
Between Platforms and Protection: Social Security Gaps and Inclusive Prosperity for Indonesian Ride-Hailing Drivers

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Abstract

In Indonesia, The World Bank Gini Inequality Index (2025) suggest progress in reducing inequality (39% to 35%, 2014-2024). The National Statistics Bureau (BPS) (2025) reports the lowest level of unemployment since post-pandemic era as per February 2025 at 4.76%. However, recent four-day nationwide protests in August-September 2025 triggered by the increase in compensation of lawmakers (later rescinded) marked a perception of increasing inequality on the ground. A 2024 Kantar report estimated that 59% of the Indonesian workforce is informal, of which 50% are gig workers. The majority representation of informal workers, and the significant representation of gig workers therein, suggests that gig workers are a key driver of Indonesian economy. While formally working on digital platforms, their position as informal workers limits access to mandatory employment benefits. This study evaluates the paradox between prosperity and perceived inequality using the three pillars of inclusive prosperity framework (Acemoglu & Robinson, 2013; Acemoglu, 2019) based on existing quantitative survey data collected from Indonesian motorbike gig workers (Brailovskaya et al. 2024a, 2024b; N=3,502 active, inactive, and offline drivers). For the first pillar, Economic Growth and Improved Living Standards, I compare incomes between active and offline drivers to assess whether platform work improves livelihoods or exposes hidden vulnerabilities. For the second pillar, Economic Opportunities and Good Jobs, I examine drivers' exit opportunities and motivations, including for inactive drivers, to evaluate whether gig work translates into economic opportunities or locks workers into informality without protection. For the third pillar, Institutions and Technology to Enable Opportunities, I quantify barriers in social protection participation rate, formal union participation, and gender equality, revealing the institutional shortcomings that limit access to protection. Findings highlight the gap between the ideal narrative of digital platforms as opportunity providers and the reality of limited social protection, offering implications for more inclusive policy design.

Keywords: gig economy, ride-hailing, platform labor markets, social protection, Indonesia.

1. Introduction

Social protection is an important element to foster equality towards inclusive prosperity. Acemoglu and Robinson (2013) describe in *Why Nations Fail* the power of inclusive institutions in fostering prosperity. Later, Acemoglu and Johnson (2024) in *Power and Progress* suggest that the direction of technological advances is a choice made by society and, without active interventions such as social protection, technology can broaden inequality, leading to an extractive rather than inclusive

direction. In parallel, Aghion et al. (2021) in *The Power of Creative Destruction* emphasize the importance of social protection in mitigating economic shocks inevitable in a state of creative destruction, where new innovations disrupt old systems along with the society which relies on them.

In Indonesia, social protection for gig workers is also becoming an important topic with 59% of the Indonesian workforce being informal (BPS, 2025), of which 50% are gig workers (Kantar, 2024). Despite their large proportion within the informal workforce, gig workers are not separately recognized as a labor category under the law (Muhyiddin et al., 2024; Tobing, 2024). February 2025 report by Badan Pusat Statistik (BPS, 2025), latest at time of this writing, aggregates them within the broader informal worker category with no distinction (BPS, 2025; Kantar, 2024). This lack of separate recognition, referred to by The World Bank as “The Missing Middle”, causes gaps in social protection for these workers (Muhyiddin et al., 2024; Datta et al., 2023).

Among the gig workers in Indonesia, online ride-hailing motorbike drivers (known locally as ojek online / ojol) are an increasingly prominent presence. Employing an estimated 4 million drivers nationally (Tobing, 2024), these platform drivers are correlated with 37% lower unemployment rates and 18% lower poverty rates in served areas (Huda & Yudhistira, 2024; Askar et al., 2024). Given their importance, this research focuses on these ride-hailing drivers in analyzing their socioeconomic state, inclusion within society, and gaps in social protection, collectively: their state of inclusive prosperity.

Inclusive prosperity, defined as “economic growth that benefits society at large, not just corporations and the very well-educated” (Acemoglu, 2019), is supported by three pillars: economic growth and improved living standards, economic opportunities and good jobs, and institutions and technology to enable opportunities (Acemoglu & Robinson, 2013; Acemoglu, 2019; as summarized in MIT Sloan School of Management & MIT Schwarzman College of Computing, 2022). I use these pillars as framework for this research to evaluate the state of economic welfare of the ride-hailing drivers, surfacing gaps within each pillar.

Pillar 1: economic growth and improved living standards, focuses on how platform work improves the income of active drivers as opposed to their offline counterpart. It also compares their actual income against the poverty line as well as other types of work, formal and informal.

Pillar 2: economic opportunities and good jobs, evaluates whether platform work is a good job based on Acemoglu’s (2019) definition, characterized by three components: wages, job security and career growth. It also evaluates whether platform work results in better economic opportunities, marked by social mobility, i.e., workers improving their socioeconomic status.

Pillar 3: institutions and technology to enable opportunities, explores how working within platform enables access to the digital economy for ride-hailing drivers, and how institutions such as labor unions provide countervailing powers against the power of platforms taking form as algorithmic management. In analyzing the role of institutions, this third pillar reflects upon the analysis in the previous two pillars to evaluate the gaps in social protection required to bridge any vulnerability contained therein.

In using this framework, I rely on contemporary data based on driver surveys conducted by IDinsight in June to July 2024 (N=3,502 active, inactive, and offline drivers, Brailovskaya et al., 2024a, 2024b), a global research organization supported by the Gates foundation. Their surveys and relevant findings analyze the socio-economic characteristics of the drivers and their experiences in working on a gig platform.

This paper contributes to the literature by applying Acemoglu et al.'s macroeconomic framework to a contemporary micro-level dataset on Indonesian ride-hailing drivers. Acemoglu, Robinson, and Johnson received the Nobel Prize in Economics in 2024 for their contributions to this framework (The Nobel Prize, 2024). By evaluating issues faced by ride-hailing drivers within each pillar, the findings help identify gaps in the current system. The resulting gap analysis then informs policy recommendations on strengthening social protection for gig workers.

2. Research method

2.1. Supporting datasets

Table 1 elaborates the survey demographics and procedures conducted in June to July 2024. Surveys for active and inactive drivers were conducted by phone while offline driver surveys were in-person. All respondents received compensation of IDR 65,000 (Brailovskaya et al., 2024a).

Table 1. Summary of target respondents

Respondents	Active drivers	Population size	Sample	Completed Surveys
Active drivers	Drivers who have been taking minimum 1 order in the past 2 months	100,000 – 350,000	6,667	3,006
Inactive drivers	Drivers who have not been taking minimum 1 order in the past 12 months but have taken at least 1 order in the period of past 12-24 months	200,000 – 500,000	1,176	196
Offline ojek in East and South Jakarta	Ojek drivers who offer their services outside of any platform	Unknown	327	300

Source: Brailovskaya et al. (2024a)

It is important to note that depending on the analysis, Brailovskaya et al. (2024a) uses subsamples more fitting to the task at hand, e.g., to calculate the drivers' net income, they use only a subsample of full-time active drivers who do not multi-home (i.e., not using other platforms) which brings N = 1,102, rather than the full N = 3,006. Additionally, active drivers are split into four groups when responding to a 300-question questionnaire, with each group answering a different subset of questions. In the absence of raw data, I rely on their aggregate analysis based on their selected subsamples when

analyzing the pillars. Finally, calculations against subgroups within each respondent group are weighted using inverse probability weights. This corrects for intentional oversampling of female drivers (only 2% of the population) to enable gender analysis, and adjusts for differential nonresponse biases (e.g., higher response rates among younger men). While weighting ensures the calculated results accurately mirror the population's observable characteristics, it makes the expression of N within subgroups (e.g., male and female) irrelevant.

2.2. Secondary research methodology

To evaluate each of the three pillars of inclusive prosperity, I synthesize the survey results presented across the two reports on gig workers in Indonesia by Brailovskaya et al. (2024a, 2024b).

2.2.1. Pillar 1: Economic growth and improved living standards

To evaluate the first pillar, I compare the net income of active platform drivers against offline drivers to understand how platform technology provides economic growth. To assess if this income provides an improved living standard, I adopt Brailovskaya et al.'s (2024a) method of comparing per-capita household income figures against BPS poverty line at IDR 582,932 to determine the proportion of driver households living in poverty. This number is in line with what was quoted by Askar et al. (2024) at IDR 535,547 per month (equivalent to USD 3.16 PPP per person per day). While this number aligns more closely with Indonesia's pre-2023 classification as lower-middle income country by The World Bank (2021) at USD 3.2 PPP, I use this definition in absence of a more granular data to compare against the updated poverty line definition reflecting Indonesia's post-2023 upper-middle income status at US\$8.30 per person per day (2021 PPP, Askar et al., 2024). I then benchmark the income from platform work against other jobs to obtain a relative comparison of improvement in living standards.

2.2.2. Pillar 2: Economic opportunities and good jobs

2.2.2.1. Good jobs analysis

A good job provides good wages, job security, and career growth (Acemoglu, 2019). The evaluation of wages is based on the mean income benchmarking analysis based on Brailovskaya et al.'s (2024a) data used in Pillar 1, combined with insights from CELIOS reports on additional factors beyond the mean (Huda, 2024; Askar et al., 2024). In evaluating job security, my analysis draws from Brailovskaya et al.'s data (2024a, 2024b) on factors which may bring drivers at risk of suspension and termination under algorithmic management. While relevant data is present, job security is not discussed in the original report. Therefore, I reinterpret the data through the lens of job security. To evaluate opportunities for career growth, I refer to Brailovskaya et al.'s (2024b) survey of inactive drivers, who were asked to identify useful skills acquired while working on the platform, and compare these findings with Huda's (2024) discussion on low-skilled labor trap.

2.2.2.2. Economic Opportunities Analysis

To determine if gig work creates economic opportunities, I leverage Brailovskaya et al.'s (2024b) comparative analysis between active and inactive drivers to highlight a direct, albeit non-causal,

method for evaluating whether platform work functions as a temporary bridge or a steppingstone to better, more stable employment in terms of earnings and financial security.

2.2.3. Pillar 3: Institutions and technology to enable opportunities

2.2.3.1. Role of technology

To assess this dimension, I focus on assessment of drivers' inclusion in the digital economy as per The World Bank (2021) policy goal using Brailovskaya et al.'s (2024b) driver surveys to determine their ownership of financial instruments before and after starting platform work.

2.2.3.2. Role of institutions

To evaluate the role of institutions, I assess drivers' integration into two components: worker organization and social protection (Acemoglu & Johnson, 2024) using Brailovskaya et al.'s (2024b) data. On worker organization, I reference the surveys on driver collectivization in terms of participation in formal unions and informal support groups. On social protection, I examine drivers' participation in social protection programs to determine effectiveness. Lastly, I highlight the precarity of platform work for female drivers from Brailovskaya et al.'s (2024b) analysis.

3. Results and Discussion

3.1. Pillar 1: Economic growth and improved living standards

3.1.1. Economic growth analysis

In evaluating economic growth, I compare the net income between offline and active platform drivers working within the same area. The analysis conducted by Brailovskaya et al. (2024a) concludes that active drivers in East and South Jakarta earn significantly more than their offline counterparts. I summarize these findings in Table 2, adding my observations on the incremental income gained from platform work: a 71% increase in overall net income (covering all sources of earnings, including income from driving, part-time work, and business), and an 82% increase in income derived specifically from driving. These results indicate that platform work provides significant economic growth than offline driving, at least in the observed areas.

This increase in income is explained by two factors: an increase in working hours and an increase in working efficiency. Surveys from Brailovskaya et al. (2024a) show a 20% increase in working hours between active platform drivers and offline drivers as platform drivers are driven by target income rather than fixed working hours, which is the characteristic of offline drivers. The surveys also show significant difference in utilization rate, with active platform drivers drive for 62% of their working hours as opposed to 26% for offline drivers. The platform improves efficiency by connecting drivers with a large customer base and offering additional services like food delivery and courier work. Table 2 summarizes these findings.

Table 2. Offline vs Online drivers' net income comparison in East & South Jakarta

	Offline (N=248)	Active (N=315)	q-value	% increase
	Mean	Mean		
Last 30 days Net income (all sources)	2,004,437	3,424,152	0.00	71%
Last 30 days Net income (driving)	1,534,839	2,792,603	0.00	82%
Working hours (last day)	8.12	9.75	0.00	20%
Utilization rate (% hours driving)	0.26	0.62	0.00	138%
Drive a fixed number of hours daily	0.59	0.44	0.00	
Target fixed earnings	0.20	0.53	0.00	

Source: Adapted from Brailovskaya et al. (2024a, p. 44, p. 59, p. 60)

3.1.2. Improved living standards analysis

In evaluating whether the drivers' income provides a sufficient living standard, I use Brailovskaya et al.'s (2024a) analysis comparing drivers' income per capita against the government's set poverty line at IDR 582,932 per capita in BPS March 2024 report. As shown in Table 3, they estimate total household income based on drivers' net income divided by the income contribution percentage. The resulting total household income is then divided by total members of the household to get income per capita. They find that 25% of households live below the poverty line, higher than national average at 9%. This suggests that platform drivers are exposed to lower living standards and higher risk of falling into poverty compared to the average worker.

Table 3. Estimated household income from all income sources (IDR)

	Full sample		By gender			
	Mean	N	Male Mean	Female Mean	q-value	% Difference
Net income (all sources)	3,393,716	3,006	3,308,855	2,886,303	0.00	-12%
Net income (platform)	2,494,489	3,006	2,497,221	2,272,510	0.00	-9%
% Contribution to Household	79.67	3,006	79.82	67.14	0.00	-16%
Estimated household income	5,189,219	2,986	5,176,048	6,259,527	0.11	
Estimated per-capita income	1,550,583	2,985	1,547,564	1,795,856	0.33	

	Full sample		By gender			
	Mean	N	Male Mean	Female Mean	q-value	% Difference
% Of households under poverty	0.25	2,985	0.25	0.25	0.99	

Note: The absence of N in gender data is due to the oversampling as explained in section 2.1

Source: Adapted from Brailovskaya et al. (2024a, p. 49)

Table 3 also shows that female drivers earn less than male drivers by 9% on platform and 12% overall. I elaborate on the significance of this in the Pillar 3 discussions.

To further elaborate on living standards comparison between platform drivers and the average worker, I summarize Brailovskaya et al.'s (2024a) analysis on full-time drivers in Jakarta area (N=471) against other jobs as per BPS August 2023 data in Table 4. Note that in defining "Self-Employed Workers", Brailovskaya et al. (2024a) follows grouping in Sakernas (National Employment Survey) which includes motorbike taxi drivers to medical professionals. The lack of more granular data makes precise analysis only against motorbike taxi drivers not possible.

Table 4. Comparison of full-time drivers' earnings to other jobs, Jakarta

Income Category	Source	N	Value (IDR)	% of Jakarta Driver Net income
Gross monthly income (Drivers)	Survey	471	4,939,707	
Net monthly income (Drivers)	Survey	471	2,839,682	100%
Minimum wage	BPS (Aug 2023)	-	5,067,381	178%
Casual workers (Net income, overall)	BPS (Aug 2023)	-	2,340,000	82%
Casual workers (Net, High School and above)	BPS (Aug 2023)	-	2,515,000	89%
Self-Employed Workers (Net income, overall)	BPS (Aug 2023)	-	3,713,200	131%
Self-Employed Workers (Net, High School and above)	BPS (Aug 2023)	-	4,097,600	144%

Source: Adapted from Brailovskaya et al. (2024a, p. 46)

Table 4 shows that the income for casual workers is lower by 11%-18% compared to platform drivers. In contrast, compared to the drivers' mean net income, self-employed workers make 30%-40% higher while the minimum wage is 78% higher. This shows that living standard for the average platforms drivers is comparable to other informal labor (higher than casual work, lower than self-employed labor) and far below formal employment, at least in Jakarta.

3.2. Pillar 2: Economic opportunities and good jobs

3.2.1. Good jobs analysis

Brailovskaya et al.'s survey on a subsample of active drivers (2024b, p.10, N=769) revealed that approximately 69% of drivers felt their expectations regarding income, working conditions, and working hours were met. However, looking deeper into the three components of a good job (Acemoglu, 2019), I conclude that platform driver is not a good job due to relatively low and risky wages, poor job security, and limited career opportunities.

3.2.1.1. Wages

In pillar 1, I discuss that while the improvement in mean income from platform work provides a fighting chance for households to stay above the poverty line, it is relatively low compared to some form of self-employment and significantly below the minimum wage earned through formal employment. This issue is compounded by the income instability inherent under the gig model, as platform drivers are subjected to market demand (Huda, 2024). Additionally, these drivers are squeezed by thin margins with as many as 50.1% of online ride-hailing drivers only earn IDR50,000 - IDR100,000 per day, while 44.1% spend their daily operational expenses of IDR50,000 - IDR100,000 per day (Askar et al., 2024, p.10). The income uncertainty and thin margins suggested that earnings are risky for a large portion of drivers.

3.2.1.2. Job Security

Platforms use algorithms for both matching drivers with customers and controlling drivers' work behaviors (Benlian et al., 2022). While job security is not a main topic of discussion in the original paper, I argue algorithmic management puts pressure on drivers' job security.

Table 5. Drivers' perception on algorithmic management

Survey group	N	Survey response	Mean
Active drivers who are planning to leave	771	Reasons for planning to leave: system & policies unfair / unfavorable	0.02
Inactive drivers	196	Reason for leaving: got terminated	0.02
Drivers who do not multi-home (use other platform)	2,535	Reason for not multi-homing: got terminated / suspended / rejected	0.03
Drivers who multi-home	189	Perceive consequences: Lost bonuses	0.56
As above	189	Perceive consequences: Lower ratings	0.49
As above	189	Perceive consequences: Less orders	0.20

Source: Adapted from Brailovskaya et al. (2024a, p. 33; 2024b, p. 26, p. 32)

Table 5 shows how drivers perceive platform control over their work behaviors: through policies that can penalize drivers via suspension, termination, reduced ratings (which often lead to suspension or termination), or annulment of bonuses and orders. These measures are common applications of algorithmic management as explicitly highlighted by Benlian et al. (2022). While these drivers are

engaged as informal workers, the platform's algorithmic management subjects them to constant pressure of losing their job or earnings due to the threat of such enforcement. This dynamic is a direct antithesis of a secure job.

3.2.1.3. Opportunities for career growth

I define career growth as a combination of two components: skills and job opportunities. Both components are lacking for platform drivers in the current climate, as elaborated below.

On the skills front, 59% of the inactive drivers (N=196) reported that they have gained useful skills, with the top three skills being: learning about traffic rules and road lanes, use of GPS, and soft skills (time management, adaptability, communication) (Brailovskaya et al., 2024b). However, I argue that the skills gained are not sufficient to qualify for meaningful career growth. Instead, the entire situation is keeping them within the low-skilled labor trap, defined by Huda (2024) as the risk of low-skilled workers being caught in a cycle of temporary jobs with no clear path to career advancement, due to a lack of skills development or professional growth opportunities toward middle income jobs.

Additionally, this situation is exacerbated by the lack of opportunity in the formal employment sector, resulting from the waves of layoffs throughout 2024 compounded by the relatively high entry barrier to formal employment (Brailovskaya et al., 2024b). This lack of opportunity continues to be observed today (Kompas, 2025).

3.2.2. Economic opportunities analysis

To understand whether platform work provides economic opportunities resulting in social mobility, I look for evidence where post-platform (i.e., inactive) drivers have better earnings and financial security compared to when they were on platform.

Table 6. Characteristics of inactive vs active drivers comparison

Survey group	Inactive Drivers		Active Drivers		q-value
	Mean	N	Mean	N	
Have bachelors' degree	0.21	196	0.07	3006	0.01
Income sources: Business	0.37	196	0.10	3006	0.00
Income sources: Full-time work	0.59	196	0.08	3006	0.00
Income sources: Transport work	0.16	196	1.00	3006	0.00
Weekly working hours (all sources)	51.15	196	76.81	3006	0.00
Total net income	4,433,780	196	3,303,716	3006	0.02
Business income (revenue)	1,515,273	196	226,179	3006	0.00
Full-time work income	2,047,573	196	205,969	3006	0.00
Transport work net income	193,852	196	2,494,489	3006	0.00

Source: Adapted from Brailovskaya et al. (2024b, p. 28, p. 29, p. 30)

On earnings, Table 6 shows that inactive drivers improve their total net income by 34% while lowering their weekly working hours by 33% by changing their source of income from transport work to full-time work and/or business. Regarding financial security, Brailovskaya et al. (2024b) surveys on inactive drivers (N=196) separately reveal that 67% of drivers can contribute to monthly savings post-platform, compared to 42% during platform work, and 93% of drivers can meet household expenses, up from 75% during platform work. While these findings suggest drivers achieving better socioeconomic status post-platform, Brailovskaya et al. (2024b) does not provide causal inference as to why.

While drawing causal inference requires deeper analysis beyond the scope of this paper, my earlier findings conclude that platform work cannot be categorized as a good job due to relatively subpar wages, poor job security, and lack of opportunities for career growth. Huda (2024) also stipulates that gig work, in its current form, leads to the low-skilled labor trap. Therefore, there should be other factors contributing to the social mobility of drivers post-platform.

In my view, which aligns with Acemoglu's (2019) view of education as a catalyst for social mobility, the higher level of education of inactive drivers explains this contrast. Table 6 shows that inactive drivers are three times more likely to hold a bachelor's degree. This explanation is strengthened by Brailovskaya et al.'s (2024b) findings that educated drivers are more likely to view platform work as a temporary job, and upon leaving the platform find better earning opportunities. Based on these findings, I can draw inference that despite the education attained before or during platform work, it is highly correlated to the social mobility post-platform.

3.3. Pillar 3: Institutions and technology to enable opportunities

3.3.1. Role of technology

The World Bank (2021) mentions that one of the key priorities for Indonesia in leveraging digital technologies to achieve greater inclusion is ensuring that the digital economy works for all. Brailovskaya et al.'s (2024a) report provides ample evidence of how ride-hailing platforms enable the digital economy for the drivers in terms of financial inclusion.

Table 7. Access to financial instruments (N=775)

Access to financial instruments	Mean (after platform work)	Mean (pre-platform work)	% increase
Mobile money	1.00	0.17	488%
Bank account	0.92	0.62	48%
Government issued health insurance	0.72	0.58	24%
Health insurance for family	0.61	0.52	17%
Government issued work insurance	0.39	0.14	179%

Access to financial instruments	Mean (after platform work)	Mean (pre-platform work)	% increase
Digital loan	0.27	0.04	575%
Pension funds	0.04	0.02	100%

Source: Adapted from Brailovskaya et al. (2024b, p. 34)

Table 7 shows high participation rates by platform drivers in key financial instruments after starting platform work, suggesting that platform technology contributes to financial inclusion for the drivers. However, despite the significant improvements in participation rates, there are three key instruments which are mandatory for formal workers to have but leave a protection gap for platform workers, namely: health insurance, work insurance, pension funds. The participation gap in pension funds is particularly concerning with only 4% of drivers reported participation, leaving most drivers unprotected beyond their productive age.

3.3.2. Role of institutions

In a platform business, winner-take-all-or-most by achieving network effects through achieving market monopoly (Cusumano et al., 2019). Ride-hailing platforms are incentivized to establish/maintain market monopoly by keeping prices low for the customers, often at the expense of drivers. Despite the algorithmic management imposed on drivers, they are classified as informal workers. While platforms argue that it provides freedom for workers to participate, corroborated by 72% of active platform drivers (N=697) as a key benefit of working on platform (Brailovskaya et al., 2024b, p.10), converting workers status to formal employment is estimated to bring costs up by 20-30% (Cusumano et al., 2019) and therefore weakening market competitiveness to achieve a winner-take-all-or-most goal.

Against this backdrop, to ensure that workers are protected from economic harm, a key role of the institutions is to act as countervailing powers (Acemoglu & Robinson, 2013). I interpret this in two ways. The first is expressly stated by Acemoglu and Robinson (2013) that one role of the government is to promote and facilitate free participation in worker unions. The second, as expanded by Acemoglu and Johnson (2024) in a later work, is providing social protection.

3.3.2.1. Labor unions

There are two types of collectivization among platform drivers highlighted by Brailovskaya et al. (2024b): Informal groups and formal unions. Drivers participate in informal groups, mostly through whatsapp, to help each other in need, gain traffic updates and work-related information, and discuss issues in general. Formal unions (e.g., Serikat Pekerja Angkutan Indonesia / SPAI), in contrast, organize protests and issue public statements to address unfair aspects of platform work. Despite the critical role of formal unions as countervailing power, participation remains small with SPAI member base estimated at only 1,000 members with 80% men and 20% women as of June 2025 (Kusnadi & Teerakowitkajorn, 2025). Table 8 shows the contrast in awareness and participation rate between informal groups and formal unions, with 61% participation rate in informal groups and only 2% participation in formal unions.

Brailovskaya et al. (2024b, p.17) explain the lower formal union participation is due to drivers's lack of interest and time commitment required, mentioned by 63% and 37% of respondents, respectively. However, Acemoglu and Johnson (2024) expressed that algorithmic management is designed to increase surveillance and weaken the power of labor, which suggests that low participation is a design consequence. While there is no supporting survey data available on this topic, Benlian et al. (2022) explains a plausible mechanism on how algorithmic controls minimize human resistance: automating interactions by minimizing feedback loops.

Table 8. Collectivization among active drivers (N=771)

Form of Collectivization	Aware	Participate
Informal groups	0.87	0.61
Formal union	0.35	0.02

Source: Adapted from Brailovskaya et al. (2024b, p. 17)

3.3.2.2. Social protection

Brailovskaya et al. (2024b) group social protection benefits into two parts: Non-contributory (for the poor) and contributory (for workers). Further, their surveys gauge the awareness of drivers to these benefits to contrast against participation rates. For this paper, I focus on benefits where awareness rate is high (more than 80%). With 25% of platform drivers living in poverty as shown in Table 3, in the most ideal case, I expect at least 25% participation rate in all non-contributory benefits, along with 100% participation rate in contributory benefits.

Among the non-contributory benefits, only top 3 have more than 80% awareness rate: Prakerja (skills training), BLT (Cash Transfers), and JKN (Health Insurance Subsidy). All three contributory benefits in the surveys have more than 80% awareness rate: JKM (Work Insurance), JHT (Old-Age Savings, functions like pension fund), and BPJS Kesehatan (Health Insurance).

Table 7 in previous discussion shows that participation in contributory benefits is far from 100%, with the lowest rate observed on pension fund (4% participation rate). For non-contributory benefits, Brailovskaya et al. (2024b) report that the highest participation rate is for JKN at slightly above 30%, while participation rate in BLT is just over 5%. Brailovskaya et al. (2024a) also highlight a 6% participation rate of Prakerja despite 22% of drivers expressing interest in starting a business post-platform. This is concerning, as the discussion in Pillar 1 shows that education and upskilling are relevant to achieving social mobility. As the forementioned ideal state of 25% participation rate in all non-contributory benefits along with 100% participation rate in contributory benefits is not met, despite above 80% awareness rate, I summarize that in the context of gig workers, current social protection schemes have not sufficiently reached their intended participants: the workers and the poor.

In my hypothesis, there are two possible reasons why drivers are aware of but not participating in social protection schemes, which are not necessarily mutually exclusive. One is by choice, i.e., drivers choose not to participate. Another is by consequences, external factors making drivers ineligible to participate, despite their state of economy. The World Bank research by Holmemo et al. (2020) helps to provide directions to the cause of low participation rate.

On Non-contributory benefits (for the poor), Holmemo et al. (2020) suggest that low participation is a consequence of gaps in implementation, stating “...the coordination between the multiple programs implemented by various agencies is often challenging. Furthermore, decentralization adds to the complexity of coordination, as both central and local governments share responsibility for the implementation of most, if not all, social assistance programs”.

On contributory benefits (for workers), Holmemo et al.’s (2020) findings suggest low participation is by choice where “voluntary informal sector participants end up joining the scheme only when they need services, or become passive soon after they have availed services”, highlighting the gap in BPJS schemes to invite participation from informal workers.

Supplementing the general analysis, pillar 1 discussion in Table 3 shows that female drivers earn less than male drivers by 9% on platform. Brailovskaya et al. (2024a) suggests that this difference is attributed to three reasons: (a) female drivers often bear more domestic responsibilities during peak order times; (b) they tend to be more risk-averse, opting not to work during evening hours to avoid potential incidents; and (c) they face a higher likelihood of order rejections, particularly in ride-hailing services. These reasons are reflected in the surveys on female drivers (N=892) with 62% reported order cancellations when user found out the driver is a woman, 38% canceled orders by themselves due to safety concerns, 33% felt unsafe in delivering far from location, and 32% experienced harassments by restaurants/merchants/customers (Brailovskaya et al. 2024b). These findings suggest need for social protection designed for women.

3.4. Summary of pillar findings

My findings support The World Bank’s (2025) view that digital intensive informal jobs, including ride-hailing drivers, shrink the earnings gap between the formal and informal sectors. However, there are gaps remaining to be addressed in each pillar.

For the first pillar: Economic growth and improved living standards, I discuss that platform work promotes economic growth and improves the living standards of platform drivers comparable to informal workers. However, the risk of falling into poverty by solely relying on platform work is high, and the compensation is still far below the minimum wage.

In the second pillar: Economic opportunities and good jobs, I conclude that platform work is not a good job. The wage is uncertain and lower than formal employment, job security is negatively affected by algorithmic penalties, and career opportunities are limited. Additionally, platform work on its own does not translate into economic opportunities. It needs to be coupled with education and upskilling, which enable social mobility.

For the third pillar: Institutions and technology to enable opportunities, I establish that a technology platform does improve financial inclusion. However, institutional support in form of participation rates in both formal union and social protection schemes is weak. Additionally, platform work is more precarious for women necessitating need for better protection.

3.5. Policy recommendations

In a state where the rise of gig platforms trends against traditional forms of formal and informal employment, I recommend considering the three safety nets to accompany creative destruction by Aghion et al. (2021) to address gaps in each pillar. Philippe Aghion and Peter Howitt received the 2025 Nobel Prize in Economics for their work on the theory of sustained growth through creative destruction (The Nobel Prize, 2025).

The first safety net is a system of minimum income to eliminate poverty traps. Such system directly addresses the first pillar regarding the high risk of poverty when working on platform.

The second safety net is a system of Flexicurity. Flexicurity is a Danish model which reduces rigidity of the labor market, which hinders the process of creative destruction, while ensuring protection for individuals to manage periods of unemployment. This model moves the narrative from “job security” to “employment security” by balancing flexible contractual arrangements with comprehensive lifelong learning strategies and social security systems. It addresses both the second pillar and partially the third pillar by ensuring that economic opportunities and good jobs are available, while strengthening social protection.

The third safety net, high-quality healthcare accessible to all, complements the social protection coverage in the third pillar in ensuring that critical benefits are applied with no exception. To complete the discussion on the third pillar, Aghion et al. (2021) also mentions the importance of labor unions within the civil society to “generate or call for the enforcement of constitutional provisions intended to check executive power and ensure greater efficiency, ethics, and justice in the operation of the market.”

In implementing these safety nets, the Malaysia’s Gig Workers Act 2025 (‘the Act’) can serve as reference. The Act classifies gig workers outside traditional employment structures, directly addressing the “missing middle”. It is praised by the International Labour Organization (ILO) as “the world’s first comprehensive legislation directly addressing gig workers” (Bernama, 2025).

Implementing the first safety net regarding minimum wage for gig workers is challenging due to the flexible nature of gig work. While the Act does not stipulate a minimum wage, it establishes a mechanism for setting minimum earnings rates for gig workers via a tripartite Consultative Council, with the possibility of these rates being formalized by Ministerial order.

On the second safety net, the Act implements a form of Flexicurity. The Act maintains “flexible contractual arrangements” by creating a new “gig worker” category, separate from traditional employment categories. In doing so, the Act stipulates mandatory social protection by providing gig workers the rights “(a) to social security contributions deducted from the earnings payable to the gig worker, made by the contracting entity on behalf of the gig worker to the Organization; and (b) to have access to such deduction of social security contributions in the digital intermediary system which is developed by the contracting entity.”

The Act also touches on the third safety net regarding high-quality healthcare access for all. The coverage on mandatory implementation of social protection refers to the Malaysian Self Employment Social Security Act 2017 which includes medical benefits.

Apart from the safety nets, the Act also addresses the need for formal representation to establish countervailing powers and strengthen the third pillar. The Act protects the rights of gig workers “(a) to associate with any other person for the establishment of a gig workers’ association; (b) to join any gig workers’ association; or (c) to participate in any activity organized by any gig workers’ association, whether the gig worker holds office in the association or otherwise.”

In addressing the need for social protection for female drivers, I recommend considering the reforms suggested by The World Bank on providing tailored support to special groups (Wiardja & Cunningham, 2021). These reforms are proposed to address the additional challenges faced by these groups which risk them being left behind.

For the first reform, fine-tuning of labor market information systems and training programs, I recommend special considerations on Prakerja (Upskilling) benefits for women. This benefit should be extended to formal education as it correlates to the social mobility in Pillar 2 discussion. While the data limits causal inference between education and social mobility, the strong correlation supported by Acemoglu's (2019) finding on education as catalyst for mobility, provides sufficient rationale for this intervention.

For the second reform, expanding the access women have to social benefits through their jobs, I recommend giving female drivers the equivalent to maternity benefits in the formal sector. Wiardja & Cunningham (2021) suggest to (i) modify the Labor Law to specify that an employer may not terminate the employment of, or take disciplinary measures against, a woman during pregnancy, maternity leave, or in the period following her return to work; and (ii) establish a national procedure for grievances related to firm payment of social benefits.

For the third reform, enacting legislation to set national norms for women’s access to the labor market, I draw on two of the measures suggested by Wiardja & Cunningham (2021). The first is to introduce an article that defines sexual harassment and clarifies the nature of unacceptable workplace interactions, thereby helps to define workplace safety in the context of ride-hailing drivers. The second is to redefine “equal pay for equal work”, as platform work creates a de-facto pay gap. Table 3 shows that female drivers earn 9% less in mean net income compared to male drivers, and Brailovskaya et al. (2024a) find that male drivers can earn up to 31% more in hourly net income compared to female drivers. In redefining “equal pay for equal work” in the context of ride-hailing, I recommend implementing (a) a stipulation requiring platforms to provide commission-based subsidies for women, and (b) a government subsidy for women’s deductibles to the mandatory social protection scheme this paper proposes. These subsidies serve as counterbalance to the precarity that women face in platform work.

4. Conclusion and Recommendations

Despite the growing importance of gig economy Indonesia, this study concludes that the current state of gig work has critical gaps within the three pillars of inclusive prosperity. The high risk of falling into poverty (Pillar 1), coupled by the precarity of platform work (Pillar 2), and the gaps in social protection and institutional support (Pillar 3) puts ride-hailing workers, especially women, marginalized within traditional employment scheme.

Efforts to address “the missing middle” is taking shape with Malaysia serving as the reference for ILO. Adopting and implementing similar measures can help Indonesia to address inequality stemming from the nature of algorithmic platform, inherent in gig work today.

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