previous study has found that the disabled-headed households have higher probability in falling into poverty (Bella & Dartanto, 2016), which hamper the previous effort on poverty eradication.

This issue is increasingly critical in the amidst of the COVID-19 pandemic. Since the first announcement of WHO on March 11, 2020, the COVID-19 pandemic did not only hit the global economy, but also health and social life. The PWDs are more likely to have higher risk when getting infected by COVID-19 (WHO, 2020). Current conditions worsen the likelihood of PWD's survival. PWDs tend to need additional necessities—which also means higher spending—to support their lives, such as healthcare services, assistive devices, and personal assistance (WHO & World Bank, 2011b). A survey conducted in Uganda showed that 45% of PWD respondents were more concerned about not being able to feed their families during the pandemic. Only around 14% are worried that they will be exposed to COVID-19 (ILO, 2020).

Therefore, this study aims to analyze; (1) the probability of PWD in getting employment; (2) how much the earning handicap of PWD compare to PWOD group, and (3) how the pandemic of COVID-19 affects the PWD workers. The study focuses on Indonesian case using the data of National Employment Survey (Sakernas) from the latest survey in August 2020. This paper will also elaborate more on the issue of employment during COVID-19 pandemic.

2. Literature Review

2.1 The Inclusivity of Labour Market for PWD

The labor market is currently massively promoted for its inclusivity, encouraging the participation of PWD. Even so, studies have shown that PWD have difficulties in doing so. In a developed country such as Australia, it was found that disability lowered the probability of employment by 17.6% and the opportunity of entering the labor market by 16.9% among people aged 15–64 (Mavromaras et al., 2007). The finding slightly differs in Canada, where disability decreased the probability of entering the labor force among the productive age population (Campolieti, 2002). In the case of developing countries, such as Indonesia, the unemployment rate of PWD was lower (8%) compared to their counterparts who have no disabilities (11%) (Halimatussadiyah et al., 2014).

Disability is a multidimensional condition. This means that PWD are more likely to have lower education, fewer formal education qualifications, and lower training opportunities, which render them more vulnerable to unemployment or wage disparity compared to people without disabilities (PWOD). In addition, many of them live in rural areas, which limits their access to training, work opportunities, and public services. Moreover, the issues that PWD face in accessing the job market are more complex than the aforementioned factors.

To be more comprehensive, we outlined the obstacles of PWD opportunities in labor force participation into three main issues: attitudinal, self-created, and institutional barriers. Attitudinal barriers indicate the existence of negative

bias against hiring people with disabilities. The stereotype that equates disability with low competence has led to employers' reluctance to hire PWD since it would alienate co-workers and negatively affect the organizational bottom-line (Lengnick-Hall et al., 2008). Another experimental study has shown that employers were not inclined to hire them, even if the PWD in question was perceived to meet the criteria for a desirable employee.

Next, PWD also contribute to creating barriers for themselves, which are aptly named self-created barriers (Klimoski & Donahue, 1997). Most PWD are not optimistic regarding their opportunities for job market entry (Feldman, 2004). They also struggle to transition into the workplace as they may make inaccurate assessments of the selection process, perceiving a lower probability of being hired. On occasion, they may also lack the capability in assessing their limitations in a realistic manner. In rare cases, some PWD may not even acknowledge their disability during the selection process.

When it comes to institutional barriers, there are two theoretical perspectives that can account for them: rational economic and institutional theory. From the rational economic perspective, PWD are considered less productive workers, and their presence would hamper the institution's goal to pursue economic optimization. Hence, to prioritize its self-interest, the institution is less willing to hire them. On the contrary, institutional theory places an emphasis on legitimacy as enhancing the actions of an organization. It influences the organization to hire PWD by enforcing support on certain pressures such as coercive, isomorphic, and mimetic pressures (Kulkarni & Lengnick-Hall, 2011). Moreover, Harcourt et al. (2005) found that coercive pressures (e.g. equal opportunity legislation) were the only thing influencing employers to hire PWD.

Along with issues at the hiring stage, there has been a growing emphasis on wage gaps for PWD. The issue arises when two people who reach equal productivity levels earn unequal amounts of money. The wage gap for disabled workers may be motivated by prejudice or a misunderstanding of their productivity. It can be difficult to distinguish between wage effects caused by health restrictions and those caused by prejudice because people with disabilities do have impairments that can reduce productivity. The wage differential basis, to the degree that it exists, may discourage people with disabilities from entering the labor market. Moreover, this may be considered an instance of wage discrimination, especially for older workers with disabilities, whose predicted output is likely to be significantly lower than that of younger workers (Gannon & Munley, 2009). Studies from Gannon & Munley (2009) have found that discrimination against older workers who have impairments appears to be significantly worse in terms of wages rather than the hiring process.

Studies in the US, India, and Russia have found significantly lower wages for PWD (Baldwin & Johnson, 2000; Kidd et al., 2000). Moreover, a study by (Choe & Baldwin, 2017) has found a larger wage gap in the case of PWD employed in jobs that are not suitable for their skills or strengths. In the context of Indonesia, Ahsan & Kelly (2018) stated that Indonesian employers valued employees based on their physical qualities. When compared to PWOD, peo-

ple with severe disabilities have a lower average hourly wage and fewer working hours per week.

Moreover, a study by Baldwin & Johnson (2000). in the US found that approximately 20–25% of the wage gap was due to unexplained effects. Similar findings have been identified in several European countries such as Sweden and the UK, where the unexplained portion of the wage gap was found to be about 20–25%. Many other studies claimed that unobserved productivity was found to be the main issue behind the wage gap (Jones et al., 2006). Therefore, the factors behind the wage gap against PWD are still inconclusive and difficult to identify.

2.2 COVID-19, Vulnerable Groups, and Government Measures

The COVID-19 pandemic has inflicted many countries with an unprecedented public health catastrophe that incapacitated many countries through large-scale lockdowns and led to economic and social crises. In the case of Indonesia, the government instituted various restrictions, such as large-scale social restrictions (PSBB), social distancing, and the closure of non-essential services. Work and school activities were done remotely at home, and businesses were also forced to cut their operating hours and limit the number of visitors. In consequence, people are unable to work at the office, and businesses have less flexible opening hours, halting ordinary economic activity. In essence, the enforcement of these stringent measures has inadvertently disrupted people's way of life, with significant ramifications for the economy. A well-documented consequence of the pandemic is large-scale unemployment, particularly among people with disabilities.

As a vulnerable group, PWD are more likely to become unemployed due to the pandemic. In order to curtail costs, employers prefer to dismiss disabled workers, who have historically been regarded as costly due to their association with the accommodation for certain types of disability care. Moreover, disabled people as a whole are more vulnerable to severe health issues associated with COVID-19 than their able-bodied counterparts. Some people with disabilities experience comorbidities that are associated with an increased risk of severe complications of COVID-19. Even though no data from Indonesia exists to corroborate this claim, there is evidence from England suggesting that the risk of death from COVID-19 was 3.1 to 3.5 times greater for people with disabilities compared to PWOD (Disability Rights UK, 2021). Since the option of remote work still excludes PWD, by implication, the situation drives the group to withdraw from the labor market.

The WHO & World Bank (2011a) emphasized the matters of empowerment program for disabilities including skills training aiming to provide a better access for labor market entry for the PWD. The training program for PWD has a significant impact on the employment of PWD (Wltavsky et al., 2014). Some studies argued that majority of the participants were employed after undergoing a skill training program (Hanif et al., 2017).

The needs of empowerment program for PWD can be explained through two basic theories: social model of disability and self-determination theory. The social model of disability argues physical problem as impairment while

disability as “a disadvantage that stems from a lack of fit between a body and its social environment” (Goering, 2015). Thus, PWDs are people, whose physical impairments are taken into less consideration by the social, restricting them from participating in socio economic activities (Goering, 2015). Self-determination theory investigates the “inherent growth tendencies and innate psychological needs that are the basis for their self- motivation and personality, as well as for the conditions that foster those positive processes” (Ryan & Deci, 2000). When social and cultural variables promote healthy environments that support PWDs' experiences with these demands, they can build healthy self-motivation and participate in social and economic activities.

2.3 Kartu Prakerja as Response to COVID-19 for Labours

In response to the aforementioned issues, the Government of Indonesia (GoI) introduce the *Kartu Prakerja* (pre-employment card) aiming to provide the skill development program especially for the workers or people above 18 years old whom looking for job, experience job loss or decreasing income through online training (*Kementerian Koordinator Perekonomian Republik Indonesia*, 2020). *Kartu Prakerja* was first enrolled by the GoI in April 11th, 2020. The GoI's budget for the *Kartu Prakerja* program in 2020 reached IDR10 trillion (covering 5.5 million recipients) which increased twice to IDR20 trillion in 2021. The GoI claimed that the *Kartu Prakerja* was an inclusive program since it included the disabled people. It was reported that disabled people made up 5% of the overall number of participants in *Kartu Prakerja*.

Different with other social assistance programs in Indonesia, *Kartu Prakerja* program is an on-demand program, where the necessity of the program depends on the participants. It is also a self-targeting program, which provides direct access to participants via official website (*Kementerian Koordinator Perekonomian Republik Indonesia*, 2020). This program is a part of National Economic Recovery (PEN) from social protection sector. The registrants must be aged 18 or above and currently not attending formal school. The program also limits the recipients to a maximum of 2 people in one family card and currently not receiving social assistance from the GoI. To register, the participant candidate must register themselves for the *Kartu Prakerja* program website by registering their ID card and family card number, handphone number, and email. The participant candidate will then take a motivation and basic skill test for 25 minutes which determines whether the participant candidate is able to join the *Kartu Prakerja* program. After the test, the participant candidate will register for their *Kartu Prakerja* batch based on their location. If the participant candidate is able to fulfill the batch quota, the participant will be able to utilize the benefits of the *Kartu Prakerja* program.

The participants of the *Kartu Prakerja* program will have a balance that can be utilized for training programs in certain digital platforms for 30 days. The training ranges from how to sell goods online, how to become a photographer, utilizing basic computer applications, language courses, and other skills. After participating in the training course, the *Kartu Prakerja* recipient will receive certificates. After completing the first training course, the recipient will

receive post-training incentives. In 2020, a recipient of the program would receive IDR3.55 million with IDR1 million for the cost of the training, post-training program monthly incentives as much as IDR600 thousand for four months, and incentives for filling 3 surveys (each survey valued at IDR50 thousand)¹.

3. Data & Methodology

3.1 Data

This study utilizes the August 2020 National Labour Force Survey (*Survei Angkatan Kerja Nasional*, Sakernas) by Central Statistical Agency of Indonesia (*Badan Pusat Statistik*, BPS). The Sakernas is a survey done twice a year (February and August) to collect data on the labour market condition including wages, job status, sector, and position, working hours, commuting statistics, among others. The data covers all provinces in Indonesia and covers all districts, specifically for the August Sakernas. The original August 2020 Sakernas data contains 793,202 individuals. However, in the analysis we only focus on samples that are part of the labour market which include samples that: (1) aged 15 and above (productive age) and (2) categorized as working or unemployed². This leaves the sample as much as 541,655 individuals. As the survey represents Indonesia's condition in August 2020, the data used accommodates the effect of COVID-19.

We the proposed a econometric model to examine the relationship between disability and income and to assess the effect of different types and causes of disability on the income of PWD. An individual is considered a disabled person if he/she meets one of the disability categories at low/moderate level³. Causes of disability used in this study are congenital disability, accident/disaster, life pressure/stress, and disease. The categories of disabilities used in this study are visual impairment, hearing disorder, walking problems, moving fingers/hand problems, communication disorders, and other disabilities. The description of the disability categories used in the Sakernas are as follows:

- Visual impairment is the inability to see even when using glasses (e.g. low vision, color-blind, stone-blind, etc.);

¹<https://djjpb.kemenkeu.go.id/kppn/lubuklinggau/id/data-publikasi/berita-terbaru/3341-realisis-kartu-prakerja.html>

²Based on the BPS definition, a person is defined as working if he/she is working in the last week or currently temporarily not working but have a job. Specifically in 2020, the questionnaire also asks whether people are doing activities to obtain income/earnings/money and whether people are supporting business activities or family/other people's job where if any answers are "yes" they are considered working. Whereas, unemployed people are defined as people that are search for a job or readying a business in the last week or if they are not searching for a job and readying a business in the last week the reason must be that they are currently waiting to enter a job or currently waiting for their business to open or giving up (discouraged workers) and the must not be working.

³In Sakernas, the degree of disability is categorized as three: (1) No Disability, (2) Low/Moderate Level, (3) High Level. Low/Moderate degree usually encompasses disabilities that would not need supporting tools to function (not including glasses, etc.) or need supporting tools without external help or a lesser degree version of the disability (such as long-term memory loss instead of short-term memory loss). Whereas, high level encompasses disabilities that need tools and support from external people and a high degree version of the disability (short-term memory loss or amnesia).

- Hearing disorder is the inability to hear even after using hearing equipment (e.g. deaf);
- Walking problem is disability to walk or climb up stairs (e.g. leg paralysis, disproportionate size of legs);
- Fingers/hand problem is disability to use or move or pick up objects with hands or fingers (e.g. does not have hands or fingers, hand or finger amputation)
- Communication disorder is inability to communicate with/ understand others (e.g. speech impairment)
- Other disabilities include disabilities in remembering/ concentrating (e.g. amnesia, dementia), behavior/emotional (e.g. hyperactive, depression, mental disorder, autism) and personal care problems (e.g. self-care disability for eating, bathing, dressing-up)

3.2 Methodology

We begin to analyze the comparison of descriptive statistics between PWD and PWOD to provide information of the characteristic differences between the two groups. This includes demographic variables such as education, age, and training participation, labour market participation variables, including unemployment rate, having additional job, and labour force participation rate, and job characteristics, including working hours, sector status, sector type, and wages. These statistics will provide explanatory information for the results of the regression analysis.

Moreover, we also provide the comparison of descriptive statistics with the PWD, between PWD who participate in the labour force and PWD who are not part of the labour force. Halimatussadiyah et al. (2014) showed that, unlike in most countries, the PWD in Indonesia have a lower unemployment rate compared to PWOD. However, the labour force participation rate of the PWD is lower compared to the PWOD. By comparing the two PWD groups, we will be able to provide the whole story of PWD participation in the labour market. We will compare demographic variables such as education, age, and training participation and disability severity.

Next, we analyse how the COVID-19 pandemic has impacted PWD compared to PWOD and the access of *Kartu Prakerja* between PWD and PWOD. Based on the Sakernas questionnaire, we compare four aspects of labour participation reduction, including temporarily not working, reduction of working hours, not seeking a job and not preparing a new business, and lost job in the last year that are caused by the COVID-19 pandemic⁴. We then compare the proportion between PWD and PWOD. To combat the COVID-19 pandemic impacts, the GoI had prepared the *Kartu Prakerja* Program to prepare productive citizens with training needed in the labour market. In regards to the *Kartu Prakerja*, we compare several aspects, including knowledge, registration, passing, finishing, and the perception of the program and compare the proportions between PWD and PWOD.

Lastly, we analyze the difference of wages between PWD and PWOD using a regression analysis. We also breakdown the model based on the type of disability pos-

⁴We categorize the aspect as caused by the COVID-19 pandemic if the reasoning behind the reduction of labour participation is: (1) afraid of contracting corona/COVID-19, (2) social/physical distancing, self-quarantine, large scale social restrictions (LSSR), or (3) answering "Yes, the condition is caused by COVID-19".

sessed by the individual. The model used is the Heckmann Two-Step Model that captures two aspects of the labour market: (1) factors that influence income and (2) factors that influence the probability of working. We utilize the Heckmann two-step model to avoid selection bias of the data if using Ordinary Least Square (OLS) method (Comola & de Mello, 2013). The Sakernas data produces censoring of wage data due to unobserved/missing nature of income for unemployed, business owner helped by temporary or permanent workers respondents, or unpaid family workers. The first step is used to determine factors that influence the probability of data censoring⁵. The model is as follows:

$$Z_i = \delta_0 + \delta_1 X_{1i} + \delta_2 X_{1i}^2 + \delta_3 X_{2i} + \delta_4 X_{3i} + \sum_{j=1}^2 \delta_j Demography_{ji} + \sum_{j=1}^6 \delta_j Regional_{ji} + e_i \tag{1}$$

$$Z_i = \alpha_0 + \alpha_1 X_{1i} + \alpha_2 X_{1i}^2 + \alpha_3 X_{2i} + \alpha_4 X_{3i} + \alpha_5 X_{4i} + \alpha_6 X_{5i} + \alpha_7 X_{6i} + \alpha_8 X_{7i} + \alpha_9 X_{8i} + \sum_{j=1}^2 \alpha_j Demography_{ji} + \sum_{j=1}^6 \alpha_j Regional_{ji} + u_i \tag{2}$$

Secondly, we run the second step method for the wage analysis. The wage model used follows the model by Mincer. For experience, this study uses age as a proxy for experience (Mincer (1974) and Pasay & Quarina (2010), while education is calculated from the years of schooling. To control the effects of schooling. Other control variables based on Magdalyn (2013) and Comola & de Mello (2013) are added, such as demography variables (gender vocational education, urban/rural, Java/Non-Java) and job characteristics (working in the primary and secondary sector (manufacturing and construction), formal/informal, received training). The wage model used is as follows:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{1i}^2 + \beta_3 X_{2i} + \beta_4 X_{3i} + \sum_{j=1}^2 \beta_j Demography_{ji} + \sum_{k=1}^6 \beta_k Regional_{ki} + \sum_{j=1}^4 \beta_j Job_{ji} + \beta_{17} \hat{E}_i + \varepsilon_i \tag{3}$$

$$Y_i = \gamma_0 + \gamma_1 X_{1i} + \gamma_2 X_{1i}^2 + \gamma_3 X_{2i} + \gamma_4 X_{3i} + \gamma_5 X_{4i} + \gamma_6 X_{5i} + \gamma_7 X_{6i} + \gamma_8 X_{7i} + \gamma_9 X_{8i} + \sum_{j=1}^2 \gamma_j Demography_{ji} + \sum_{k=1}^6 \gamma_k Regional_{ki} + \sum_{j=1}^4 \gamma_j Job_{ji} + \gamma_{17} \hat{E}_i + v_i \tag{4}$$

⁵Through this model, we are able to produce the inverse mills ratio (IMR), a proxy variable for the probability of participation and when it is added to the wage equation as an additional regressor, it measures the sample selection effect due to the lack of observations on the earnings of non-participants (Heckman, 1979). A significant IMR indicates that there is indeed selection bias if using OLS method, thus the regression should use the Heckman Two Step Model.

4. Results & Discussion

4.1 Results

4.1.1 Descriptive Statistics

Comparing between PWD and PWOD, there are differences in terms of capacity, labour participation, and job characteristics of two groups. In terms of capacity, PWOD complete higher levels of education, are younger, and participate in training more compared to PWD. PWOD have completed education at lower secondary level on average, whereas PWD have only completed education at primary level on average. In terms of job characteristics, PWD receive lower wages and have fewer working hours (in both main and all occupations) on average compared to PWOD. Moreover, the proportion of PWD working in formal sector is less compared to PWOD. The majority of PWD work in the primary sector (agriculture or mining and quarrying), whereas PWOD mostly work in the tertiary sector (services). The characteristics of PWD that work in the primary and informal sector that have low value added with less working hours may be one of the explanations of the wage differences between the two groups.

Table 1. Descriptive Statistics of PWD and PWOD

Variables	PWD	PWOD
Capacity		
Years of Schooling (Years)	6.08	9.43
Age (Years)	56.18	39.35
Training Participation (%)	9.44	13.55
Labour Participation		
Unemployment Rate (%)	3.99	7.26
Labour Force Participation Rate (%)	44.55	70.01
Having Additional Occupation (%)	13.35	11.72
Job Characteristics		
Total Wage (Rupiah)	1,375,428	1,860,736
Employed in Formal Sector (%)	30.49	48.27
Working in Primary Sector (%)	48.49	29.69
Working in Secondary Sector (%)	13.15	20.32
Working in Tertiary Sector (%)	38.36	50.00
Hours Worked Main Occupation (Hours)	29.85	33.98
Hours Worked All Occupation (Hours)	31.41	35.43

Source: Author's Calculation

However, we find that PWD have lower unemployment rates compared to PWOD meaning the proportion of PWD without jobs is lower compared to PWOD. The unemployment rate of PWD in 2020 is 3.99%, whereas the unemployment rate of POWD is 7.26%. This is quite different then situations in other countries, where PWD have higher unemployment rates compared to PWOD (OECD, 2010). However, this situation has been observed in Indonesia (Halimatussadiyah et al., 2014) but does not provide the full story regarding the situation of PWD in Indonesia's labour market. When comparing the Labour Force Participation Rate (LFPR), we observe that PWD's LFPR (44.55%) is significantly lower compared to PWOD (70.01%). While PWD who participate in the labour force are less likely to be unemployed, the rate of PWD who are able to participate in the labour force itself is low. This provides a concern of who are the PWD that are able to participate in the labour market.

When comparing the PWD in the labour force and PWD not participating in the labour force, we compare the two populations based on their capacity and disability level. Be-

tween PWDs, there is a difference in capacity where PWD in the labour force are more educated and well equipped (trained) compared to the PWD not participating in the labour force. PWD in the labour force, on average, had finished primary school, whereas PWD not in the labour force have not completed primary school on average (4.78 years of schooling). In terms of disability level, PWD not participating in the labour force tend to have more severe (high level) of disabilities compared to PWD participating in the labour force. This pattern is seen in all types of disabilities. When asked why the PWD did not participate in the labour force, the majority of the PWD answered “unable to do work” which may be caused by the underlying condition of the capacity and disability levels of the PWD.

4.1.2 COVID-19 and Analysis on *Kartu Prakerja*

The COVID-19 pandemic has affected the Indonesian labour market causing unemployment and changes in job patterns. This shock in the labour market has affected both PWD and PWOD. In general, the COVID-19 pandemic mostly affected the working population through the reduction in working hours. Furthermore, the unemployment and changes in job patterns related to COVID-19 pandemic proportionally affected PWOD more compared to PWD (See Figure 1). In terms of losing jobs in the last year, 2.46% of PWD who previously had a job would lose their job due to COVID-19 related reasons. This is lower compared to PWOD where 8.43% of PWOD who previously had a job would lose their job due to COVID-19 related reasons. PWOD were also proportionally higher of being temporarily not working in the last week, reduction of working hours, and not seeking job and not preparing a new business compared to PWD.

Regarding the *Kartu Prakerja* Program, as per August 2020, 26.07% of Indonesia's productive-aged population knew about the program. Within the PWD productive-aged population, only 8.24% knew about the program. From the PWD population that knew about the *Kartu Prakerja* program, only 4.35% eventually registered for the program. From the PWD population that registered for the program, only 9.84% would eventually pass the selection to participate in the program. Lastly, from the selected PWD participants, 61.98% would finish the training of the *Kartu Prakerja* program. Thus, only 0.02% of the PWD population had finished the *Kartu Prakerja* Program. Compared to the PWOD productive-aged population, 27.79% of the PWOD population knew about the *Kartu Prakerja* program, significantly higher compared to the PWD population. Moreover, the percentage of the PWOD that registered, passed the selection, and finished the training program of the *Kartu Prakerja* program was higher compared to the PWD population. In general, participants of the *Kartu Prakerja* that had finished the program, felt that the program increased their skill. The entire participants (100%) of *Kartu Prakerja* from PWD group and 88% of the PWOD participants agreed with the notion. This is encouraging as the participants feel the program provides value-added to their skills which will be useful in the labour market.

4.1.3 Regression Analysis

The regression analysis provides two results: (1) the selection model and (2) the wage model from the Heckmann re-

gression⁶. As the inverse mill ratio is significant, Heckmann two-step method is more efficient compared to OLS. From the selection model, we find that PWD have a 0.95% higher probability of having censored wages values compared to PWOD. This can be interpreted as PWD being more likely to be unemployed or being business owner helped by temporary or permanent workers or working as unpaid family workers compared to PWOD. From descriptive statistics analysis, we find that this is strongly related the PWD working status as proportionally PWD working as business owner helped by temporary workers are significantly higher compared to PWOD working as business owner helped by temporary workers. Moreover, proportionally PWD working as business owner helped by permanent workers and unpaid family workers are compared to their PWOD cohort. On the other hand, proportionally unemployed PWD is lower compared to unemployed PWOD. **Thus, the higher probability of wage censoring for PWD compared to PWOD is driven by PWD working in job statuses that have censored wages** (working as business owner helped by temporary or permanent workers or unpaid family workers). Moreover, when broken down by type of disability, this condition is found with people that have hearing disabilities, walking disabilities, finger/hand disabilities, or other disabilities. Whereas, people with visual disabilities and communication disabilities are less likely to have censored wages.

Other factors affecting the probability of wage censoring, such as age, education, training provide a significant lower probability of wage censoring (increasing but diminishing for age). An increase of age by one year reduces the probability of censored wages by 1.57% (which will diminish), while an increase of education by one year also reduces the probability of censored wages by 1.72%. Labour force who are trained have a lower probability of censored wages by 9.39% compared to labour force that have not participated in any training. This may be explained with the increase of human capital through age (proxy of experience), education and training, the likelihood of being unemployed is lower. Thus, more experienced, educated, and trained labour force will improve the likelihood of working and having wages. Demographic and regional variables also significantly affect the probability of wage censoring. Males have lower probabilities of wage censoring compared to females. Labour force located in urban areas have lower probabilities of wage censoring compared to labour force located in rural areas. Labour force located in Sumatra, Nusa Tenggara, and Sulawesi have a higher probability of wage censoring compared to labour force located in Java. Whereas, labour force located in Kalimantan, Maluku, and Papua have a lower probability of wage censoring compared to labour force located in Java.

From the wage model, we find that PWD have lower wages compared to PWOD, after controlling for several factors. PWD earn IDR84 thousand less in wages compared to PWOD. One of the challenges faced by PWD is that PWD have lower education attainment and training participation compared to PWOD which cause barriers to achieve jobs that are more productive and provides higher wages.

⁶For comparison, we also provide the OLS regression in Appendix.

Table 2. Descriptive Statistics of PWD in Labour Force vs PWD in Non-Labour Force

Variables	PWD Labour Force	PWD Non-Labour Force
Capacity		
Years of Schooling (Years)	6.08	4.78
Age (Years)	56.18	63.61
Training Participation (%)	9.44	4.96
Disability Level		
High Visual Disability (%)	1.81	9.09
High Hearing Disability (%)	6.56	12.80
High Walking Disability (%)	3.77	21.55
High Finger/Hand Disability (%)	2.92	16.84
High Communication Disability (%)	14.35	22.66
High Other Disability (%)	3.86	24.59

Source: Author’s Calculation

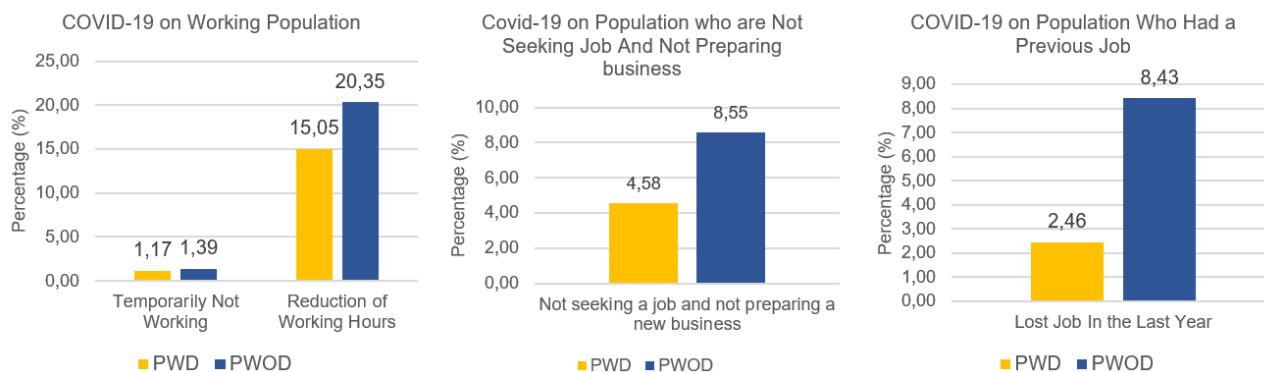


Figure 1. COVID-19 Work-Related Shocks between PWD and PWOD

Source: Author’s Calculation

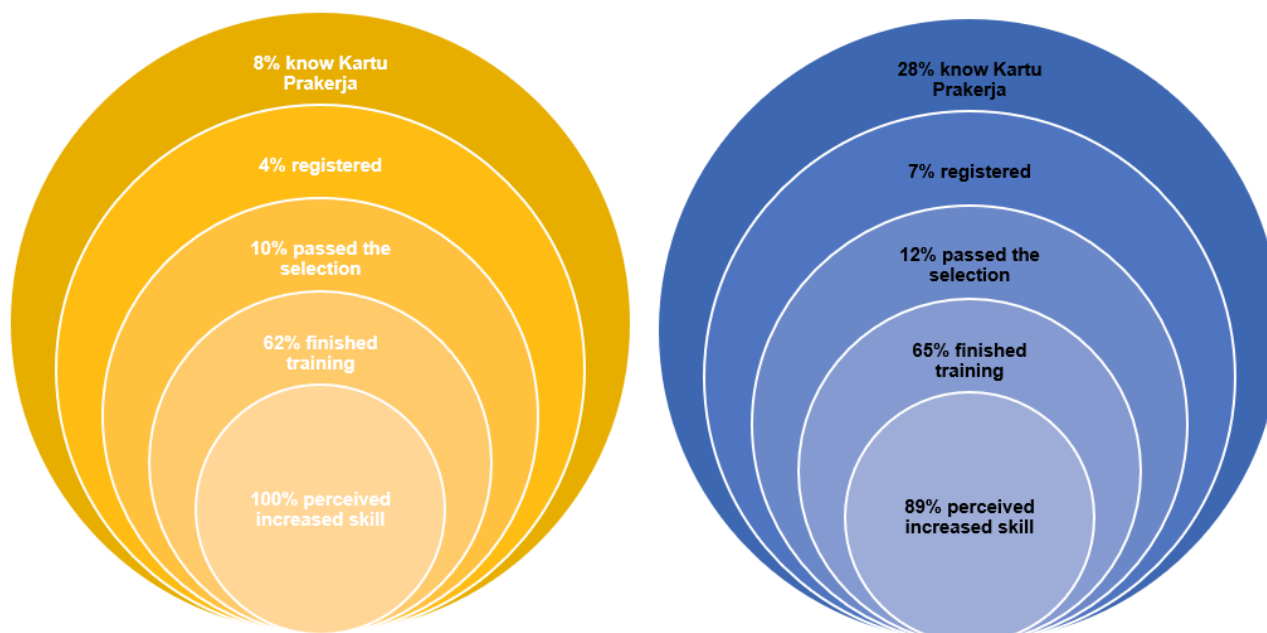


Figure 2. Characteristics of Kartu Prakerja Program between PWD (left) and PWOD (right)

Source: Author’s Calculation

Moreover, when broken down by type of disability, having hearing disabilities, walking disabilities, finger/hand disabilities, or other disabilities significantly reduced wages. Have finger/hand disabilities has the highest reduction of wages, where a person with finger/hand disabilities received IDR151 thousand less in wages compared to PWOD. This is followed by walking disabilities that received IDR57 thousand less in wages compared to PWOD. Disabilities that affect mobility of workers affected skill wages the most.

Moreover, there are other contributing factors that influence wage. Age, education, and training variables provide an increase on wages. An increase of age by one year increases wages by IDR116 thousand (which will diminish), while an increase of education by one year also increases by IDR118 thousand. Labour force who are trained have IDR641 thousand higher wages compared to labour force that have not participated in any training. This may be explained with the increase of human capital through age,

Table 3. Regression Results of Heckman Regression

VARIABLES	(1) Probit Selection Model	(2) Marginal Effect (%) Selection Model	(3) Heckmann Total Wages	(4) Probit Selection Model	(5) Marginal Effect (%) Selection Model	(6) Heckmann Total Wages
Age (Years)	0.0454*** (3.47e-05)	1.57*** (1.19e-05)	116,880*** (81.01)	0.0455*** (3.49e-05)	1.57*** (1.19e-05)	117,143*** (81.50)
Age Squared (Years2)	-0.000496*** (4.03e-07)	-0.0171*** (1.38e-07)	-1,256*** (0.943)	-0.000498*** (4.06e-07)	-0.0172*** (1.39e-07)	-1,261*** (0.951)
Years of Schooling (Years)	0.0498*** (2.29e-05)	1.72*** (7.68e-06)	118,578*** (53.89)	0.0499*** (2.29e-05)	1.72*** (7.68e-06)	118,707*** (53.91)
Has Disability (1 = Yes; 0 = No)	-0.0277*** (0.000417)	-0.957*** (0.000144)	-84,245*** (983.7)			
Visual Disability (1 = Yes; 0 = No)				0.00203*** (0.000509)	0.0702*** (0.000176)	5,165*** (1,202)
Hearing Disability (1 = Yes; 0 = No)				-0.00273*** (0.000902)	-0.0944*** (2.141)	-4,791** (2,141)
Walking Disability (1 = Yes; 0 = No)				-0.0143*** (0.000875)	-0.495*** (0.000302)	-57,941*** (2,069)
Finger/Hand Disability (1 = Yes; 0 = No)				-0.0478*** (0.00142)	-1.65*** (0.000490)	-151,695*** (3,339)
Communication Disability (1 = Yes; 0 = No)				0.0327*** (0.00163)	1.13*** (0.000564)	34,914*** (3,854)
Other Disability (1 = Yes; 0 = No)				-0.0123*** (0.000129)	-0.424*** (0.000447)	-15,520*** (3,076)
Sex (1 = Male; 0 = Female)	0.170*** (0.000192)	5.86*** (6.61e-05)	500,995*** (437.1)	0.170*** (0.000192)	5.86*** (6.61e-05)	501,067*** (437.2)
Location (1 = Urban; 0 = Rural)	0.252*** (0.000197)	8.69*** (6.71e-05)	601,059*** (460.7)	0.251*** (0.000197)	8.69*** (6.71e-05)	600,977*** (460.8)
Lives in Sumatra (1 = True; 0 = False)	-0.0626*** (0.000235)	-2.18*** (8.21e-05)	-121,916*** (551.2)	-0.0630*** (0.000235)	-2.19*** (8.21e-05)	-123,080*** (551.3)
Lives in Nusa Tenggara (1 = True; 0 = False)	-0.216*** (0.000481)	-7.68*** (0.000175)	-512,145*** (1,131)	-0.217*** (0.000481)	-7.71*** (0.000175)	-514,279*** (1,131)
Lives in Kalimantan (1 = True; 0 = False)	0.0834*** (0.000391)	2.82*** (0.000130)	214,970*** (913.6)	0.0829*** (0.000391)	2.80*** (0.000130)	213,585*** (913.7)
Lives in Sulawesi (1 = True; 0 = False)	-0.0532*** (0.000370)	-1.85*** (0.000129)	-129,210*** (864.3)	-0.0539*** (0.000370)	-1.87*** (0.000129)	-131,394*** (864.4)
Lives in Maluku or Papua (1 = True; 0 = False)	0.00573*** (0.000575)	0.197*** (0.000197)	52,426*** (1,358)	0.00508*** (0.000575)	0.174*** (0.000197)	50,857*** (1,358)
Received Certified Training (1 = Yes; 0 = No)	0.272*** (0.000294)	9.39*** (0.000101)	641,233*** (684.6)	0.272*** (0.000294)	9.39*** (0.000101)	640,341*** (684.6)
Working in Formal Sector (1 = Formal Sector; 0 = Informal Sector)			301,898*** (243.5)			301,731*** (243.3)
Working in Secondary Sector (1 = Secondary Sector; 0 = Others)			25,869*** (202.1)			26,136*** (202.1)
Working in Services Sector (1 = Services Sector; 0 = Others)			-11,551*** (189.9)			-11,341*** (189.8)
Jobs Utilizes Internet (1 = Yes; 0 = No)			94,184*** (179.9)			94,312*** (179.9)
Inverse Mills Ratio			14.69*** (7.28e-05)			14.69*** (7.28e-05)
Constant	-1.222*** (0.000764)		-3,382e+06*** (1,753)	-1.224*** (0.000767)		-3,386e+06*** (1,760)
Observations	138,221,938	138,221,938	138,221,938	138,221,938	138,221,938	138,221,938

Source: Author's Calculation

Note: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

education, and training, the productivity of the labour be higher. Using perfect competition assumptions, productivity will go hand in hand with wages. Thus, more experienced, educated, and trained labour force will have higher wages. Demography and regional variables also significantly affect wages. Males have higher IDR500 thousand wages compared to females. Labour force located in urban areas have IDR601 thousand compared to labour force located in rural areas. Labour force located in Sumatra, Nusa Tenggara, and Sulawesi have lower wages compared to labour force located in Java. Whereas, labour force located in Kalimantan, Maluku, and Papua have higher wages compared to labour force located in Java.

Job characteristics also affect the wages received by workers. Workers working in the formal sector have IDR301 thousand higher compared to workers in the informal sector. Workers in the secondary sector have IDR25 thousand higher wages compared to workers working in the primary sector. Whereas workers in the tertiary sector have IDR11 thousand lower wages compared to workers working in the primary sector. Furthermore, jobs that utilize internet will have IDR94 thousand higher wages compared to jobs that do not utilize internet.

4.2 Discussion

4.2.1 Factors Affecting PWD to Enter Labour Market

Our study found that the unemployment rate of PWD was lower (4%) compared to PWOD (7.3%). The contrast of our finding with the situation of OECD may be attributed to the high of inactive persons of PWD group that is much higher than the PWOD. At this context, inactive person is defined as the who does not carry out housework or schooling but not included in labour force as well. Our study also confirmed that only 45% of PWD were in labour force which was smaller to the number of labour force of PWOD (70%). This fact could be attributed to the existence of a huge numbers of uncapable workers among PWD.

Moreover, the low unemployment rate of PWD is not truly promising for the disabled groups. In fact, even if PWD are getting hired, most of employed PWD are working in the informal sectors (69%). While almost 50% of PWOD are employed in formal sectors, most of PWD are self-employed as entrepreneurs or even unpaid labour (Halimatussadiyah et al., 2014). According to the Sakernas, 27% of PWD are self-employed, i.e. taxi biker, land broker, or street vendors; and 26% are working as an entrepreneur assisted by non-permanent workers/family/unpaid worker. In contrast, there are only 17% of PWD employed in the formal sectors. These facts suggest that the labour market is slightly exclusive for the PWD which makes most of PWD have insufficient access to enter the labour market.

The less inclusive access of PWD to enter the labour market has been confirmed by prior studies. Stone & Williams (1997) has been described the reluctance of employer to hire PWD and propose the additional of non-essential requirements, such as ideal profiles which potentially marginalizing the PWD (Boyle, 1997; Stone & Colella, 1996). Louvet (2007) on his study argued that employers may be reluctant to hire PWD even though the PWD are desirable and favourable during the interview performance. Other experimental studies have indicated that there were a negative bias

towards hiring PWD (Ren et al., 2008). There was a strong stigma that hiring PWD would alienate co-worker and negatively affect the organizational bottom line (Lengnick-Hall et al., 2008). Employers also less prefer to hire PWD due to their concern regarding the scepticism of the low productivity of PWD or because of additional cost associated with accommodating certain types of disability (Gannon & Munley, 2009).

The low educational attainment of PWD also could be a factor affecting employer to less prefer to hire PWD. Our study found that PWD have 3 years less schooling than PWOD, indicating that the majority of PWD only have an elementary level degree. Most of PWD are struggles to pursue a higher level of education due to their disabilities (Longhi, 2017). For instance, disabled people need to allocate their time for health treatment which may causes a less educational experience for them. As a result, PWD are struggling to increase their human capital, making them less valuable in the labour market.

Informal education, as much as formal education, can be used to improve knowledge and skills. Unfortunately, low involvement of people with disabilities in formal education is followed by low participation in informal education (training). In general, the participation of PWD in training program account for only 9% of the total, less than PWOD (14%).

4.2.2 Wage Differentiation on PWD

As mentioned above, there are much of factors hindering PWD to enter to the labour market. It also confirmed that most PWD are working in the informal sector, self-employed, or working as an entrepreneur. According to sector-based analysis (See Table 4), the majority of PWD are employed in the agricultural-related sector (e.g. hunting-, forestry- and fishing-sector), which is typically associated with underemployment and low economic return. According to the statistical data of Indonesia's average monthly wage, people who work in the agriculture industry have the lowest monthly average wage (*Statista.com*, 2020). They earn around IDR 1.91 million per month, and are only able to live from hand to mouth or even live under minimum wage provinces. Meanwhile, PWD involvement in the mining and quarrying sector, which is the highest-paying industry, is often less than 10%. Hence, the lower pay of PWD compared to PWOD found in our study remains relevant.

Despite of the unequal opportunity for PWD to enter the formal sector, other extensive issues also worsening the wage differentiation of PWD. Yet, the discussion of factors affecting the low wage of PWD are still inconclusive. The issue will be more confused when two individuals with equal productivity obtain different wages. In the case of a worker with disability, the low wage could result from prejudice or from an incorrect perception about the productivity of workers with disabilities. Because people with disabilities have impairments that can affect productivity, it can be difficult to differentiate between the wage effects either due to health limitations or a missed perception. To the extent that wage differentiation occurs, it might discourage people with disabilities from participating in the labour market.

Empirical study from Longhi (2017) indicated that the different characteristics that are valued in the labour market,

Table 4. Job Characteristics of PWD (in percentage)

Disability Type	Visual Disability	Hearing Disability	Walking Disability	Finger/Hand Disability	Communication Disability	Other Disability	Any Disability
Formal	31.97	20.95	26.17	27.66	22.90	22.91	30.49
Agriculture, hunting, forestry, and fishing	47.15	59.26	50.87	52.56	55.62	57.41	47.90
Mining and quarrying	0.63	0.53	0.27	0.33	0.67	0.52	0.59
Manufacturing	9.30	9.65	9.19	8.45	10.64	8.58	9.68
Electricity, gas, and water supply	0.64	0.63	0.74	0.55	1.19	0.97	0.68
Construction	3.60	2.86	2.00	2.26	2.75	2.44	3.47
Wholesale and retail trade, and hotels and restaurants	21.54	16.32	24.11	22.67	16.46	19.10	21.83
Transport, storage, and communication	2.97	2.34	1.93	2.35	3.27	2.42	2.92
Financing, insurance, real estate, and business services	1.75	1.21	1.22	1.10	0.83	0.64	1.53
Community, social, and personal services	12.42	7.22	9.66	9.73	8.57	7.93	11.41

Source: Author's Calculation

i.e. low education profile and less working experience, are factors behind the lower pay of PWD in the labour market. In addition pay gaps are much larger for people with a mental impairment than for those with a physical impairment Longhi (2017). Because, people with mental health conditions may require more day of sickness leave, and this may result in different preferences and needs in terms of work-life balance. These issues are also approved in our study where people with other disability (i.e. mental health problem) are excluded from the labour force participation group.

4.2.3 Covid and Government Support for PWD

The social restriction measurement in the midst of COVID-19 disproportionately affects PWD. It affects PWD in many ways, including the risk of job loss. Although PWD have low labour force participation, if they work, they tend to engage in informal employment with insecure work contract and lower access to employment access. Therefore, the pandemic affects the job patterns of PWD including reduction in work hours, temporarily not working, or even lost job. Despite the fact that the pandemic affected more PWOD than PWD in terms of employment disruptions, it should be remembered that if PWD are laid off from the labour market, they will have a more difficult time being rehired than PWOD. It does matters since some discrimination has been identified during the recruitment process of PWD (Gannon & Munley, 2009). Further, as lesson learned from the previous crisis in 2008, the Great Recession has disproportionately impacted the PWD and reverted the effort of employment rate of PWD pre-crisis due to the longer period for the unemployment to recover compare to PWOD. The lack of low-skill jobs opportunity after recession also exacerbates the PWD to find suitable employment during economic recovery (Livermore & Honeycutt, 2015).

The issuance of program of *Kartu Prakerja* is expected to be able to address the issue above. At least, the provision of a training program would improve the abilities and capacity of PWD while also equipping them to meet the expectations of employers. Perhaps, the program can effectively improve the empowerment of PWD by providing a healthy environment that supports their psychological and physiological needs. The perceived of skill improvement following the program as identified in our study would be an evidence that the training program would accommodate and help the PWD to participate in social and economic activities (Ryan & Deci, 2004).

Several interesting findings were discovered as a result of our research of the *Kartu Prakerja* inclusivity. First, the PWD still had limited access to *Kartu Prakerja* information. According to our findings, only 8% of people with disabilities are aware of the program's existence, which is significantly lower than the 28% of PWOD who are aware of the program. The social model theory would be a story behind of this finding. The theory explains that PWD are not disabled by their impairments but by the disabling barriers they faced in society (Lissitsa & Madar, 2018). Most of the *Kartu Prakerja* programs, including the promotion of the program, provided on online basis which required the participants to be well-literate on technology used. In facts, studies show that PWD do not utilize digital era opportunities. PWD are excluded due to lack of support or lack of skills to access resources that differ from those used by non-disabled. The creators and vendors of digital technologies may not to take PWD into consideration when planning their designs. Hence, programs that provided through digital technologies may isolate PWD.

In addition, the PWD have a self-created barriers issue and it makes the PWD to be more excluded from the society. This is another interesting issue for the story behind the low participated number of PWD for the *Kartu Prakerja*. PWD are not being optimistic about their competency to compete in a selection process (Feldman, 2004). The government argued that the program's inclusion did not provide preferential treatment to any certain group. PWD may be discouraged from participating in a competitive selection because to an inferiority complex about their skills.

5. Conclusion

The unemployment rate of persons with disabilities (PWD) in most countries is higher compared to persons without disabilities (PWOD). However, it is not the case in Indonesia. The PWD tends to have lower unemployment rate. It turns out that the rate of PWD who are able to participate in the labour force itself is low. These productive-aged PWDs classify themselves as no longer able or incapable to do work. Meanwhile, PWDs who enter the labour force most likely work in informal sector or primary sector (i.e., agriculture, mining and quarrying, etc.) which provide low economic returns. This provides quite contradictory depiction considering the conditions of PWD who apparently work in sectors that require physical strength instead.

Our study suggests that more experienced, educated, and

trained labour force will improve the likelihood of working and having wages. However, PWD have lower educational attainment and training participation compared to PWOD which provide barriers to achieve jobs that are more productive and end up earning lower wages. Moreover, the reduction of wages are highest among PWD with mobility-related disabilities. Yet, the discussion of factors affecting the low wage of PWD are still inconclusive. Because people with disabilities have impairments that can affect productivity, it can be difficult to differentiate between the wage effects that are either due to the health limitations or a missed perception.

In the time of COVID-19 pandemic, there are limited PWDs who understand and know access to *Kartu Prakerja* Program. PWD are not disabled by their impairments but by the disabled barriers they faced in society. PWD are excluded due to lack of support or lack of skills to access resources that differ from those used by non-disabled. The creation of platform for *Kartu Prakerja* or any other workforce programs need to consider the inclusivity for PWD. The inclusivity of labor force participation for all groups of people is explained comprehensively in Article 5 Regulation 13/2003 which mentioned that every worker has an equal opportunity, including disabled groups, without discrimination to get a job.

Further, there needs to be a transmission or pathway from the *Kartu Prakerja* or other programs to ensure that PWD are able to finally implement the knowledge gained from the training in the workforce. For instance, the stringent enforcement of Law No. 8/2016 that mandated the private companies and state-owned enterprise to hire the PWD at least 1% or 2%, respectively, of the total number of workers in their institution.

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APPENDIX

Table A1. OLS Regression Results

VARIABLES	(1)	(2)
	OLS Total Wages	OLS Total Wages
Age (Years)	101,246*** (76.08)	101,322*** (76.51)
Age Squared (Years ²)	-870.5*** (0.895)	-873.0*** (0.902)
Years of Schooling (Years)	90,121*** (54.12)	90,211*** (54.15)
Has Disability (1 = Yes; 0 = No)	-81,966*** (932.9)	
Visual Disability (1 = Yes; 0 = No)		-11,506*** (1,139)
Hearing Disability (1 = Yes; 0 = No)		-43,624*** (2,077)
Walking Disability (1 = Yes; 0 = No)		-71,670*** (1,987)
Finger/Hand Disability (1 = Yes; 0 = No)		-69,929*** (3,209)
Communication Disability (1 = Yes; 0 = No)		11,917*** (3,667)
Other Disability (1 = Yes; 0 = No)		54,060*** (2,945)
Sex (1 = Male; 0 = Female)	782,967*** (405.2)	782,970*** (405.2)
Location (1 = Urban; 0 = Rural)	359,969*** (447.7)	360,043*** (447.8)
Lives in Sumatra (1 = True; 0 = False)	-59,830*** (514.1)	-60,751*** (514.2)
Lives in Nusa Tenggara (1 = True; 0 = False)	-267,991*** (1,063)	-269,603*** (1,063)
Lives in Kalimantan (1 = True; 0 = False)	205,448*** (841.4)	204,571*** (841.5)
Lives in Sulawesi (1 = True; 0 = False)	-3,598*** (803.6)	-5,170*** (803.7)
Lives in Maluku or Papua (1 = True; 0 = False)	357,945*** (1,276)	356,762*** (1,276)
Received Certified Training (1 = Yes; 0 = No)	411,430*** (632.7)	410,713*** (632.7)
Working in Formal Sector (1 = Formal Sector; 0 = Informal Sector)	927,174*** (461.7)	927,309*** (461.7)
Working in Secondary Sector (1 = Secondary Sector; 0 = Others)	270,468*** (632.2)	270,793*** (632.3)
Working in Services Sector (1 = Services Sector; 0 = Others)	19,319*** (567.7)	19,354*** (567.8)
Jobs Utilizes Internet (1 = Yes; 0 = No)	683,439*** (514.9)	683,507*** (514.9)
Constant	-2.936e+06*** (1,632)	-2.937e+06*** (1,638)
Observations	104,330,041	104,330,041

Source: Author's Calculation

Notes: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

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