DOES SOCIAL ASSISTANCE DISINCENTIVISE EMPLOYMENT, JOB FORMALITY, AND MOBILITY?

LEARNING FROM PAST UNCONDITIONAL CASH TRANSFER PROGRAM IN INDONESIA

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Overview

01	How does social assistance in the form of cash transfers affect employment and formality in developing countries, especially in times of crises and economic recovery?
02	Identification is based on a difference-in-difference design exploiting three waves of nationally-representative longitudinal data on household transfer receipts and labour market outcomes
03	Main findings: • People are around 2 to 4 pp less likely to be employed (3 to 7% decrease from the mean outcome) and, among those employed, they are 2 to 4 pp less likely to be in formal work (5 to 10% decrease from the mean outcome) following receipt of the transfer • Beneficiaries are less likely to stay in their original status of formal work and are more likely to shift into informal work and unemployment, as estimated using a multinomial logit method.

Background

01 The increase in domestic fuel prices prompted the government to launch the Direct Cash Transfer (*Bantuan Langsung Tunai*/BLT) Program to reduce the negative impact of the increase. BLT was carried out for the first time in 2005, and continued in 2008, and 2013.

02 Potential unintended consequences, such as diminished work incentives and a greater inclination towards informal employment.

- Gains to be made from returning to employment or work in the formal sector are insufficient to compensate the loss of the welfare benefits
- Beneficiaries may prefer to accept more time spent for leisure or keep searching for the right job (or stay in the informal sector) instead of accepting the first offer
- Households may tend to move to the informal sector, hide their income, and therefore still qualify for social benefits

03 BLT provided emergency income support to nearly one-third of Indonesian household (equivalent to 19 million households)

Figure 1: BLT Expenditure and Target Beneficiaries

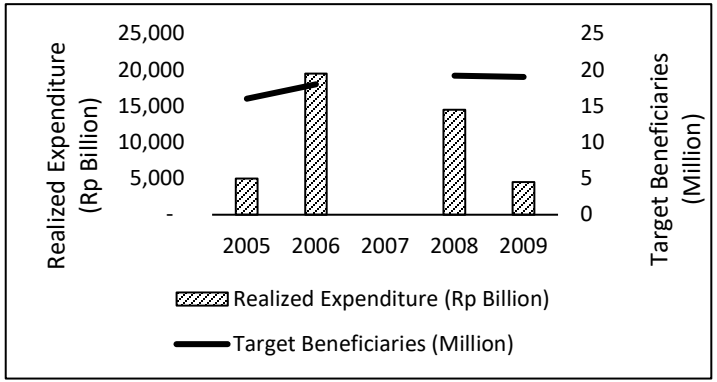
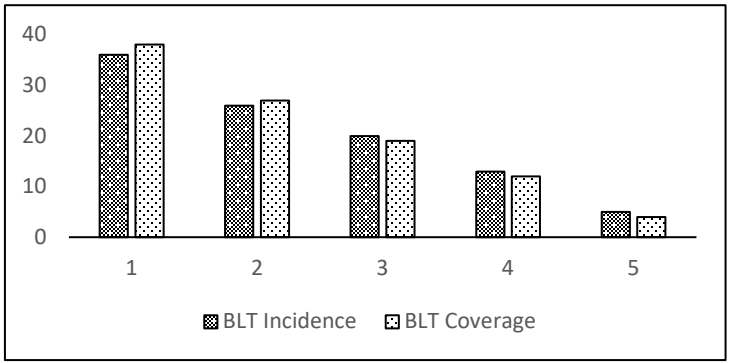


Figure 2: BLT Incidence and Coverage, 2005-06:



Economic Theory

Theory will predict that receipt of social assistance **disincentivises work** through two channels (Ellwood 1988; Moffit, 2002):

Income effect: social assistance provide additional income to households, which increases the consumption of normal goods, including leisure

- An increase in purchasing power for normal goods with positive income elasticity of demand resulting from a change in real income

Price effect: marginal effective tax rate on the additional income due to the loss of social assistance will increase if someone accepts a job offer → there would be no incentive to accept the offer

- The gains to be made from returning to employment is insufficient to offset loss of the unemployment assistance

Interaction with informality and self-employment:

Households may tend to move to the informal sector, hide their income, and therefore still qualify for social assistance

Data Characteristics

01	A rich longitudinal household survey from the Indonesia Family Life Survey (IFLS) wave 3 to 5 (2000-2014) serves as the primary data source for this paper. The sample selected for this study are individuals age 15 or above and not currently at school during the survey
02	Two separate individual-level panel datasets are constructed: first, a panel dataset using the survey wave 3 and 4 (i.e., 2000 and 2007), and second, a panel dataset using the survey wave 4 and 5 (i.e., 2007 and 2014) – each to examine the impact of BLT 2005 and BLT 2008, respectively
03	IFLS has a dedicated section to record respondents' employment history every year at least up until the year of the previous round survey. For cases in which respondents were employed and unemployed in the same year, IFLS would record the employment status with the longest duration during that year

Summary Statistics

Dataset 1: 2000-2007 for BLT I (2005)

Variable	Obs	Mean	Std. Dev.	Min	Max
lfp_1	48,265	0.617611	0.485976	0	1
emp_1	48,265	0.600083	0.489886	0	1
log_hour_tot	33,663	3.670705	0.680972	0	5.123964
log_hour_p~m	33,651	3.55613	0.683094	0	5.123964
formal_pri~1	33,747	0.390583	0.487888	0	1
inf_hhe_prim	48,254	0.381274	0.485705	0	1
inf_cas_prim	48,254	0.044929	0.20715	0	1
inf_agr_prim	48,254	0.092759	0.290098	0	1
age	48,263	36.21039	15.24269	13	101
married	48,264	0.694824	0.460487	0	1
head	48,264	0.376989	0.484637	0	1
educ_year	48,258	7.713643	4.423163	0	22
skill_1	48,258	2.037652	0.742112	1	3
nchild_4	48,265	0.373459	0.571859	0	4
hh_educ_year	48,264	10.78402	3.513969	0	22
houseown	48,255	0.7828	0.412344	0	1
land	48,257	0.332574	0.47114	0	1
hhe	48,257	0.447003	0.497189	0	1
cf_factory	43,807	0.440455	0.496447	0	1

Dataset 2: 2007-2014 for BLT II (2008) & BLSM (2013)

Variable	Obs	Mean	Std. Dev.	Min	Max
lfp_1	57,169	0.601655	0.489562	0	1
emp_1	57,169	0.588763	0.492062	0	1
log_hour_tot	40,358	3.631272	0.742924	0	5.123964
log_hour_p~m	40,329	3.52068	0.746796	0	5.123964
formal_pri~1	40,617	0.385184	0.486645	0	1
inf_hhe_prim	57,134	0.359033	0.479721	0	1
inf_cas_prim	57,134	0.078045	0.268244	0	1
inf_agr_prim	57,134	0.085623	0.279809	0	1
age	57,168	37.61783	15.5245	14	110
married	57,169	0.716735	0.450588	0	1
head	57,169	0.398503	0.489594	0	1
educ_year	57,169	8.386818	4.43024	0	22
skill_1	57,169	2.144344	0.736893	1	3
nchild_4	57,169	0.353373	0.549711	0	4
hh_educ_year	57,169	11.5263	3.30459	0	22
houseown	57,130	0.759373	0.427468	0	1
land	57,127	0.311587	0.463146	0	1
hhe	57,129	0.419122	0.49342	0	1
cf_factory	43,277	0.575571	0.494262	0	1

Identification Strategy

01

Assumption for no time-varying differences is implausible for the targeted program → as BLT program is targeted for the poor, the DID method may bias the program's true effect

02

To account for the potential of varying unobserved heterogeneity over time → DID is combined with the propensity score matching approach to help construct a statistical comparison group using the probability model of participating in the treatment

04

Estimation using **matched DID** is specified as follows:

$$Y_{it} = \alpha + \beta T_{it} t + \delta T_{it} + \gamma t + \boldsymbol{X}'_{i,t}\pi + \alpha_j + \varepsilon_{it}$$

05

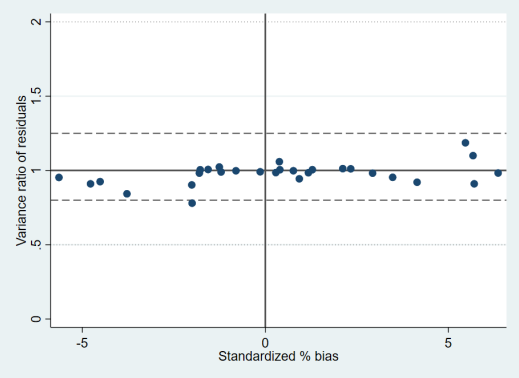
To analyse the transition behaviour in the labour market of social assistance beneficiaries and non-beneficiaries, estimation using **multinomial logit** is specified as follows:

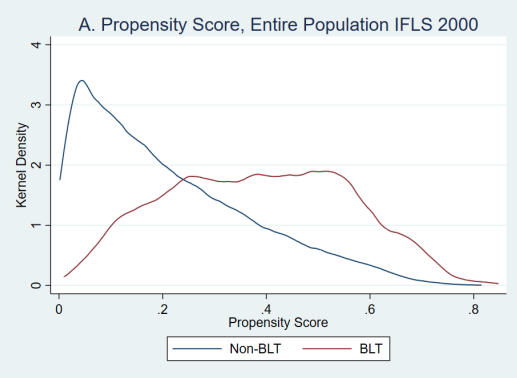
$$Y_{it} = \alpha + \beta T_{it} + \boldsymbol{X}'_{i,t}\pi + \alpha_j + \delta_t + \varepsilon_{it}$$

Y_{it} is the categorical dependent variable – categorised based on its initial labour market condition – indicating the transition behaviour in the labour market.

Propensity Score Matching

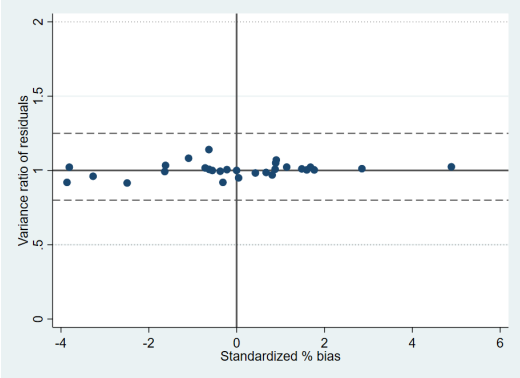
Dataset 1: 2000-2007 for BLT I (2005)

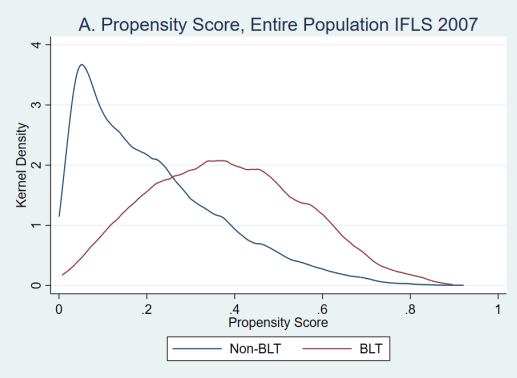




Propensity Score Matching

Dataset 2: 2007-2014 for BLT II (2008) & BLSM (2013)





Test for Parallel Trend Assumption

	BLT 2005			BLT 2008	
	Employment	Job Formality		Employment	Job Formality
d_y02	0.000805	0.0174	d_y05	0.00773	0.0174
	(0.00993)	(0.0207)		(0.0116)	(0.0209)
d_y03	-0.00153	0.0175	d_y06	-0.00457	0.0161
	(0.00993)	(0.0207)		(0.0116)	(0.0209)
d_y04	0.00109	0.0105	d_y07	-0.00185	0.00759
	(0.00993)	(0.0207)		(0.0116)	(0.0209)
d_y05	0.00408	0.0174	d_y08	-0.0200*	-0.0227
	(0.00993)	(0.0207)		(0.0116)	(0.0209)
F (4, 45542)	0.15	1.11	F (4, 49089)	1.19	0.93
Prob > F	0.9634	0.3503	Prob > F	0.3134	0.4427

The findings signify that the current treatment (i.e., BLT 2005 and BLT 2008) **does not have an effect on past outcome** (anticipatory effect). In this case, the *F* test indicates that there is not enough evidence to reject the null hypothesis of H_0: $\eta_{+1} = \eta_{+2} = \cdots = \eta_{+s} = 0$, at 5 percent significance level. Therefore, it can be inferred that the condition for **the parallel trend assumption holds**.

IMPACT OF SOCIAL ASSISTANCE ON EMPLOYMENT

Impact of UCT on Employment, DID Estimation

ATT on outcome	BLT I (2005)			BLT II (2008) & BLSM (2013)			Pooled		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LFP, =1	**-0.038*** **	**-0.013**	**-0.012**	**-0.024*** **	**-0.014**	**-0.014**	**-0.030*** **	**-0.014** **	**-0.013***
	(0.009)	(0.010)	(0.010)	(0.009)	(0.010)	(0.010)	(0.006)	(0.007)	(0.007)
Mean	0.61	0.61	0.61	0.60	0.60	0.60	0.60	0.60	0.60
Observation	48,265	43,792	43,792	57,169	43,243	43,243	105,434	87,035	87,035
Working, =1	**-0.042*** **	**-0.015**	**-0.014**	**-0.024*** **	**-0.009**	**-0.009**	**-0.032*** **	**-0.012***	**-0.011***
	(0.010)	(0.010)	(0.010)	(0.009)	(0.011)	(0.010)	(0.006)	(0.007)	(0.007)
Mean	0.59	0.59	0.59	0.58	0.58	0.58	0.59	0.59	0.59
Observation	48,265	43,792	43,792	57,169	43,243	43,243	105,434	87,035	87,035
Working hour (total), in log	**-0.034***	**-0.015**	**-0.013**	**-0.007**	**0.022**	**0.024**	**-0.020***	**0.002**	**0.004**
	(0.018)	(0.019)	(0.019)	(0.017)	(0.020)	(0.020)	(0.012)	(0.013)	(0.013)
Mean	3.67	3.67	3.67	3.64	3.64	3.64	3.65	3.65	3.65
Observation	33,663	30,672	30,672	40,358	30,708	30,708	74,021	61,380	61,380
Working hour (primary), in log	**-0.028**	**-0.012**	**-0.010**	**-0.001**	**0.020**	**0.022**	**-0.013**	**0.003**	**0.005**
	(0.018)	(0.019)	(0.019)	(0.017)	(0.020)	(0.020)	(0.012)	(0.013)	(0.013)
Mean	3.56	3.56	3.56	3.53	3.53	3.53	3.54	3.54	3.54
Observation	33,651	30,660	30,660	40,329	30,684	30,684	73,980	61,344	61,344
Working hour (secondary), in log	**-0.075**	**-0.052**	**-0.049**	**-0.045**	**0.013**	**0.013**	**-0.059**	**-0.014**	**-0.012**
	(0.068)	(0.071)	(0.071)	(0.068)	(0.076)	(0.076)	(0.046)	(0.049)	(0.049)
Mean	2.73	2.73	2.73	2.63	2.63	2.63	2.68	2.68	2.68
Observation	7,931	7,425	7,425	9,479	7,579	7,579	17,410	15,004	15,004
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Covariates	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Province FE	No	No	Yes	No	No	Yes	No	No	Yes

Note: All estimates include all control variables as explained in Section 4 and province fixed effect. Below the coefficient estimates, robust clustered standard errors at the household level are presented in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. The DID is analysed using panel data approach with fixed effects model where group is set at the individual level.

- Beneficiaries of **UCT reduced their employment (extensive margin)**, when estimated **without covariates**. On average, based on the pooled dataset, UCT reduces LFP and working status by **3 pp**, **equivalent to 5% decrease from the mean outcome**.
- However, there is **no evidence of negative impact** of receiving UCT on employment (extensive and intensive margin), when estimated with **covariates and province FE**, either using BLT I, BLT II & BLSM, or pooled datasets. [potential case of reduced power or attenuation bias due to measurement error in the covariates]
- With regard to the **effect size**, in general, the effect of BLT I on employment is **larger** than that of BLT II & BLSM.

Impact of UCT on Employment, PSM-DID Estimation

ATT on outcome	BLT I (2005)			BLT II (2008) & BLSM (2013)			Pooled		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LFP, =1	**-0.033*** **	**-0.008**	**-0.007**	**-0.028*** **	**-0.016**	**-0.015**	**-0.030*** **	**-0.012***	**-0.011**
	(0.010)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.007)	(0.007)	(0.007)
Mean	0.61	0.61	0.61	0.60	0.60	0.60	0.60	0.60	0.60
Observation	29,712	28,842	28,842	29,802	28,203	28,203	59,514	57,045	57,045
Working, =1	**-0.039*** **	**-0.012**	**-0.011**	**-0.028** **	**-0.011**	**-0.011**	**-0.033*** **	**-0.012**	**-0.011**
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.007)	(0.007)	(0.007)
Mean	0.59	0.59	0.59	0.58	0.58	0.58	0.59	0.59	0.59
Observation	29,712	28,842	28,842	29,802	28,203	28,203	59,514	57,045	57,045
Working hour (total), in log	**-0.032**	**-0.008**	**-0.007**	**-0.01**	**0.019**	**0.021**	**-0.021**	**0.005**	**0.006**
	(0.020)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.014)	(0.014)	(0.014)
Mean	3.67	3.67	3.67	3.64	3.64	3.64	3.65	3.65	3.65
Observation	21,753	21,148	21,148	22,223	21,053	21,053	43,976	42,201	42,201
Working hour (primary), in log	**-0.03**	**-0.007**	**-0.005**	**-0.013**	**0.013**	**0.014**	**-0.021**	**0.002**	**0.004**
	(0.020)	(0.021)	(0.021)	(0.021)	(0.022)	(0.022)	(0.014)	(0.014)	(0.014)
Mean	3.56	3.56	3.56	3.53	3.53	3.53	3.54	3.54	3.54
Observation	21,745	21,140	21,140	22,210	21,040	21,040	43,955	42,180	42,180
Working hour (secondary), in log	**-0.04**	**-0.036**	**-0.033**	**0.006**	**0.04**	**0.04**	**-0.017**	**0.011**	**0.012**
	(0.076)	(0.077)	(0.077)	(0.078)	(0.081)	(0.081)	(0.052)	(0.053)	(0.053)
Mean	2.73	2.73	2.73	2.63	2.63	2.63	2.68	2.68	2.68
Observation	5,559	5,464	5,464	5,761	5,558	5,558	11,320	11,022	11,022
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Covariates	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Province FE	No	No	Yes	No	No	Yes	No	No	Yes

Note: All estimates include all control variables as explained in Section 4 and province fixed effect. Below the coefficient estimates, robust clustered standard errors at the household level are presented in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. The DID is analysed using panel data approach with fixed effects model where group is set at the individual level.

- The results of PSM-DID estimation is similar to that of standard DID estimation, indicating **consistent results across the two approaches**.
- However, with regard to the **effect size**, in general, the coefficient of interest is **slightly larger** when using PSM-DID than when using standard DID.

IMPACT OF SOCIAL ASSISTANCE ON JOB FORMALITY

Impact of UCT on Job Formality, DID Estimation

ATT on outcome	BLT I			BLT II & BLSM			Pooled		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Formal (primary), =1	**-0.096*** **	**-0.101*** **	**-0.101*** **	**0.034*** **	**0.030*** **	**0.031*** **	**-0.026*** **	**-0.037*** **	**-0.036*** **
	(0.011)	(0.012)	(0.012)	(0.010)	(0.011)	(0.011)	(0.007)	(0.008)	(0.008)
Mean	0.40	0.40	0.40	0.39	0.39	0.39	0.39	0.39	0.39
Observation	33,747	30,746	30,746	40,617	30,889	30,889	74,364	61,635	61,635
Formal (secondary), =1	**-0.084*** **	**-0.083*** **	**-0.081** **	**-0.001**	**0.002**	**0.001**	**-0.041** **	**-0.041** **	**-0.040** **
	(0.031)	(0.032)	(0.032)	(0.024)	(0.026)	(0.026)	(0.019)	(0.020)	(0.020)
Mean	0.18	0.18	0.18	0.13	0.13	0.13	0.15	0.15	0.15
Observation	8,012	7,502	7,502	9,699	7,745	7,745	17,711	15,247	15,247
HH enterprise (primary), =1	**-0.006**	**0.008**	**0.008**	**-0.041*** **	**-0.034*** **	**-0.035*** **	**-0.025*** **	**-0.012***	**-0.013** **
	(0.010)	(0.010)	(0.010)	(0.009)	(0.010)	(0.010)	(0.006)	(0.006)	(0.006)
Mean	0.37	0.37	0.37	0.35	0.35	0.35	0.36	0.36	0.36
Observation	48,254	43,784	43,784	57,134	43,220	43,220	105,388	87,004	87,004
Casual worker (primary), =1	**0.077*** **	**0.070*** **	**0.071*** **	**0.006**	**0.005**	**0.004**	**0.039*** **	**0.038*** **	**0.038*** **
	(0.006)	(0.006)	(0.006)	(0.007)	(0.008)	(0.008)	(0.004)	(0.004)	(0.004)
Mean	0.04	0.04	0.04	0.08	0.08	0.08	0.06	0.06	0.06
Observation	48,254	43,784	43,784	57,134	43,220	43,220	105,388	87,004	87,004
Informal agriculture (primary), =1	**-0.037*** **	**-0.022** **	**-0.022** **	**0.025*** **	**0.005**	**0.005**	**-0.004**	**-0.007**	**-0.007**
	(0.010)	(0.010)	(0.010)	(0.007)	(0.009)	(0.009)	(0.005)	(0.006)	(0.006)
Mean	0.10	0.10	0.10	0.08	0.08	0.08	0.09	0.09	0.09
Observation	48,254	43,784	43,784	57,134	43,220	43,220	105,388	87,004	87,004
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Covariates	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Province FE	No	No	Yes	No	No	Yes	No	No	Yes

Note: All estimates include all control variables as explained in Section 4 and province fixed effect. Below the coefficient estimates, robust clustered standard errors at the household level are presented in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. The PSM method used is single nearest-neigbour matching with replacement. The PSM-DID is analysed using panel data approach with fixed effects model where group is set at the individual level.

- Evidence of **disincentive to work in the formal sector**: using the **pooled dataset**, beneficiaries of UCT are less likely to work in the formal sector, a reduction in job formality of **3.6 pp**, equivalent to **9% decrease from the mean outcome.**
- The results are **significant regardless the specification** (without or with covariates and province fixed effect)
- **Puzzle**: the result is negative and significant for BLT I; but positive and significant for BLT II and BLSM.
- **For BLT I**: a decrease in job formality is accompanied by **an increase in casual work**, and **a decrease in informal agriculture activities**
- **For BLT II**: an increase in job formality is accompanied by a decrease in HH enterprise employment.

Impact of UCT on Job Formality, PSM-DID Estimation

ATT on outcome	BLT I			BLT II & BLSM			Pooled		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Formal (primary), =1	**-0.098*** **	**-0.098*** **	**-0.098*** **	**0.024** **	**0.030** **	**0.029** **	**-0.037*** **	**-0.035*** **	**-0.035*** **
	(0.013)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.008)	(0.008)	(0.008)
Mean	0.40	0.40	0.40	0.39	0.39	0.39	0.39	0.39	0.39
Observation	21,806	21,198	21,198	22,325	21,150	21,150	44,131	42,348	42,348
Formal (secondary), =1	**-0.086*** **	**-0.080** **	**-0.077** **	**0.012**	**0.006**	**0.006**	**-0.038***	**-0.037***	**-0.036***
	(0.033)	(0.033)	(0.033)	(0.028)	(0.027)	(0.027)	(0.021)	(0.021)	(0.021)
Mean	0.18	0.18	0.18	0.13	0.13	0.13	0.15	0.15	0.15
Observation	5,608	5,512	5,512	5,880	5,672	5,672	11,488	11,184	11,184
HH enterprise (primary), =1	**0.001**	**0.008**	**0.008**	**-0.034*** **	**-0.037*** **	**-0.037*** **	**-0.017** **	**-0.014** **	**-0.014** **
	(0.011)	(0.011)	(0.011)	(0.010)	(0.010)	(0.010)	(0.007)	(0.007)	(0.007)
Mean	0.37	0.37	0.37	0.35	0.35	0.35	0.36	0.36	0.36
Observation	29,709	28,839	28,839	29,792	28,195	28,195	59,501	57,034	57,034
Casual worker (primary), =1	**0.071*** **	**0.068*** **	**0.068*** **	**0.005**	**0.004**	**0.004**	**0.038*** **	**0.037*** **	**0.037*** **
	(0.006)	(0.007)	(0.007)	(0.008)	(0.008)	(0.009)	(0.005)	(0.005)	(0.005)
Mean	0.04	0.04	0.04	0.08	0.08	0.08	0.06	0.06	0.06
Observation	29,709	28,839	28,839	29,792	28,195	28,195	59,501	57,034	57,034
Informal agriculture (primary), =1	**-0.034*** **	**-0.021**	**-0.021**	**0.024*** **	**0.008**	**0.008**	**-0.005**	**-0.005**	**-0.005**
	(0.011)	(0.011)	(0.011)	(0.009)	(0.010)	(0.010)	(0.006)	(0.007)	(0.007)
Mean	0.10	0.10	0.10	0.08	0.08	0.08	0.09	0.09	0.09
Observation	29,709	28,839	28,839	29,792	28,195	28,195	59,501	57,034	57,034
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Covariates	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Province FE	No	No	Yes	No	No	Yes	No	No	Yes

Note: All estimates include all control variables as explained in Section 4 and province fixed effect. Below the coefficient estimates, robust clustered standard errors at the household level are presented in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. The PSM method used is single nearest-neigbour matching with replacement. The PSM-DID is analysed using panel data approach with fixed effects model where group is set at the individual level.

- The results of PSM-DID estimation is similar to that of standard DID estimation, indicating **consistent results across the two approaches**.
- However, with regard to the **effect size**, in general, the coefficient of interest is **slightly larger** when using PSM-DID than when using standard DID.

IMPACT OF SOCIAL ASSISTANCE ON JOB MOBILITY

Impact of BLT 2005 and 2008 on Job Mobility

Panel A. Transition from Formal Employment (FE)

Marginal Effect at the Mean

	Pooled			2004-2006			2007-2009		
	FE to FE	FE to IE	FE to UE	FE to FE	FE to IE	FE to UE	FE to FE	FE to IE	FE to UE
blt	-0.0394***	0.0119***	0.0275***	-0.0266***	0.0177***	0.00887	-0.0509***	0.00491	0.0460***
	(0.00820)	(0.00455)	(0.00713)	(0.00942)	(0.00687)	(0.00692)	(0.0128)	(0.00575)	(0.0122)
Observation	23504	23504	23504	9892	9892	9892	13612	13612	13612
Log Likelihood		-15429.9			-5940.07			-9424.33	
Wald Chi2		4067.13			1060.2			2512.75	
P>Chi2		0.0000			0.0000			0.0000	

Panel B. Transition from Informal Employment (IE)

Marginal Effect at the Mean

	Pooled			2004-2006			2007-2009		
	IE to FE	IE to IE	IE to UE	IE to FE	IE to IE	IE to UE	IE to FE	IE to IE	IE to UE
blt	0.00326	-0.00254	-0.000717	0.000591	0.000296	-0.000886	0.00598	-0.00541	-0.000576
	(0.00327)	(0.00361)	(0.00155)	(0.00452)	(0.00476)	(0.00150)	(0.00453)	(0.00552)	(0.00321)
Observation	13240	13240	13240	6782	6782	6782	6458	6458	6458
Log Likelihood		-3011.7			-1471.51			-1524.58	
Wald Chi2		527.66			317.9			205.56	
P>Chi2		0.0000			0.0000			0.0000	

Panel C. Transition from Unemployment (UE)

Marginal Effect at the Mean

	Pooled			2004-2006			2007-2009		
	UE to FE	UE to IE	UE to UE	UE to FE	UE to IE	UE to UE	UE to FE	UE to IE	UE to UE
blt	-0.0261**	0.00146	0.0247*	-0.00949	0.00461	0.00488	-0.0291**	0.000857	0.0282*
	(0.0127)	(0.00687)	(0.0138)	(0.0250)	(0.0165)	(0.0244)	(0.0138)	(0.00725)	(0.0148)
Observation	8473	8473	8473	2646	2646	2646	5827	5827	5827
Log Likelihood		-6384.84			-2554.64			-3788.72	
Wald Chi2		1377.24			317.02			393.58	
P>Chi2		0.0000			0.0000			0.0000	

Note: The dependent variable is a categorical variable of employment transition. Other control variables included in the estimation are age, gender, education, marital status, location of residence, household income, as well as year fixed effect. Below the coefficient estimates, robust clustered standard errors are presented in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

In **Panel A**, among the formally employed individuals, beneficiaries are less likely to stay in their initial status of formal employment and more likely to move into informal employment and unemployment.

In **Panel B**, among the informally employed, beneficiaries of social assistance tend to stay in their informal employment since the insignificant results suggest no movement across employment statuses.

In **Panel C**, among the previously unemployed individuals, cash transfer beneficiaries are less likely to move into formal employment. This negative movement to formal employment is more significant after the Great Financial Crisis.

Discussion

01

Evidence showing that an unconditional cash transfer could produce **negative influence on employment and job formality**.

- **Consistent with the expected outcome** derived from the economic theory.
- **Nevertheless, the effect of UCT programs on employment are relatively small** – within a range of 2 to 4 pp, equivalent to 3 to 7% decrease from the mean outcome. This may be due to the moderate amount of cash transfer received that is just enough to temporarily compensate the increase in prices.
- However, when **job formality** is examined as the labour outcome variable, the effect is ambiguous. Using the pooled dataset, the effect between 2 to 4 pp, equivalent to 5 to 10% decrease from the mean outcome. The effect is larger than that of on employment, indicating that informality may provide better perspective to analyse the effect of social assistance in developing countries than unemployment per se.

02

Beneficiaries are less likely to stay in their original status of formal work and are more likely to **shift into informal work and unemployment**, as estimated using a multinomial logit method.

- The findings indicate that **disincentives to work, particularly formal work,** may be the primary mechanism through which social assistance influences labour market behaviours.

THANK YOU

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