Persons with Disabilities (PWD) and Labor Force in Indonesia: A Preliminary Study

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Abstract

This study elaborates labor force characteristics of persons with disabilities (PWD) in Indonesia. Using Census 2010 and Susenas 2012, the data shows lower unemployment rate of PWD compared with persons without disabilities (PWOD). This finding seems to contradict the international evidence. We argue that discouraged workers are behind the low unemployment rate of PWD. The discouragement of PWD to enter the labor market may arise because of internal factor—the impairment itself—or external factor—disabling institutions. Low number of schools for PWD and low number of infrastructure to access educational facilities hamper PWD in reaching out to higher education and other life skills and capabilities. In labor market, formal sector still has the so-called 'mental block' in incorporating PWD as their workers.

JEL Classification: J14; J24; J64; J71

Keywords

PWD — Labor Force — Unemployment — Education

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Contents

1	INTRODUCTION	1
2	LITERATURE REVIEW	2
2.1	Disability and Labor Market	2
2.2	Estimating Disability Prevalence Rate	3
2.3	Education and PWD	3
2.4	PWD in Labor Force: Highly Inactive, Low Uner ployment Rate	
25	•	
		n
2.5	Unemployment and Inactivity Rate by Educatic and Age	
		5
2.6	and Age	5 6
2.6	and Age	5 6
2.6 2.7	and Age Does Formal Sector Accommodate PWD? Regulation and Institution on PWD	5 6 6
2.6 2.7	and Age Does Formal Sector Accommodate PWD? Regulation and Institution on PWD DISCUSSION	5 6 6 7

1. INTRODUCTION

In 2004, an estimated number of persons with disabilities (PWD) reached 15.3 percent of the world population [1]. From 650 million PWD, 470 million of them were in working age population [2]¹. In low income countries, the incident rate of PWD was higher (18 percent) than in high income countries (11.8 percent) [1].

The majority of PWD does not work or works in informal sector with low wages. Only a few of them get skill development programs to increase their opportunity to get a decent living. Most PWD have lived in poverty, dependency, and social exclusion [4]. PWD tend to experience high unemployment and have lower earnings than PWOD. They are often segregated from the mainstream labor market. Many become underemployed or even discouraged to enter labor market [2].

Excluding PWD from labor force generates social costs, one of which is the exclusion of benefit from PWD's economic productivity. Estimation from ILO of this exclusion cost ranges between 1 to 7 percent of GDP [4]. Another estimation from [5]² suggests that the figure could reach US\$1.37 to 1.94 trillion in annual loss in GDP.

In Indonesia, estimating the disability prevalence rate is not an easy task. The difficulty mostly occurs due to the lack of statistical data and differences in defining disability. The latter problem leads to differences in measuring disability. Broader scope of measurement is used by WHO through the International Classification Functioning (ICF) [6]. ICF is a classification of health and health-related domains. As the functioning and disability of individual occurs in a context, ICF also includes a list of environmental factors³. However, in Indonesia most of the data on disability only cover physical disability.

Population Census 2010 stated that the number of PWD in Indonesia were 11 million or 4.66 percent of the population. Other statistics estimated that the figures were 6 million or 2.45 percent (Susenas 2012) and 1 million or 0.45 percent (Podes 2011). Higher figure was published in Riskesdas 2013; 11 percent of people aged 15 years or

¹In 2010, an estimated number of persons with disabilities (PWD) in working age (15 years or older) reached some number between 785 to 975 million [3] - according to the World Report on Disability [1]. This is an estimated number based on 2010 World Population estimates and 2014 disability prevalence estimates.

² in "Facts on Disability in the World of Work" [2].

³http://www.who.int/classifications/icf/en/.

above had disability. Even though Riskesdas estimated a higher prevalence rate, still the definition of disability is less specified than ICF's.

Labor force among PWD showed lower rate (60 percent) than in people without disabilities (PWOD) (72 percent). The unemployment rate of PWD was lower (8 percent) compared with that of PWOD (11 percent). However, there were quite large number of inactive people among PWD—people who do not carry out housework (not housewife) or schooling but are not included in labor force. The figure reached 25 percent for PWD, far beyond PWOD (7 percent only). This fact has brought us to suspect the existence of discouraged workers among PWD.

In this study, we elaborate data on characteristics of PWD in labor force and compare it with PWOD. There is limited amount of research on the labor market situation of PWD in Indonesia. Data exploration may bring us to find logical arguments for the low unemployment rate of PWD and the reason of high inactive people among PWD. We argue that among inactive PWD, there are quite large number of discouraged workers.

2. LITERATURE REVIEW

2.1 Disability and Labor Market

Disability involves a multidimensional condition in which PWD are more likely to have lower education, fewer formal education qualifications, lower training, to be unemployed, to be paid less if they are employed, and to have less access to public service than people with no disabilities (PWOD) ([7]; [8]; [9]; [10]). In addition, it is acknowledged that many PWD in developing countries live in rural areas where access to training, work opportunities, and services are limited [11].

Traditional view on disability uses an assumption of the individual medical model of disability [12]. This approach argues that the inability for PWD to achieve a reasonable standard of living by their own efforts occurs as a consequence of the physical and/or psychological impairment [13]. However, along with the growing paradigm on disability (ex. [14]), this view is no longer seen to give adequate explanation for the problem related with the impairment. The contemporary view on disability acknowledges that it is not the impairment which prevents PWD from enjoying equivalent lifestyle to PWOD, but restrictive environments and disabling barriers. This approach is known as the social model of disability ([12]; [15]). It shows that being disabled means to be discriminated against, for disability is followed by a diverse system of social constraints imposed upon PWD [13].

The passage of UN Convention on the Rights of Persons with Disabilities (CRPD) in 2008 indicates the conversion of perception towards PWD. The accomplishment of the right of PWD by charity-based—the prevention of impairments, rehabilitation, and individual support—has changed into rights-based approaches (RBAs)—social, economic, and political inclusion in development policies [16]. The change is aligned with the literature debate in contemporary development studies ([17]; [18]; [19]).

Figure 1 indicates high level of unemployment of PWD compared with that of PWOD in OECD. In some develop-

ing countries with a lack of official data, the unemployment rate is estimated to be 80% or higher [20]. Considering high level of unemployment of PWD, the inability to absorb PWD into labor market incurs cost for society in terms of their productive potential, the cost of disability benefits and pensions, and implications for their families and careers. ILO estimates that this barring may cost countries between 1 to 7 percent of GDP [21]. Working PWD have valuable contribution to the national economy in that their employment reduces the cost of disability benefits and may reduce poverty ([22]; [23]; [24]; [25]; [26]; [10]; [27]).

Several studies have investigated the barriers and challenges for PWD to participate in labor market. [29] identifies the barriers to work among adults with disabilities using national US data National Health Interview Survey Disability Supplement for the year 1994/95. They realize that "pre-hiring" steps are essential and become potential points for policy intervention. The reasons for being discouraged from looking for work are, from the most frequently cited: the lack of appropriate jobs being available, family responsibilities, lack of transportation, inadequate training, fears about access to the full complement of opportunities once on the job, and being discouraged by family or friends because of further burdens that may fall to them if a relative or friend with a disability goes to work. Regarding the lack of appropriate jobs, it could mean there are no openings for jobs with appropriate accommodations, there are no jobs in the right, or the respondent is unable to locate openings. For the accommodation needed for workers with disability, it includes accessible parking or transportation stop, elevators, or specially designed work stations, and special work arrangements, such as reduced work hours for more breaks or job redesign.

[30] have examined the association between disabilities and labour market outcomes by using The Survey of Disability, Ageing and Carers (SDAC03) and The Household, Income and Labor Dynamics in Australia (HILDA). Disabling conditions are associated with lower labor market engagement, which is marked by lower full time employment and lower labor force participation. They have also estimated an approximate wage gap of 7 percent between workers with and without disabilities. Related to occupation, employed people with disabling conditions are more likely to be self-employed and less likely to be in paid employment contrasted to people without disabling conditions. PWD are more likely to be employed in agriculture than in trade or finance sectors; however, they do not find significant differences in the occupation and industry types of disabled and non-disabled employed persons. They also found that more work experience and higher levels of education are associated with higher labor force participation rates. In addition, the likelihood of staying employed or returning to work after losing a job is higher if a person with a disability is younger, highly educated, and has more working experiences. Another appealing finding is that labor markets are shown to evaluate the human capital investment of persons with a disability in a very similar way to that of their non-disabled counterparts.



Figure 1. Unemployment Rates by Disability Status: International Comparison Source: [28]

Table 1. Disability Prevalence Rate from Several Secondary Data Sources

Secondary Data Sources	PWD		PWD Age	15-65	
Secondary Data Sources	Person	%	Person	%	
Population Census 2010	11,081,220	4.66	6,255,499	3.86	
Susenas 2012	6,004,688	2.45	3,505,850	2.15	
Podes 2011	1,078,374	0.45	n.a.	n.a.	
Riskesdas 2013	n.a.	n.a.	n.a.	11*	

Source: Census 2010; Susenas 2012; Podes 2011; Riskesdas 2013

Note: *for age 15+

2.2 Estimating Disability Prevalence Rate

This study has found the differences on the estimation of disability prevalence rate in Indonesia. The range of the figures lies between 0.45 percent (Podes 2011) until more than 11 percent [31] (Table 1). About 42 percent of PWD in productive age are women and the prevalence gets higher as age group increases.

Population Census 2010 collects data of people who have difficulty in one or more of this impairment: seeing, hearing, walking or climbing stairs, remembering or concentrating or communicating and taking care of himself. It categorizes the impairment into moderate and severe. Most PWD have difficulties in seeing (59 percent) and hearing (58 percent), and only 17 percent cannot take care of themselves.

Podes 2011 classifies disabilities into nine categories: seeing impairment (blind), hearing impairment (deaf), speech impairment, blind and deaf, paralyzed, mentally disabled, formerly mental-hospitalized, ex-leprosy, and mixed impairment (physically and mentally)⁴. Meanwhile, Susenas 2012 uses eight categories of impairment with the same classification as Podes 2011's except that it excludes ex-leprosy. Podes 2011 does not use categorization based on severity as Susenas 2012 does.

Riskesdas 2013 uses 12 criteria to classify disability, namely: difficulty in standing for more than 30 minutes; difficulty in doing routine household tasks; difficulty in learning or doing something new; difficulty in joining community activity; experiencing emotional problem arising from health condition; difficulty in concentrating in doing something for 10 minutes; difficulty in walking for more than 1 km; difficulty in bathing; difficulty in wearing clothes; difficulty in getting around with unknown person; difficulty in maintaining friendship; difficulty in doing routine job. Each criterion has 5 scales. Riskesdas 2013 categorizes impairment to 'problematic' in scale 3-5 and 'very problematic' in scale 5.

Distribution of PWD across provinces in Indonesia is described in Figure 2. Although there are no consistent ranks across data sets, we found several provinces that are listed in the top 10 in two, three, or all data sources. Special attention to PWD should be payed in Gorontalo, Central Sulawesi, and South East Sulawesi as the three provinces have consistently ranked among the top 10 in disability prevalence rate in four data sources. South Sulawesi, West Sumatra, Bengkulu, and West Sulawesi are included in the top 10 in three data sources, whereas East Nusa Tenggara and West Nusa Tenggara are among the top 10 in two data sources (Table 2). From regional perspective, provinces with the highest prevalence rate are concentrated in Sulawesi and Nusa Tenggara.

2.3 Education and PWD

Education is important as a leverage factor for PWD to get a decent living. However, as expected, the participation rate of PWD in schooling is low for all level of education

⁴Different from the other data sources, PODES generates data at village level rather than individual level.

Table 2. The Top 10 Disability Prevalence Rates

Prevalence Rate	Province
Top 10 in 4 data sources	Gorontalo, Central Sulawesi, a

Top 10 in 4 data sourcesGorontalo, Central Sulawesi, and South East SulawesiTop 10 in 3 data sourcesSouth Sulawesi, West Sumatra, Bengkulu, and West Sulawesi

Top 10 in 2 data sources East Nusa Tenggara and West Nusa Tenggara

Source: Census 2010; Susenas 2012; Podes 2011; Riskesdas 2013



Figure 2. Distribution of Disability Prevalence Rates Across Provinces in Indonesia (percent)

(elementary, junior, and senior high school). Compared with PWOD, participation rate of PWD in school is more or less only the half.

Based on data from Kemendiknas 2012, there are 1,924 schools available for PWD. They consist of 322 elementary schools, 146 junior high schools, 202 senior high schools, and 1.254 special schools. However, the distribution of education facilities still varies across provinces. Figure 2 captures the difference in the number of schools per 1000 PWD across provinces⁵. Rough estimation suggests that the number of schools for PWD are less than 1 percent when compared with the number of schools for PWOD⁶.

Not only facing the problem of inequality in educational facility, PWD also have problem in access to schools. From all students aged 6 to 18 that go to school, the proportion of PWD that have to travel 3 km or more is higher (32 percent) than PWOD (26 percent). The distance may occur due to fewer schools dedicated to PWD compared with PWOD

(Table 3).

Knowledge and skill development can be achieved not only through formal education but also informal education. Unfortunately, low participation of PWD in formal education is followed by low participation in informal vocational education (*kursus*/training). In general, PWD who take informal vocational educational program are only 0.7 percent, far below PWOD (2 percent). Nonetheless, participation rate of PWD at working age is higher than participation rate of PWD in general, which is in contrast with PWOD (Table 4).

One of the available support for PWD to encourage them to go to school is in the form of scholarship. In general, PWD's scholarship grantee is higher (in percentage) than PWOD. However, for senior high school the figure is lower.

2.4 PWD in Labor Force: Highly Inactive, Low Unemployment Rate

In 2010, almost half of PWD (5.4 million) were in their working age (15–65). From the figure, only 60 percent of them were in labor force. This number was smaller than the number of labor force for PWOD that stood at 72 percent. Yet, it is quite surprising that 92 percent of its labor force were employed. It generated unemployment figure of 8 percent, smaller than the unemployment rate of PWOD (11

⁵This figure is potentially biased when used to explain the sufficiency of educational facilities for PWD. The more appropriate measurement is intake capacity of schools for PWD compared with number of PWD in schooling age.

⁶http://www.jimlyschool.com/read/news/331/ penyandang-disabilitas-di-indonesia-uncrpd-dan\ -kebijakan-publik/



Source: Susenas 2012



n			
Person	%	Person	%
116,867	46.96	29,220,648	52.07
34,507	13.86	7,805,228	13.91
17,301	6.95	4,250,793	7.57
50,465	20.28	9,919,992	17.68
29,745	11.95	4,924,166	8.77
248,885	100.00	56,120,827	100.00
	34,507 17,301 50,465 29,745	116,867 46.96 34,507 13.86 17,301 6.95 50,465 20.28 29,745 11.95 248,885 100.00	116,867 46.96 29,220,648 34,507 13.86 7,805,228 17,301 6.95 4,250,793 50,465 20.28 9,919,992 29,745 11.95 4,924,166 248,885 100.00 56,120,827

Source: Susenas 2012

percent).

Despite the lower unemployment rate of PWD, we also found high number of inactive PWD compared with PWOD. Inactive person is one who does not carry out housework (not housewife) or schooling but is not included in labor force as well. The figure reached 24.75 percent, far beyond PWOD (only 7 percent) (Table 6). This fact has brought us to suspect the existence of discouraged workers among PWD. From this figure we generated inactivity rate, the ratio between inactive person to the 'potential' labor force. Potential labor force is the sum of labor force and inactive person. Inactivity rate of PWD is approximately triple the inactivity rate of PWOD. Potential economic loss could be generated from this figure.

The low unemployment rate of PWD is confirmed by another data source, Susenas 2012 (Table 7), where higher inactive PWD is also reported. In Susenas, more detailed data could be generated as it separates 'others' in non-labor force to active and inactive group. Active non-labor force is a person who does not belong to labor force, does not perform housework, does not go to school, but has other activity. Inactivity rate from Susenas 2012 has indicated more convincing figure on the high inactivity rate of PWD. The difference between inactivity rate of PWD and PWOD is much more pronounced in Susenas data.

More PWD in the more productive age (25–44) are inactive (27 percent), compared with PWD in the group age of 15–54 (25 percent). This trend is different from PWOD where people from 15–24 less likely to become inactive

than group age of 15–54 (Table 8).

PWD with mild disability⁷ tend to enter the labor force more than PWD with severe disability. In the severe group, most PWD are categorized as inactive (Table 9). However, as severity could reduce the ability in doing daily activity, we have to elaborate more on the term 'severe'. We argue that person with severe disability still have potential to perform activities that generate economic value. The problem is whether they have the supporting tools to make them able to do so and whether the surrounding infrastructure helps their mobility.

Comparing the situation in Indonesia with OECD, several indicators seem to have the same trends, such as lower employment rate for PWD compared with PWOD and higher inactivity rate of PWD. However, PWD in Indonesia experienced lower unemployment rate than PWOD, in contrast with the situation in OECD. The low unemployment rate of PWD may be due to high inactivity rate of PWD that is much higher than of PWOD. It suggests that PWD have much more obstacles than PWOD in entering the labor market.

2.5 Unemployment and Inactivity Rate by Education and Age

Table 10 shows educational attainment and labor force status of PWD and PWOD. At a glance, there are differences in labor status for every educational attainment of PWD and

⁷In Susenas, the categorization is mild disability (*ringan*) and severe disability (*berat*).

Table 4. Participation rate of PWD and PWOD in Taking Informal Vocational Educational Program

Age	PWD				
1.90	Person	%*	Person		%*
All Ages	41,313	0.69	5,054,403		2.12
16-65	30,555	0.88	2,496,689		1.61

Source: Susenas 2012

Note: *percent with respect to the students of the respective age group



Figure 4. Distribution of School Facilities per 1000 PWD Across Provinces 2012 Source: Census 2010; Kemendiknas 2012

PWOD. In general, in every educational attainment both PWD and PWOD are mostly employed. The difference is that PWD has significantly higher number of inactive persons than PWOD in every educational attainment. In particular, PWD are two or three times more likely to be inactive compared with PWOD with the same educational attainment. Furthermore, the lower the school attainment of PWD, the higher the percentage of PWD that become inactive. This implies that primary education is crucial for PWD in order to be productively active.

Table 11 shows similar tendencies that PWD are more likely to become inactive than PWOD, but with a larger magnitude. The highest relative probability of becoming inactive between PWD and PWOD is at the age of 25–34 and 35–44, in which PWD are 5–6 times more likely to become inactive than PWOD in the same age groups. Yet in particular, at age 15–24 PWD are dominated by inactive persons (43 percent) and only 26 percent of them are employed. On the other hand, at this age group PWOD mainly go to school or are employed. Therefore, government must give extra attention to this particular group of young people who are disabled and not attending school.

2.6 Does Formal Sector Accommodate PWD?

The low unemployment rate of PWD may relate to high inactivity rate of PWD. It suggests that PWD have much

more obstacle than PWOD in entering the labor market. Yet, even if PWD have jobs, it is most likely in informal rather than formal sector. While most PWOD work as labors or employees, the majority of PWD works as entrepreneurs or unpaid labors (Tabel 12). [31] provides more evidence that only 6% of total PWD work as employees.

Indication of low absorption of PWD in formal sector could be seen in the job sector of PWD (Table 13). Most of the employed PWD work in agricultural sector, which is usually associated with underemployment and generates low economic return. Only few could enter the industry sector.

2.7 Regulation and Institution on PWD

Indonesia has made remarkable progress in past years in developing inclusive legal framework for PWD. Several regulations have been placed to make sure PWD can live their life as decently as PWOD do. As the general framework, Indonesia has ratified international conventions on PWD and makes it operationalized in national law (Table 14). The government has also set a national action plan on PWD. In the National Action Plan of PWD, the training and recruiting of PWD are listed as part of the priorities.

The regulations of PWD in Indonesia concern the social welfare and social security, medical and social rehabilitation, and public service for PWD. Other regulations concern

1 00	PW	'D		PWOD		
Age	Person	%*	Person		%*	
06-12	18,133	14.28	3,970,822		12.36	
13-15	9,907	19.71	1,364,816		11.73	
16-18	3,159	7.81	707,002		8.89	
19–65	3,522	11.30	304,856		6.93	

Table 5. Scholarship Grantee of PWD and PWOD	Table 5.	Scholarship	Grantee	of PWD	and PWOD
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Source: Susenas 2012

Note: *percent with respect to the students of the respective age group

Table 6. Labor Force and Disability State	us, Census 2010
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Labor Force Status	PW	PWD PWOD Total		PWOD		1
Lubor Force Status	Person	Percent	Person	Percent	Person	Percent
Labor Force	3,268,248	60.25	109,503,648	71.90	112,771,896	71.50
Employed	3,006,040	55.42	97,424,937	63.97	100,430,977	63.68
Unemployed	262,208	4.83	12,078,711	7.93	12,340,919	7.82
Not in Labor Force	2,155,809	39.75	42,796,141	28.10	44,951,950	28.50
Housewife	732,74	13.51	18,763,527	12.32	19,496,267	12.36
Schooling	80,735	1.49	12,536,573	8.23	12,617,308	8.00
Others	1,342,334	24.75	11,496,041	7.55	12,838,375	8.14
Total	5,424,057	100.00	152,299,789	100.00	157,723,846	100.00
Unemployment Rate		8.02		11.03		10.94
Inactivity Rate*		29.11		9.50		10.22

Source: Sensus 2010, people age 15–65

Note: *Inactivity rate: others/(others+labor force)

education, access to labor market, and infrastructure. Regulation on education for PWD aims to increase PWD's school participation. The strategy does not only include increasing the number of special schools but also giving access to PWD to enter public schools. However, to be inclusive, public schools must provide certain infrastructure and supporting tools to facilitate PWD in engaging in learning activity. Issues then follow related to the tools needed for PWD. Each type of disability requires different kind of supporting tools or infrastructure. Providing schools all type of supporting tools will make the utilization less efficient⁸.

Labor regulation on PWD requires firms to accommodate about 1 percent of PWD in their labor structure. However, many firms do not have any PWD as part of their employees. They usually employ PWD because of accident experienced by the existing employee. In other words, they do not recruit new PWD employee. From the result of our small survey⁹, firms consider worker's health condition as one of the most important factor in employment besides willingness to learn, attitude, and skill. Nevertheless, we managed to find a number of firms that employ PWD. As many as 87 firms have partnered with the Social Rehabilitation Center of Physical Impairment (BBRSBD) and the Ministry of Social Affairs. However, it is still limited to people with physical impairment. Nine firms have employed PWD, especially with vision & physical impairment. Ten firms have received awards from Ministry of Manpower and Transmigration for caring for and employing PWD labors. The firms are located across Sumatra, Java, Sulawesi, and Bali. We also found one firm that accepts PWD labors with all kind of impairment (hearing, mental disability, etc.).

[32] found that the existing legislation indicates the appeal of Indonesian government to promote job opportunities for PWD, but with weak dissemination and enforcement. Among the legislation, some of them are still charity-based [2]. In addition, the fiscal resources allocated under the national budget and the programme coverage of PWD are inadequate in achieving equal rights and opportunities [33]. Other challenges include eliminating discriminatory provisions, clarification of existing ambiguous legislation and provision of the technical rule functioning as technical umbrella, and provision of practical guidance [34].

The Center for Election Access for Persons with Disabilities (*Pusat Pemilihan Umum Akses Penyandang Cacat*/PPUA) has explored that there is discrimination in PWD recruitment in labor market. Employers consider that PWD are unproductive. As a result, there is only small fraction of private sector that has indicated its awareness and provided open employment for PWD. However, in terms of community awareness, school attendance for PWD has been relatively well implemented in urban areas [32]. *Asia Pacific Development Center on Disability 2006* also estimates that there are 196 NGOs and 750 self-help organizations for PWD at national, provincial, and local levels. Their activities include providing income-earning opportunities for young-adult PWD.

3. DISCUSSION

The findings of this study give rise to several issues for discussion. First, disability prevalence in Indonesia has been quite low compared to world average level. This has brought us into the supposition of underreported disability prevalence data. The underreporting can be in the form of unrecorded data or measurement error of disability concept. The future measurement of disability has to capture not

⁸This is why several schools only accept mentally-disabled students because they relatively do not need special mechanical tools.

⁹We conducted small online survey for several firms and only nine gave their response to the questionnaire.

Labor Force Status	PW	PWD PWOD Tot		PWOD		1
	Person	Percent	Person	Percent	Person	Percent
Labor Force	1,682,578	44.94	99,688,662	62.54	101,371,240	62.14
Employed	1,636,504	43.71	95,659,157	60.01	97,295,661	59.64
Unemployed	46,074	1.23	4,029,505	2.53	4,075,579	2.50
Not in Labor Force	2,061,194	55.06	59,711,223	37.46	61,772,417	37.86
Housewife	96,701	2.58	13,761,403	8.63	13,858,104	8.49
Schooling	1,004,761	26.84	41,050,275	25.75	42,055,036	25.78
Others - active	369,756	9.88	3,342,530	2.10	3,712,286	2.28
Others - inactive	589,976	15.76	1,557,015	0.98	2,146,991	1.32
Total	3,743,772	100.00	159,399,885	100.00	163,143,657	100.00
Unemployment rate		2.74		4.04		4.02
Inactivity rate**		25.96		1.54		2.07

Table 7. Labor Force and Disability Status, Susenas 2012

Source: Sensus 2012, people age 15–65

Note: **Inactivity rate: "others-inactive"/("others-incative"+labor force)

Table 8. Estimation of Unemployed and Inactive PWD and PWOD

Description	Age	PWD	PWOD
Unemployed	15-65	8.02%	11.03%
Inactive person	25-44	27.41%	5.18%
-	15-54	25.33%	8.68%
	15-65	29.11%	9.50%
Source: Sensu	s 2010 n	eonle age	15_65

Source: Sensus 2010, people age 15–65

only the physical and health-related impairment, but also the external, social dimension that gives further restrictions to PWD. Limited availability of data has also arisen as a problem in the analysis of PWD in the labor market. Ideally, we could use the data from National Labor Force Survey (*Survey Tenaga Kerja Nasional*/Sakernas) to estimate unemployment rate of PWD¹⁰. Surprisingly, such data are not available from Sakernas. Accurate and valid data provide more evidence and give better understanding on PWD, especially in addressing the specific needs of PWD and execution of many policies on PWD.

Looking at the distribution of PWD in Indonesia, we have to highlight two areas for their high disability prevalence rate: Sulawesi and Nusa Tenggara. Further study on what drives the high prevalence rate is important.

Low unemployment rate and high inactivity rate could indicate discouragement of PWD to enter the labor market. Education attainment seems to be important for PWD to reduce inactivity rate and enter the labor force. Low participation in schools and informal vocational education has to be addressed in order to solve the issue of highly inactive PWD. Insufficient access and barriers to school has to be addressed as well by promoting inclusive education and providing appropriate tools for PWD to help them overcome the obstacles in learning activity. Accessibility to school, work, and other public facilities are of utmost importance to the well-being of PWD.

Unequal opportunity for PWD in formal sector still exists. The regulation is present but the implementation and enforcement are still week. Pushing private sector to accommodate PWD is unlikely to become the main policy instrument. Increasing the capacity of PWD and provide a better environment for PWD to be capable and competitive in labor market as well as well-engaged in society is the more likely objective. In this sense, social and economic inclusion of PWD is important. The objective is to move the attribute 'disable' of PWD into 'able'.

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¹⁰Sakernas in most situation provides more accurate data to measure unemployment rate and other indicators related to labor market.

Degree of Disability			
Mild	Severe		
51.96%	26.37%		
50.58%	25.54%		
1.38%	0.83%		
48.04%	73.63%		
2.85%	1.87%		
29.34%	20.21%		
7.29%	16.73%		
8.56%	34.82%		
100.00%	100.00%		
1,026,629	2,717,143		
	Mild 51.96% 50.58% 1.38% 48.04% 2.85% 29.34% 7.29% 8.56% 100.00%		

Table 9. Labor Force Status and Degree of Disability

Key labour market indicators, ^a by disability status, OECD average, ^b late 2000s and r
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a) Employment rate: employment as a percentage of working-age population; Inactivity rate: inactive population as a percentage of working-age population; Unemployment rate: unemployed as a percentage of the labour force; working-age population; Poverty rate: percentage of people with disability in households with less than 60% of the median adjusted disposable income.

b) The OECD average is an unweighted average across 27 OECD countries (excluding Japan, New Zealand and Turkey).



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Figure 6. Institutions on PWD and their roles

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Table 10. Educational Attainment and Labor Force Status of PWD and PWOD

Educational Attainment			DWD						DWOD	Q		
I	Labo	Labor Force	Non	Non-Labor Force			Labo	Labor Force	Non	Non-Labor Force		
I	Employed	Employed Unemployed Housewife	Housewife	Schooling	Other	Total PWD	Employed	Unemployed	Housewife	Schooling	Other	Total PWOD
No primary education	45.3%	5.0%	18.0%	%6.0	30.7%	100.0%	61.6%	7.0%	19.2%	3.0%	9.3%	100.0%
Elementary	49.4%	5.5%	21.1%	0.9%	23.1%	100.0%	59.1%	8.7%	19.6%	4.8%	7.8%	100.0%
Junior High	46.0%	6.9%	17.7%	6.1%	23.3%	100.0%	47.8%	10.1%	12.4%	20.5%	9.2%	100.0%
Senior High	49.6%	6.8%	16.4%	5.4%	21.8%	100.0%	55.5%	11.3%	11.6%	11.6%	10.0%	100.0%
Vocational	54.8%	6.9%	14.2%	2.5%	21.6%	100.0%	66.6%	11.6%	9.0%	4.5%	8.2%	100.0%
Diploma I/II	52.2%	3.3%	23.3%	7.2%	14.0%	100.0%	58.4%	6.8%	17.4%	11.3%	6.1%	100.0%
Diploma III	53.4%	4.5%	20.0%	3.6%	18.5%	100.0%	63.7%	7.6%	15.9%	5.3%	7.5%	100.0%
Diploma IV/Bachelor	66.0%	3.3%	17.1%	2.1%	11.5%	100.0%	72.1%	6.1%	13.4%	2.6%	5.7%	100.0%
Master/Doctoral	77.6%	1.1%	10.4%	2.5%	8.4%	100.0%	81.4%	1.7%	10.0%	2.5%	4.3%	100.0%

			ï	able 11. La	bor Forc	Table 11. Labor Force Status of PWD by Age	WD by Age					
Educational Attainment			PWD						DWOD	D		
	Labo	Labor Force	Non	Non-Labor Force			Labo	Labor Force	Non	Non-Labor Force		
	Employed	Unemployed	Housewife	Schooling	Other	Total PWD	Employed	Employed Unemployed Housewife Schooling Other Total PWD Employed Unemployed Housewife Schooling Other Total PWOD	Housewife	Schooling	Other	Total PWOD
15-24	26.2%	11.4%	2.1%	17.6%		100.0%	41.2%	13.3%	3.9%	28.7%	12.8%	100.0%
25-34	48.0%	9.4%	9.9%	1.0%		100.0%	%6.69	8.9%	14.2%	1.3%	5.6%	100.0%
35-44	58.1%	6.3%	17.4%	0.4%		100.0%	73.7%	5.5%	17.7%	0.4%	2.7%	100.0%
45-54	64.8%	4.0%	17.2%	0.2%	13.8%	100.0%	75.5%	3.6%	16.5%	0.2%	4.2%	100.0%
55-65	54.7%	2.5%	12.3%	0.0%		100.0%	71.1%	2.4%	11.7%	0.0%	14.8%	100.0%
							_				-	-
					Source: C	Source: Census 2010						

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No	Job Status	PV	VD	PW	OD
110	Job Status	Susenas	Census	Susenas	Census
1	Self-employed	25.22%	29.60%	18.01%	23.10%
2	Self-employed and assisted with temporary labor/unpaid labor	21.98%	21.70%	13.94%	13.80%
3	Self-employed and assisted with permanent labor/paid labor	3.03%	3.60%	3.31%	3.40%
4	Workers/employees	25.94%	19.40%	42.19%	32.30%
5	Freelance	13.47%	11.80%	12.43%	12.30%
6	Family/unpaid labors	10.36%	14.00%	10.12%	15.10%
	Total	100.00%	100.00%	100.00%	100.00%

Table 12. Job Status of PWD and PWOD

Source: Sensus 2010, age \geq 15. Susenas 2012, age 15–65

 Table 13. Job Sector of PWD and PWOD

No	Sector	PV	VD	PWOD		
	50000	Susenas	Census	Susenas	Census	
1	Agriculture	43.76%	54.60%	30.88%	40.50%	
2	Industry	8.29%	6.00%	13.50%	10.80%	
3	Services	17.85%	14.80%	19.17%	16.80%	
4	Trade, hotels, restaurants	17.81%	15.80%	20.58%	18.40%	
5	Others	12.29%	8.80%	15.87%	13.50%	
	Total	100.00%	100.00%	100.00%	100.00%	

Source: Sensus 2010, age ≥ 15 . Susenas 2012, age 15–65

Table 14. Appendix: Regulation on PWD in Indonesia

No.	Regulation	Classification
1	ILO Convention 1958 No.111 (Convention concerning Discrimination in Respect of Employment and Occupation)	International Convention
2	ILO Convention 1983 No. 159 (Vocational Rehabilitation and Em- ployment (Disabled Persons) Convention)	International Convention
3	UN Convention on The Right of Persons With Disabilities (2006)	International Convention
4	Asia Pacific Decade of Disabled Persons	International Convention
5	Law No. 19/2011	Convention on PWD
6	Draft Presidential Regulation	National Action Plan on PWD (2014-2019)
7	Circulation Letter of Minister of Social Affairs No. 96/HK/SE/2005	Action Plan on PWD Empowerment
8	Law No. 4/1997	PWD
9	Government Regulation No. 43/1998	PWD and Social Welfare
10	Law No. 11/2009	Social Welfare
11	National Action Plan	PWD and Social Welfare
12	Presidential Decree No. 39/1983	Coordination on Social Welfare for PWD
13	Presidential Decree No. 83/1999	Coordination on Social Welfare for PWD
14	Director General of Treasury Regulation No. Per-20/Pb/2006	Social Security for PWD
15 16	Ministry of Social Affairs Decree No.55/HUK/KEP/XI/79/1981	Social Rehabilitation for PWD Standardization of Social Pakabilitation for PWD
10	Ministry of Social Affairs Regulation No. 25/2012 Ministry of Health No. 104/MENKES/PER/II/1999	Standardization of Social Rehabilitation for PWD Medical Rehabilitation
18	Ministry of Female Empowerment No. 23/2010	Information Center and Consultation for Female PWD
19	Circulation Letter of Ministry of Social Affairs No. A/A-50/VI-04/MS	Public Service Quality for PWD
20	Circulation Letter of Ministry of Administrative Reform No.	Public Service for PWD
20	SE/09/M.PAN/3/2004	
21	Law No. 25/2009	Public Service
22	Ministry of Manpower Decree No. Kep-205/MEN/1999	Vocational Education for PWD
23	Law No. 13/2003	Labour Regulation
24	Circulation Letter of Ministry of Manpower and Transmigration No. 01.Kp.01.15.2002	PWD and Employment
25	Circulation Letter of State Employee Affairs Agency No. K-26-20/V5- 39/48	PWD and Civil Servant
26	Memorandum of the Ministry of Administrative Reform No. 49/D.III/PAN/2/2005	PWD and Civil Servant
27	Law No. 20/2003	Education
28	Government Regulation No. 72/1991	Education for PWD
29	Government Regulation No. 19/2005	Education
30	Ministry of National Education Regulation No. 70/2009	Inclusive Education for PWD
31	Circulation Letter of Directorate General of Primary and Secondary	Inclusive Education
22	Education No. 380/G.06/MN/2003, 20 January 2003	A second little in Deciding and Deblie Decilities for DWD
32	Circulation Letter of Ministry of Social Affairs No. A/A 164/VIII/2002/MS, 13 August 2002	Accessibility in Building and Public Facilities for PWD
33	Ministry of Public Works Regulation No. 45/PRT/M/2007	Building
34	Ministry of Public Works Regulation No. 30/PRT/M/2006	Building and Environment and PWD
35	Law No. 28/2002	Building
36	Ministry of Public Works Regulation No. 06/PRT/M/2007	Building Building to accommodate DWD
37	Circulation Letter of Ministry of Administrative Reform No. 3064/M.PPN/05/2006	Building to accommodate PWD
38	Law No. 23/2007	Railway Transportation
39 40	Law No. 17/2008	Water Transportation
40	Law No. 1/2009	Air Transportation
41	Law No. 22/2009 Local Regulations on PWD in Jakarta, Bangka Belitung, Yogyakarta,	Road Infrastructure
42	Riau Islands, South Kalimantan, East Java, Riau, West Java, Lam-	
	pung, Papua, West Kalimantan, South Sumatra, Central Java, Ban-	
	dung City, South Tangerang City, Sukoharjo Regency, Sleman Re-	
	gency, Surakarta City, Pangkalpinang City, Wonogiri Regency, Klaten	
	Regency	