UNDERSTANDING LABOR MARKET FRICTIONS IN DEVELOPING COUNTRIES

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Based on joint work with Livia Alfonsi, Oriana Bandiera, Robin Burgess, Vittorio Bassi, Elena Spadini, Munshi Sulaiman, Ottavia Anna Veroux, Anna Vitali ***+ many others***

Motivation

- 420 million young people in Africa today
  - 140 million are unemployed; 130 million are underemployed [AfDB 2018]
- efficient allocation of human capital is critical for:
  - individual well-being
  - economy-wide process of economic development
- various frictions in labor markets create barriers to:
  - productive efficiency (employment)
  - allocative efficiency (worker-firm sorting)

Labor Market Frictions

- skills mismatch: entrants lack skills demanded by firms
  - race between education and technology [Goldin and Katz 2009]
- credit constraints:
  - firms lack resources to train workers
  - workers unable to invest in HK post labor market entry
- information:
  - firms lack information to screen workers (certification)
  - workers misattribution of signals during job search

A 10-Year Study Project

- a two-sided labor market experiment to study these frictions
  - workers: young entrants into the labor market
  - firms: SMEs in eight sectors [manufacturing, services]
- study context: Uganda
  - majority of popn aged below 25, youth represent 60% of the unemployed
  - youth unemployment and underemployment are key policy challenges
  - upon labor market entry, youth rely on casual jobs
  - slow transition up the job ladder towards regular work

Project 1: Training [Alfonsi et al. 2020]

- RCT to measure causal impacts **on workers** of training:
  - vocationally training workers before they enter the labor market [**VT**]
  - incentivising firms to hire and train workers on-the-job [**FT**]
- compare and contrast demand vs. supply-side training provision

Workers and Firms in the Study

- panel of 1714 workers tracked from baseline over three follow-ups
  - targeted to poorest/disadvantaged youth
- panel of 1500 SMEs from across 15 urban labor markets throughout Uganda
  - $L \in [1, 15]$, $\bar{L} = 3$, operating in eight sectors:
  - welding, motor mechanics, construction,..,hairdressing
- [Table 1: C-group Worker Labor Market Outcomes]
- [Table 2: Mincerian Returns to Vocational Training]

Table 1: Baseline Balance on Worker Labor Market Outcomes

Means, robust standard errors from OLS regressions in parentheses

	Number of workers	Currently working	Has worked in the last month	Has done any wage employment in the last month	Any self employment in the last month	Has done any casual work in the last month	Total earnings in the last month [USD]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
T1: Control	451	**.381**	.401	.120	.038	.296	**5.11**
		(.049)	(.048)	(.025)	(.015)	(.047)	**(1.27)**

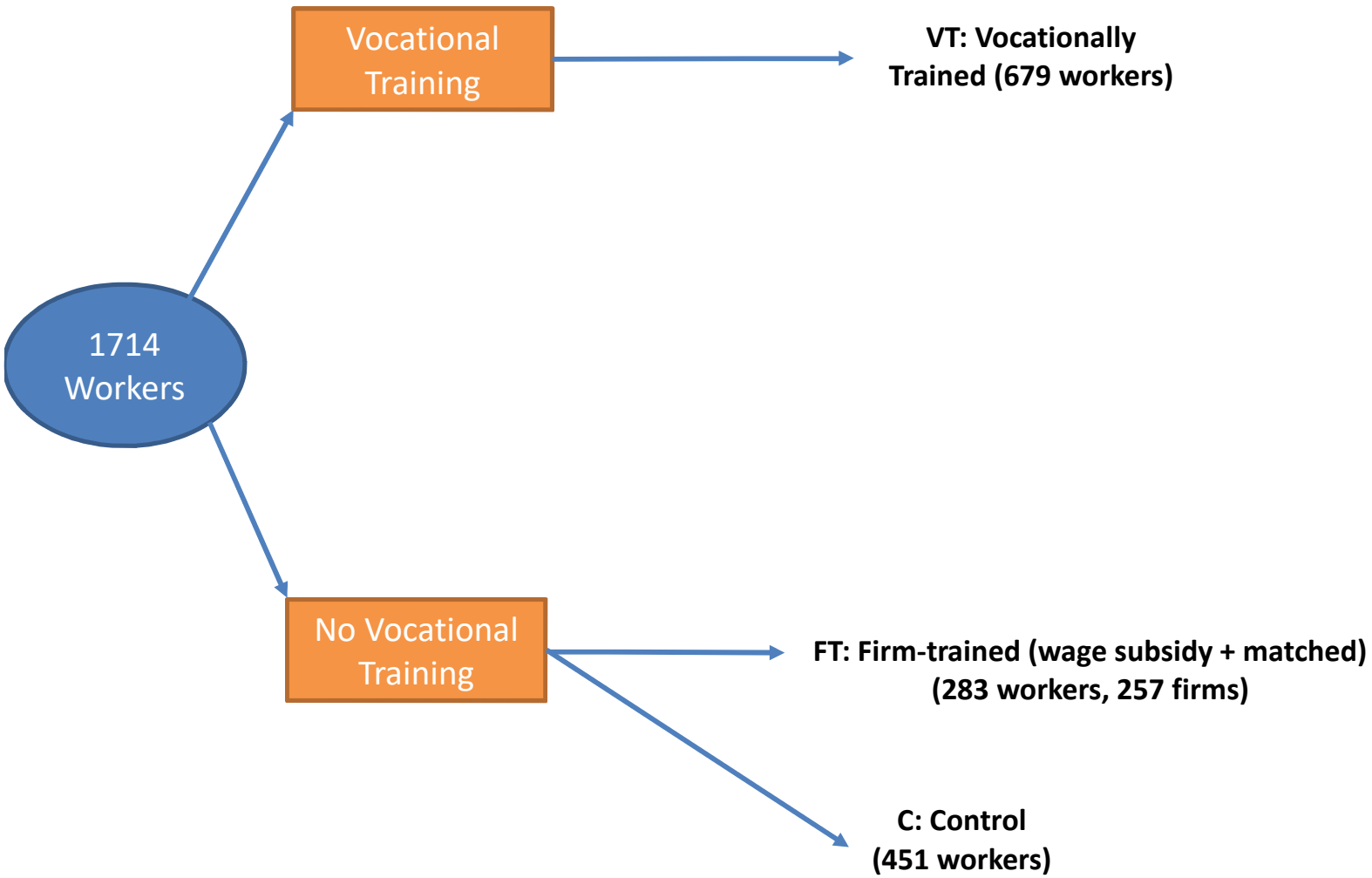
Table 2: Mincerian Returns to Vocational Training, by Sector

			Worker is skilled: self-reported VTI attendance	
	Share of firms in sector	% workers skilled in sector	Coefficient and SE from worker wage regressions [USD]	Coefficient and SE from worker log(wage) regressions [USD]
	(1)	(2)	(3)	(4)
All Sectors		**31.0%**	**26.2**	**.515**
			(3.15)	(.045)
Manufacturing				
Welding	14.57%	24.9%	34.5	.381
			(6.40)	(.084)
Services				
Hairdressing	39.64%	29.2%	22.9	.444
			(5.97)	(.069)

2.Design

[Figure 1: Experimental Design]

Figure 1: Experimental Design



Vocational Training in VTIs [VT]

- 6 months sector-specific training
- we covered total cost $470 per trainee
  - VTI ($400) + worker's out-of-pocket costs ($70)

Firm Training [FT]

- firm paid 120K UGX/month = \$50 (for 6 months) to hire an untrained worker
- inflexible wage subsidy with designated split: \$12.5 to owner, \$38 to worker
- anchor for this split: for those reporting to be an apprentice with a wage, mean wage is \$39
- subsidy rate for unskilled workers (subsidy/average wage): 63%
  [de Mel *et al.* 2010, SR=50%]

Certification and Skills Composition

- certification:
  - VT workers can signal their skills to employers
  - value of certification [Pallais 2014, Bassi and Nansamba 2017]
  - incentives for firms to train workers depends on labor market frictions [Acemoglu and Pischke 1998, 1999]
  - UJ and JJ transitions
- VT workers more likely to be poached than FT $\longrightarrow$ tilts to balance towards latter having relatively more firm specific skills
  - skills, wages, productivity, UJ and JJ transitions

Timing of Treatments

- workers are observationally equivalent at point of application to VTI
- selection into FT also depends on firm's willingness to accept trainee
  - no such **supply-side selection** for vocational training
  - present ITT and ATE estimates

3.Treatment Effects on Skills, Employment

[Table 4: ATE Skills]

[Table 5: ATE Employment, Earnings, Sectoral Allocation]

Table 4: ATE Estimates, Training and Skills

2SLS regression coefficients, bootstrapped standard errors in parentheses

Bootstrap p-values in braces: unadjusted p-values (left) and Romano and Wolf [2016] adjusted p-values (right)

	ing Trained by Firı	Sector-Specific Skills		Skills Transferability
Treatment effects on:	**Received On the Job Training**	**Any Skills (0/1)**	**Test Score (0-100)**	
Measured at:	**First Job**	**Two-Three Years after Training**	**Two-Three Years after Training**	**Three Years after Training, Conditional on Employment**
	(1)	**(3)**	**(4)**	**(5)**
Firm Trained	**.570**	**.422**	9.67	-.072
	(.179)	**(.100)**	(5.29)	(.341)
	{.001 ; .022}	{.001 ; .011}	{.087 ; .292}	{.831 ; .841}
Vocationally Trained	-.048	**.407**	10.3	**.253**
	(.056)	**(.032)**	(1.70)	**(.104)**
	{.426 ; .815}	{.001 ; .001}	{.001 ; .002}	{.049 ; .136}
Mean (SD) Outcome in Control Group	.402	.596	30.1 (22.9)	-
P-values on tests of equality:				
Firm Trained = Vocationally Trained	[.000]	[.863]	[.902]	[.264]
N. of observations	789	1,818	1,818	650

Table 5: ATE Estimates, Labor Market Outcomes

2SLS regression coefficients, bootstrapped standard errors in parentheses
Bootstrap p-values in braces: unadjusted p-values (left) and Romano and Wolf [2016] adjusted p-values (right)

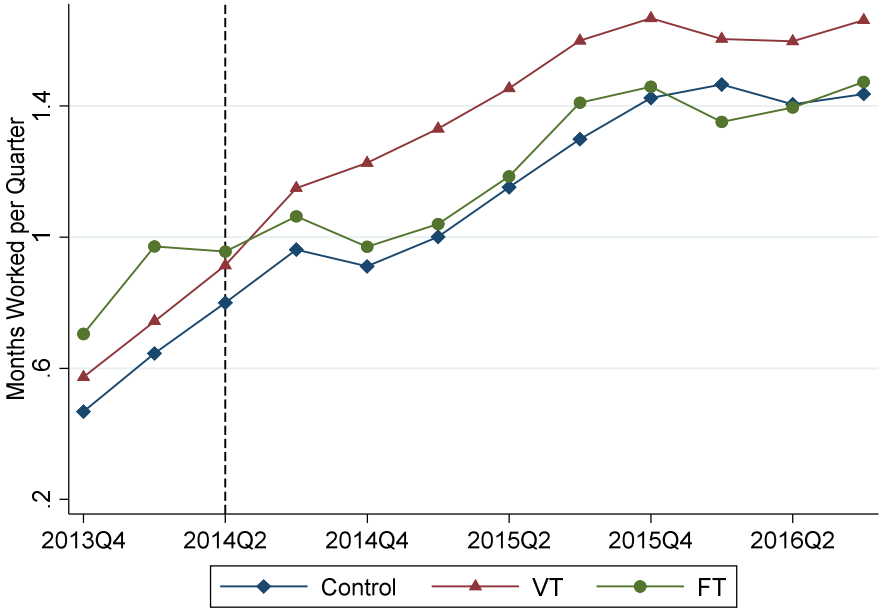
	Any paid work in the last month	Total earnings in the last month [USD]	Labor market index
	(1)	(4)	(5)
Firm Trained	.246	11.9	.473
	(.085)	(8.08)	(.176)
	{.004 ; .023}	{.145 ; .241}	{.009 ; .009}
Vocationally Trained	.135	10.3	.272
	(.028)	(2.65)	(.059)
	{.001 ; .001}	{.001 ; .001}	{.001 ; .001}
Mean Outcome in Control Group	.438	24.7	.003
Control for Baseline Value	Yes	Yes	Yes
P-values on tests of equality:			
Firm Trained = Vocationally Trained	[.141]	[.830]	[.202]
N. of observations	3,256	3,115	3,256

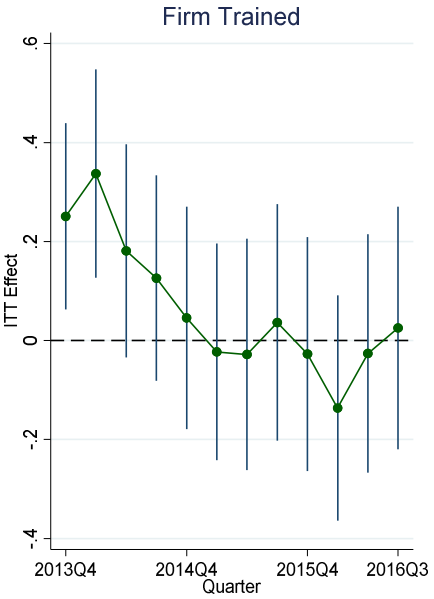
Frictions

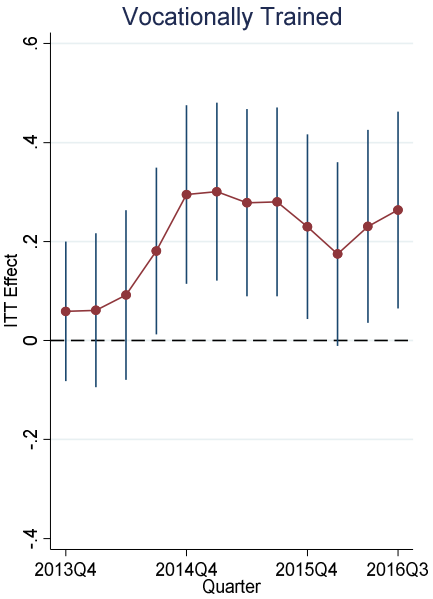
- with such high returns from VT/FT, why do workers not self-invest in HK?
- credit constraints likely bind in this sample
  - total cost: $470 per trainee
- credit constraints on firms prevent them paying up front hiring/screening costs of employing youth
  - only induced to do so with wage subsidy
- [Figure 2: Dynamics]

Figure 2: Dynamics of Employment

Panel A: Number of Months Worked per Quarter







4.Job Ladder Model of Worker Search

Value Functions

- value function for an unemployed worker is:

$$V^n(t) = -\varphi(c) + \beta \left[\begin{array}{c} \lambda_0(c,t) \max\left\{ \int V(w,t) dF(w|t), V^n(t) \right\} \\ +(1-\lambda_0(c,t)) V^n(t) \end{array} \right]$$

- value function for an employed worker with wage w is:

$$V(w,t) = w - \varphi(c) + \beta \left[\begin{array}{c} \delta V^n(t) + \lambda_1(c,t) \max\left\{ \int V(w,t) dF(w|t), V(w,t) \right\} \\ +(1-\delta-\lambda_1(c,t) V(w,t) \end{array} \right]$$

- [Table 6: Model Estimates]

Table 6: Baseline Estimates of the Job Ladder Search Model

		Compliers	
	Control	Firm Trained	Vocationally Trained
Panel A: Parameter Estimates (Monthly)	**(1)**	**(4)**	**(5)**
Job destruction rate, δ	.027	.023	.023
	(.003)	(.007)	(.004)
Arrival rate of job offers if UNEMPLOYED, λ_0	.019	**.020**	**.028**
	(.002)	**(.005)**	**(.003)**
Arrival rate of job offers if EMPLOYED, λ_1	.038	**.032**	**.039**
	(.010)	**(.022)**	**(.013)**
Panel B: Unemployment (% impacts)			
Unemployment rate		**-9.9%**	**-23%**
Unemployment duration (months)		**-5.2%**	**-32%**
Employment duration (months)		**20%**	**17%**
Panel C: Earnings (% impacts)			
Impact on annual earnings [USD]		**31%**	**55%**

5.Discussion

[IRR, External Validity]

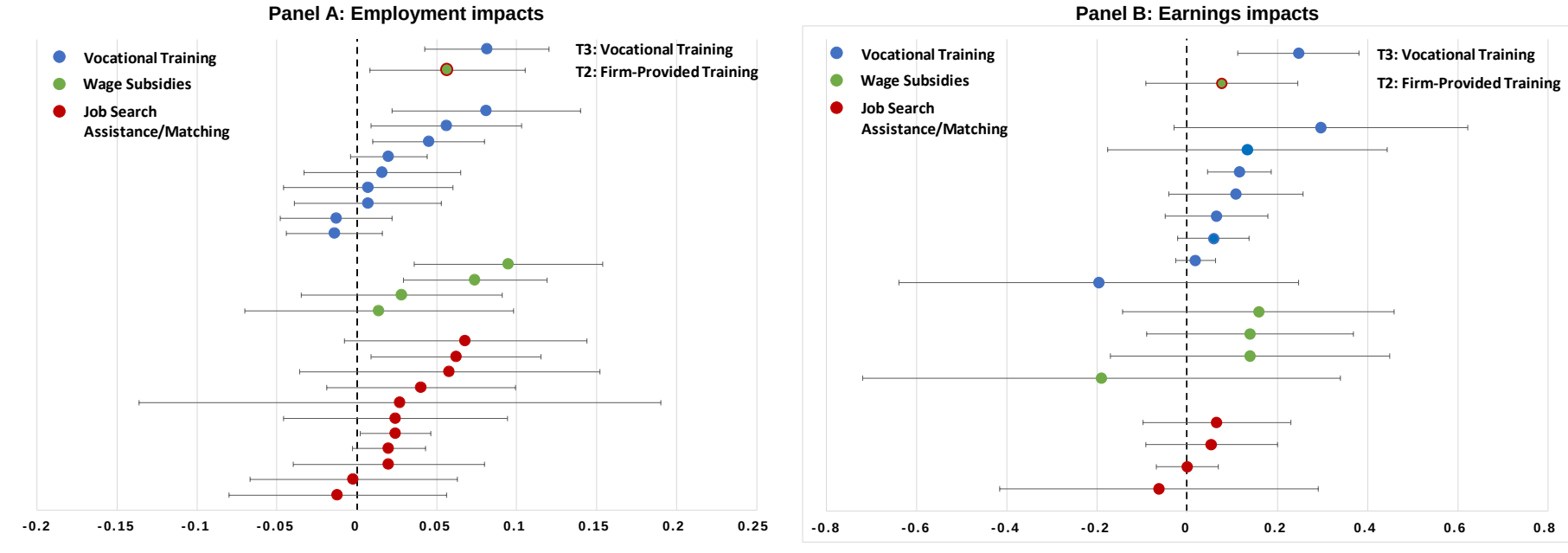
IRR

- VT cost: \$470 per trainee split as VTI (\$400) + out-of-pocket costs (\$70)
- FT cost: \$50.3 x 6 months = \$302 per trainee
- SS earnings impact 3 times larger for vocational training: \$107 versus \$37
- opportunity costs: foregone earnings while being trained
- [Table 7: IRR]
- [Figure 3: McKenzie 2017 Meta-analysis]

Table 7: Internal Rate of Return

	All Workers		Compliers	
	Firm Trained	Vocationally Trained	Firm Trained	Vocationally Trained
	(1)	(2)	(3)	(4)
Social discount rate = 5%				
Remaining expected productive life of beneficiaries	15 years	15 years	15 years	15 years
Panel A. External parameters				
Total cost per individual at year 0 [USD]:	**368**	**510**	**368**	**510**
(i) Training costs (for 6 months)	302	470	302	470
(ii) Program overheads costs	31	4	31	4
(iii) Foregone earnings (for 6 months) - average at baseline	36	36	36	36
Panel B. Estimated total earnings benefits				
1 NPV change in steady state earnings (from model estimates)	222	1246	990	1753
2 Benefits/cost ratio	**.604**	**2.44**	**2.69**	**3.44**
3 Internal Rate of Return (IRR)	**-.017**	**.224**	**.250**	**.327**
Panel D. Program Costs for IRR to equate social discount rate				
5 Total cost per individual at year 0 [USD]	**-**	**1246**	**990**	**1753**

Figure 3: Comparison of Treatment Impacts to Meta-analysis of McKenzie [2017]



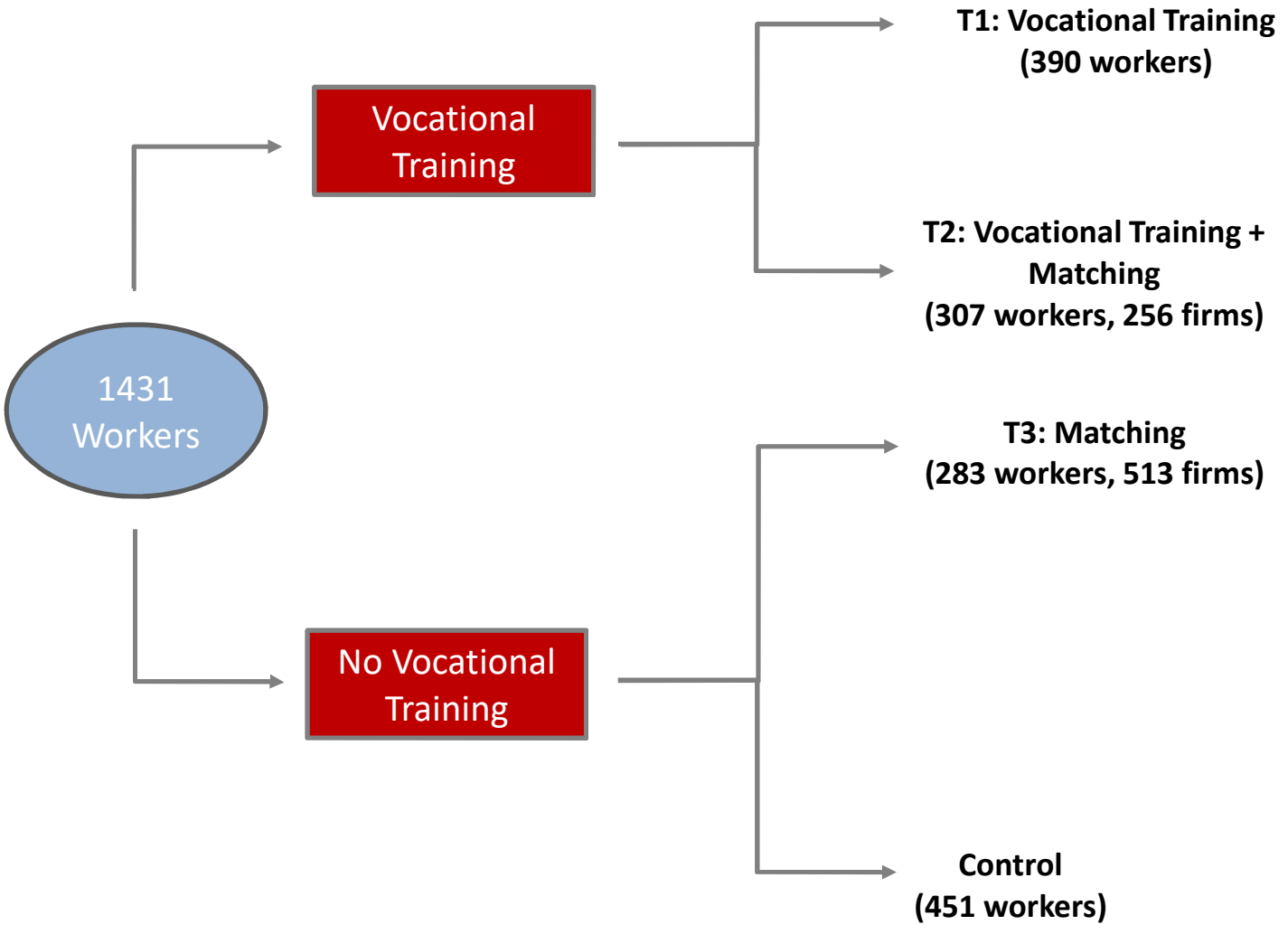
External Validity

- we have documented large impacts of training relative to studies in middle- and high-income countries: **why?**
  - sectoral focus: reduced mismatch
  - worker selection into evaluation sample, low attrition
  - treatment intensity
  - VTI quality (interacting with information frictions of workers)

Project 2: Job Search [Bandiera et al. 2022]

- how do workers search for 'good' jobs in urban labor markets?
- understand the job search process through the randomized provision of two standard labor market interventions:
  - offer of vocational training
  - offer of vocational training + offer of matching workers to firms
  - match offers only

Figure 4: Experimental Design



Match Offers

- *offer* to match workers to firms [scripted]
- matches offered to those with/without earlier offer of vocational training
- near 100% take-up by workers
- firms: profitable, established SMEs in high-wage sectors
  [manufacturing, service sectors]
- each firm matched to two workers
  - either both skilled or both unskilled
- each worker matched to one or two firms
- start-to-finish of match offer process: two weeks
- controls: walk-ins, informal contacts, 4-8 job applications per year

7.Expectations

[Figures 5A, 5B: Baseline Expectations Among Controls]

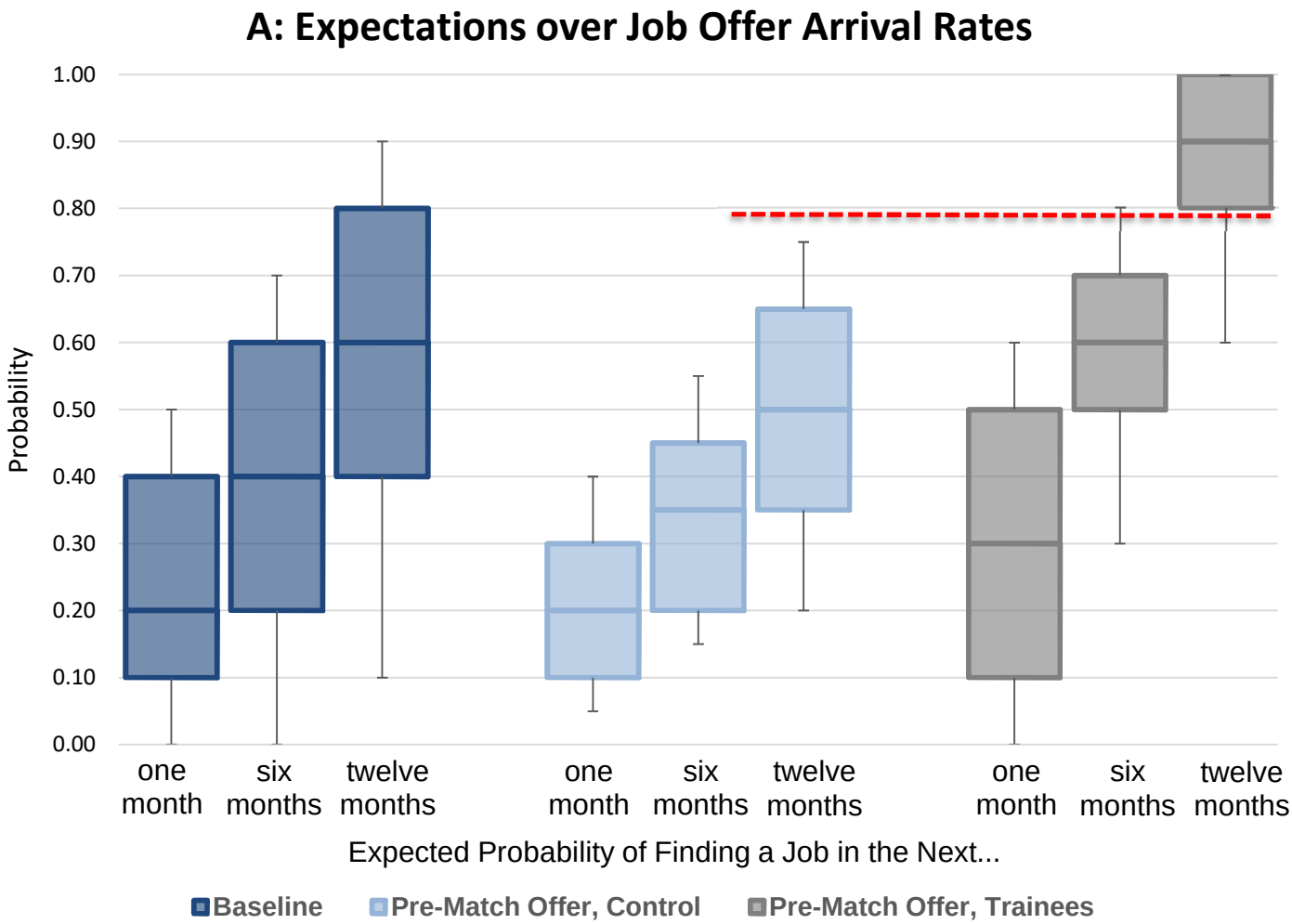
[Figure 6B: Evolution of Expectations]

Figure 5: Expectations Among Controls

10th, 25th, 50th, 75th and 90th percentiles

Figure 6: The Evolution of Expectations Until Match Offers are Announced

10th, 25th, 50th, 75th and 90th percentiles



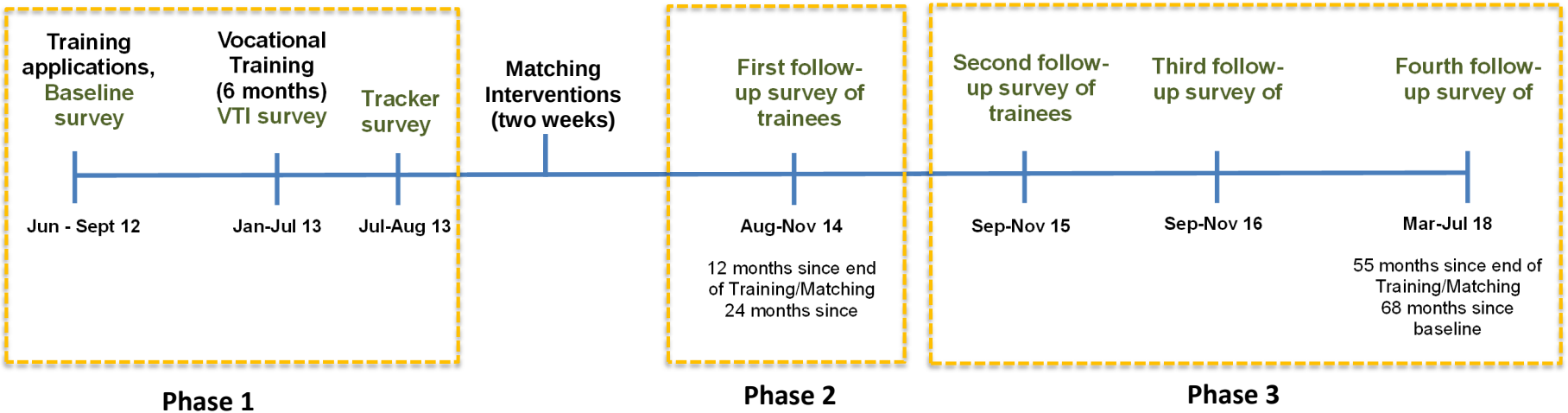
Match Offers and Call Backs

- on eve of match offers: increasingly realistic controls vs euphoric trainees
- key outcome for worker from match offers: **call back**
- **expected** versus **actual** call back rates:
  - skilled: 30% vs 13%
  - unskilled: median = 15% vs 19%
- why are call back rates so low?
  - lack of vacancies/firm characteristics
  - **not** due to worker chars (almost by design)

Response to (Lack of) Call Backs

- null: workers perfectly informed $\longrightarrow$ no reason to update based on few draws from a large pool of firms ($\simeq 40$)
- alternative: workers imperfectly informed $\longrightarrow$ misattribute lack of call back as informative of their job prospects
  - biased beliefs to begin with
  - match offer is salient to youth: no market substitutes
- for those offered VT: 30% vs 13% $\longrightarrow$ bad news on average
- for those randomized out of VT: 15% vs 19% $\longrightarrow$ confirmation
- treatment arms: exuberant vs discouraged vs confirmation
- [Figure 7: Timeline]

Figure 7: Timeline of Worker Surveys and Interventions



8.Results

[Table 8: Expectations]

[Table 9: Expectations Over Labor Market Conditions]

Table 8: Expectations Over Own Job Prospects

OLS regression coefficients, robust standard errors in parentheses

Randomization inference and Romano-Wolf adjusted p-values in braces

	Job Offer Arrival Rate	Expected Earnings Conditional on Employment [USD]		
	Exp. prob of finding a job in the next year (0 to 10 scale)	Minimum	Maximum	Mean
	(1)	(2)	(3)	(4)
Vocational Training	1.84***	17.7***	31.8***	25.4***
	(.205)	(3.06)	(4.85)	(4.37)
	{.000, .001}	*{.000, .001}*	*{.000, .001}*	*{.000, .001}*
Vocational Training + Matching	1.45***	12.0***	23.6***	17.9***
	(.217)	(3.28)	(5.37)	(4.67)
	{.000, .001}	*{.000, .002}*	*{.000, .001}*	*{.000, .001}*
Matching	.242	3.21	6.04	3.47
	(.216)	(3.05)	(4.97)	(4.44)
	{.261, .286}	*{.327, .297}*	*{.222, .236}*	*{.414, .449}*
P-value: VT = VT + Matching	***[.082]***	***[.095]***	*[.129]*	*[.105]*
Mean in Control Group	4.19	42.9	72.5	57.8
N. of observations	1,171	952	946	801

Table 9: Expectations Over Labor Market Conditions

OLS regression coefficients, robust standard errors in parentheses
Randomization inference and Romano-Wolf adjusted p-values in braces

	Lack of firms is a serious problem	Job opportunities not being advertised is a serious problem	Difficulty to show possession practical skills is a serious problem	Difficulty to show possession of soft skills is a serious problem	Market beliefs index
	(1)	(2)	(3)	(4)	(5)
Vocational Training	-.045	.014	-.016	-.038	-.048
	(.037)	(.036)	(.037)	(.036)	(.046)
	{.201, .398}	*{.698, .886}*	*{.690, .883}*	*{.297, .496}*	*{.305, .603}*
Vocational Training + Matching	-.058	.027	-.039	-.031	-.054
	(.041)	(.040)	(.040)	(.040)	(.052)
	{.141, .398}	*{.500, .850}*	*{.313, .665}*	*{.430, .496}*	*{.301, .603}*
Match Offer	-.026	.017	-.004	-.054	-.039
	(.041)	(.041)	(.041)	(.040)	(.053)
	{.505, .539}	*{.673, .886}*	*{.918, .926}*	*{.181, .414}*	*{.441, .603}*
P-value: VT = VT + Matching	*[.749]*	*[.752]*	*[.569]*	*[.873]*	*[.907]*
Mean in Control Group	.581	.592	.441	.438	.028
N. of observations	1,227	1,228	1,229	1,228	1,231

Underpinning Changes in Search Behavior

- from Δexpectations $\rightarrow$ Δsearch behavior
- can link directly rather than infer one from the other
  [Mueller and Spinnewijn 2021]
- two dimensions of search behavior:
  - search intensity
  - desired sorting/directed search
- [Table 10: Search Intensity]
- [Table 11: Desired Sorting/Directed Search]

Table 10: Search Intensity

OLS regression coefficients, robust standard errors in parentheses
Randomization inference and Romano-Wolf adjusted p-values in braces

	Has actively looked for a job in the last year	Has attempted to migrate to find a job	Main channel through which looked for a job is by walking into firms and asking for a job
	(1)	(3)	(5)
Vocational Training	.175***	.084**	.088***
	(.036)	(.033)	(.028)
	{.000, .001}	*{.012, .026}*	*{.003, .010}*
Vocational Training + Matching	.097**	.060*	.056*
	(.040)	(.036)	(.030)
	{.021, .030}	*{.101, .167}*	*{.072, .121}*
Matching	-.036	-.036	-.004
	(.041)	(.033)	(.028)
	{.385, .372}	*{.270, .251}*	*{.899, .889}*
P-value: VT = VT + Matching	***[.053]***	*[.523]*	*[.338]*
Mean in Control Group	.490	.217	.139
N. of observations	1,231	1,231	1,231

Skills and search intensity are complements on extensive margin

Weaker complementarity for those additionally offered matching

Table 11: Desired Sorting and Directed Search

OLS regression coefficients, robust standard errors in parentheses
Randomization inference and Romano-Wolf adjusted p-values in braces

	Wages Important (1)	Ideal Firm Searched For (2)	Ideal Job Searched For (3)
Vocational Training	**.110*** **	**.103*** **	-.054
	(.036)	**(.036)**	(.040)
	{.000, .005}	*{.004, .013}*	*{.169, .313}*
Vocational Training + Matching	.030	.030	-.022
	(.039)	(.039)	(.041)
	{.412, .424}	*{.454, .480}*	*{.605, .593}*
Matching	-.048	.042	-.064
	(.037)	(.039)	(.042)
	{.231, .347}	*{.311, .480}*	*{.139, .303}*
P-value: VT = VT + Matching	*[.050]*	*[.102]*	*[.465]*
Mean in Control Group	.338	-.046	.020
N. of observations	1,213	1,215	1,231

DESIRED SORTING: Driven by VT workers searching over larger more formal firms

Does Any of This Matter for Long Run Labor Market Outcomes?

- null: in frictionless labor markets, initial conditions will not matter
- certified skills increase job mobility (JJ, UJ transitions)
  [Project 1: Alfonsi et al. 2020]
- [Table 12: First Job]
- [Table 13: Employment and Earnings]
- [Table 14: Realized Sorting]

Table 12: First Jobs

OLS regression coefficients, robust standard errors in parentheses
Randomization inference and Romano-Wolf adjusted p-values in braces

	Months between intervention and first job	First job in one of eight good sectors	Formal contract in first job	Monthly earnings in first job
	(1)	(2)	(3)	(4)
Vocational Training	-1.74***	.227***	**.059***	**8.32****
	(.605)	(.039)	**(.034)**	**(3.88)**
	{.004, .016}	*{.000, .001}*	***{.089, .193}***	***{.036, .089}***
Vocational Training + Matching	-1.61**	.222***	-.020	-4.88
	(.696)	(.044)	(.033)	(3.99)
	{.022, .045}	*{.000, .001}*	*{.543, .553}*	*{.224, .350}*
Matching	-.719	.013	-.030	-3.40
	(.702)	(.043)	(.034)	(3.80)
	{.306, .312}	*{.759, .797}*	*{.376, .553}*	*{.374, .358}*
P-value: VT = VT + Matching	*[.847]*	*[.917]*	***[.022]***	***[.001]***
Mean in Control Group	13.6	.313	.118	60.2
N. of observations	1,037	1,051	722	974

Table 13: Employment and Earnings

OLS regression coefficients, robust standard errors in parentheses
Randomization inference and Romano-Wolf adjusted p-values in braces

	Has done any work in the last month	Has done any casual work in the last month	Has done any regular work in the last month	Earnings in the last month [USD]
	(1)	(2)	(3)	(6)
Vocational Training	.094***	.000	**.113*** **	**11.0*** **
	(.021)	(.015)	**(.022)**	**(2.52)**
	{.000, .001}	*{.993, .992}*	*{.000, .001}*	*{.000, .001}*
Vocational Training + Matching	.063***	.005	**.066*** **	**6.11** **
	(.023)	(.017)	**(.024)**	**(2.89)**
	{.011, .010}	*{.758, .983}*	*{.009, .013}*	*{.024, .074}*
Matching	.051**	-.003	.054**	3.27
	(.022)	(.017)	(.023)	(2.71)
	{.024, .019}	*{.826, .983}*	*{.018, .015}*	*{.225, .224}*
P-value: VT = VT + Matching	*[.152]*	*[.765]*	*[.043]*	*[.099]*
Mean in Control Group	.623	.169	.524	43.3
N. of observations	3,703	3,699	3,700	3,125

Those offered vocational training + matching make a slower progression from casual work into regular jobs

Table 14: Realized Sorting

OLS regression coefficients, robust standard errors in parentheses
Randomization inference and Romano-Wolf adjusted p-values in braces

	Realized Firm	Realized Job	Length of last employment spell (months)
	(1)	(2)	(3)
Vocational Training	.003	.096***	1.24***
	(.028)	(.029)	(.234)
	{.916, .910}	*{.000, .002}*	*{.000, .001}*
Vocational Training + Matching	-.058*	.042	.619**
	(.031)	(.032)	(.258)
	{.069, .106}	*{.202, .349}*	*{.020, .029}*
Matching	-.067**	-.013	.452*
	(.031)	(.030)	(.248)
	{.021, .079}	*{.683, .672}*	*{.054, .063}*
P-value: VT = VT + Matching	***[.035]***	***[.077]***	***[.015]***
Mean in Control Group	.045	-.025	5.63
N. of observations	2,504	2,429	3,693

Differential sorting into firms and jobs based on initial expectations

Summary

- initial conditions matter
- skills and expectations at labor market entry have persistent impacts on workers outcomes six years later
  - friction: misattribution of news as a form of scarring
- skilled workers move up the job ladder relative to equally skilled workers with match offers:
  - speedier transition from casual to regular work/wage employment
  - better jobs in better firms
- [Table 15: Labor Market Success]

Table 15: Labor Market Success

OLS regression coefficients, robust standard errors in parentheses
Randomization inference and Romano-Wolf adjusted p-values in braces

	Labor Outcomes Index
	(5)
Vocational Training	**.115*** **
	(.018)
	{.000, .001}
Vocational Training + Matching	**.051*** **
	(.020)
	{.014, .021}
Matching	.020
	(.018)
	{.288, .273}
P-value: VT = VT + Matching	*[.001]*
Mean in Control Group	-.042
N. of observations	3,725

Matching undoes around half the impact of vocational training

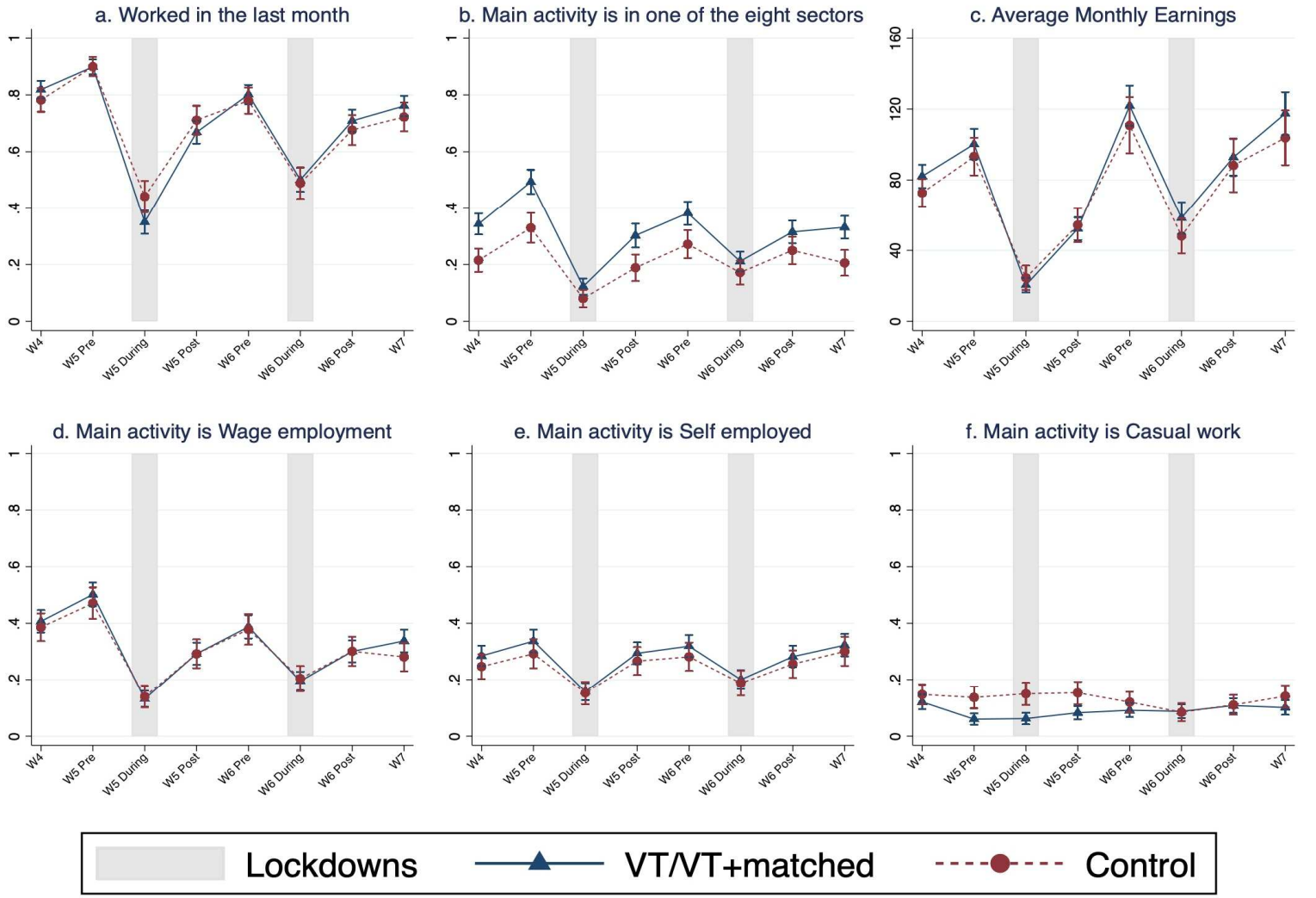
Implications for Job Assistance Policies: Debiasing Beliefs

- labor market entrants have biased beliefs
- increasingly realistic controls vs euphoric trainees
- should policy makers try to debias beliefs via matching workers to firms?
- theory of the second best: danger of misattribution
  - backfires for skilled workers
  - opposite for low skilled workers: info $\succ$ credit

Project 3: COVID-19 [Alfonsi et al. 2022]

- continued to track workers over the course of the pandemic
- do skills enable workers to become resilient to such aggregate shocks?
- [Figure 10: Skills and Labor Market Outcomes through the Covid-19 Pandemic]
- [Table 16: Cumulative Impacts the Covid-19 Pandemic]

Figure 10: Labor Market Outcomes Over the Pandemic



Skilled workers impacted relatively more during lockdowns, but more speedy bounce back

No role for casual employment as buffer to the shock

Table 16: Cumulative Labor Market Outcomes Over the Pandemic-period

OLS regression coefficients, robust standard errors in parentheses

	Has done any work in the last month	Main activity in last month is work in any of the eight sectors	Earnings in last month (USD) TOTAL	Earnings in last month (USD) WAGE/SELF EMPLOYMENT
	(1)	(2)	(3)	(4)
Vocationally Trained	-.152	1.171***	110.997*	120.256*
	(.270)	(.325)	(63.203)	(63.780)
Mean in Control Group	8.685	2.726	895.988	747.674
Imputed effects over 24 months				
Constant imputation	-.210	2.235***	223.765*	234.495*
	(.523)	(.645)	(122.420)	(124.282)
Mean in Control Group	16.701	5.269	1687.065	1408.287
Implied Treatment Effect (%)		***42%***	***13.2%***	***16.6%***
N. of observations	708	607	662	662

Potential Mechanisms

- less impacted by firm closures
- reallocation across firms/sectors (skills certification)
- labor market attachment (search capital)
- savings/wealth

10.Conclusion

Labor Market Frictions

- various frictions in labor markets:
  - skills mismatch, credit, information, psychology
- future projects: firm side of the labor market
  - response to treatments [Project 4]
  - survival and behavior over the pandemic [Project 5]
- anticipated (and unanticipated) returns to engaging in a long run study project!

THANK YOU!

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