

# Tracing Informal Recruitment Relationships through a Panel Survey of Migrants

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# Motivation

- ▶ Labour migration is an important component of the Sri Lankan economy.
- ▶ Recruitment involves formal recruitment agents & informal Sub-Agents (SA).
- ▶ Involvement of SA's are common in South Asian Countries - i.e. Bangladesh, India, Nepal, & Pakistan.
- ▶ These countries are grappling to regulate SA's
  - ▶ India : SA's are illegal/ banned
  - ▶ Nepal : SA's are licensed through formal agents.
  - ▶ B'desh: regulation to recruit from a national database or news paper ads. to circumvent SA's.
  - ▶ Sri Lanka: trying introduce yet another new scheme of regulations

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# Objectives

- ▶ Long term objective :
  - ▶ Recommend evidence based policies to regulate SA's.
- ▶ Immediate Objectives :
  - ▶ Understand the interaction between SAs & migrants
  - ▶ Understand the evolution of migrants' perception about SA's over the recruitment process.
  - ▶ Understand how this perception influences various migration outcomes.

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# Theoretical Background

## ► Search Theory.

- A worker's optimal strategy is to reject offers  $<$  Reservation Wage (RW), and accept offers  $>$  RW (McCall, 1970).
- More variation in wage offers, leads to a longer wait in hope of receiving an exceptionally high wage offer.
- job-search research has failed to examine how job seekers behaviors change during the course of their search over time (Barber et al., 1994).

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# Theoretical Background

- ▶ Manpower placement agencies.
  - ▶ Manpower placement agencies assemble offers of and demand for employment and makes job search more effective.
  - ▶ The existence of agencies is justified if, in their absence individual decisions result in an insufficient allocation of resources devoted to job searching.
- ▶ Job search networks.
  - ▶ Workers connected to workers with earning high wages draw from a better wage offer distribution, than workers connected to workers earning low wages (Schmutte, 2015).
  - ▶ There are wage differentials between jobs found through informal and formal methods (Pellizzari, 2010).

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# Research Questions

- ▶ What is the causal impact of migrants' ;
  - ▶ perception about SA on negotiated recruitment incentives/wages?
  - ▶ maturity in recruitment process on negotiating recruitment incentives/wages?
  - ▶ maturity in recruitment process on migrants' perception of SA's?

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# What's innovative ?

- ▶ SA's are a hidden population. Instead of SA , get opinion of migrants.
- ▶ Complicated and costly to follow migrants across two countries.
- ▶ Innovative approach :
  - ▶ capitalize on the recruitment framework in SL, where family involvement is mandatory in pre-departure stage.
  - ▶ survey of households instead of individuals - capturing information from potential migrants & spouse/parents of current migrants.
  - ▶ two waves of rolling samples of current and potential migrant households spaced out by 6 months
    - ▶ – includes a panel component
    - ▶ – includes a cross sectional component
  - ▶ structures migrants as cohorts of potential and current migrants

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# Research Design

## Scope

- ▶ Female Domestic Workers (FDWs)
- ▶ Destination GCC countries
- ▶ Those who used a SA for recruitment
- ▶ Current migrant/potential migrant

## Sampling

- ▶ 3 purposively selected districts
- ▶ For each district used administrative data on migration preparation and departures to randomly select HHs

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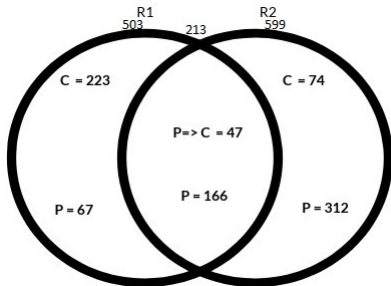
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# Available Data Structures



Round 1		Round 2	
Potential	67	Potential	166
	47		312
	166		
	280		478
Current	223	Current	74
			47
	223		121
Panel	213	Panel	213
Pooled			1107

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# About data

Variable	%	Variable	%
Country of employment		Education of migrant	
Bahrain	2.08	No education	1.17
Kuwait	49.50	Grade 1-5	14
Oman	13.64	Grade 6-10	80.22
Qatar	5.42	Grade 11-13	4.61
Saudi Arabia	15.63		
UAE	13.73	Migrant is employed in Sri Lanka	
		No	76.06
Marital status of migrant		Yes	23.94
Divorced	2.71		
Married	84.01	First time migrating for foreign employment	
Never married	7.86	No	65.49
Separated	3.43	Yes	34.51
Widowed	1.99		
Age (mean)	38.14		
Age (SE)	7.33		
Wage (mean)	45457.64		
Wage (SE)	10140.82		
Incentives (mean)	161603.50		
Incentives (SE)	79480.57		

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# About data

Variable	%	Variable	%	Variable	%
Gender of SA		Decide the amount of incentives		SA showed official ID	
Female	28.91	Licensed Agent/Don't know	70.73	No	35.95
Male	71.09	SA	29.27	Yes	48.87
				Don't know	15.18
Age of SA		Involving SA is compulsory		Incentives in absence of SA	
30-39 yrs	17.89	No	46.79	Higher amount	21.5
40-49 yrs	58.63	Yes	27.01	Lower amount	26.74
50-59 yrs	23.49	Don't know	26.2	Same amount	51.76
Incentives		Official rep. of Licensed Agents		Monthly salary in absence of SA	
Promised by Licensed Agent	44.08	No	13.46	Higher amount	11.11
Promised by SA	33.79	Yes	52.03	Lower amount	26.38
None of above	3.97	Don't know	34.5	Same amount	62.51
SKIP	18.16	SA officially recognized			
Power in the recruitment process		No	10.93		
Licensed Agent/Don't know	67.12	Yes	41.37		
SA	32.88	Don't know	47.70		

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# Methodology

► Panel data: Fixed Effect Methodology

► Repeated XS Data: Propensity Score Matching Methodology

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# Methodology

- ▶ Panel data: Fixed Effect Methodology
  - ▶ Controls for unobserved heterogeneity by subtracting them out - previous period acts as a control for an individual.
  - ▶ Assumptions
    - ▶ A1. Unobserved heterogeneity is constant over time (=Time Invariant)
    - ▶ A2. Unobserved heterogeneity is additive
    - ▶ A3. Unobserved heterogeneity (individual specific effect) is correlated with the independent variables
- ▶ Repeated XS Data: Propensity Score Matching Methodology

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# Methodology

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  - ▶ Controls for unobserved heterogeneity by subtracting them out - previous period acts as a control for an individual.
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    - ▶ A1. Unobserved heterogeneity is constant over time (=Time Invariant)
    - ▶ A2. Unobserved heterogeneity is additive
    - ▶ A3. Unobserved heterogeneity (individual specific effect) is correlated with the independent variables
- ▶ Repeated XS Data: Propensity Score Matching Methodology
  - ▶ Match cases across T & C groups
  - ▶ Key assumption: participation is independent of outcomes conditional on  $X_i$

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# Variables

- ▶ Dependent variables
  - ▶ amount of incentives /salary (continuous)
  - ▶ higher/same or lower incentives negotiated without a SA (binary)
  - ▶ higher/same or lower wages negotiated without a SA (binary)
- ▶ Control variables
  - ▶ demographic characteristics of migrants
  - ▶ demographic characteristics of SA
  - ▶ other recruitment related variables
- ▶ Variables of interest :
  - ▶ indicators on migrants perception about SAs (formal/informal status; power ).
  - ▶ indicator on migration status
  - ▶ indicator on maturity in migration process

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# FE models

Table: Causal effect of migrant's perception of SA on incentives

Perception indicator	Y = Amount of Incentives					
	(1)	(2)	(3)	(4)	(5)	(6)
SA official representative	-16864.2 (12116.4)					
SA officially recognized		-20558.3* (11826.2)				
SA has more power -in recruitment			-15605.1 (11906.8)			
SA decides incentives -for migrant				-8762.2 (13351.4)		
SA compulsory					-7870.0 (13467.7)	
SA showed ID						-25248.2** (11096.6)
Sigma u	67769	69262	70000	70119	69575	70133
Sigma e	66297	66050	66347	66644	66665	65568
Rho (fraction of variance due to u i)	0.5110	0.5237	0.5268	0.5254	0.5214	0.5336
N	370	370	370	370	370	370
Hausman test statistic (FE vs RE)	22.3	23.68	24.1	22.65	22.8	25.2
P-value	0.1736	0.1284	0.1169	0.161	0.1558	0.0903

Standard errors in parentheses \* $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$

Estimated on full panel, demographics of migrants, demographics of SA, other recruitment related variables, and for current/potential status.

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# Robustness Check

Table: Causal effect of migrant's perception of SA on incentives

Perception indicator	Y = Incentives promised					
	(1)	(2)	(3)	(4)	(5)	(6)
SA official representative	-73750.3** (26544.8)					
SA officially recognized		-66205.8** (29247.2)				
SA has more power -in recruitment			-7151.0 (23644.7)			
SA decides incentives -for migrant				-19713.0 (29549.8)		
SA compulsory					-30617.9 (31916.4)	
SA showed ID						-40012.7 (23501.8)
Sigma u	93548	112696	106728	111431	109498	105199
Sigma e	58105	60638	66672	66188	65553	63097
Rho (fraction of variance due to u i)	0.7216	0.7755	0.7193	0.7392	0.7362	0.7354
N	242	242	242	242	242	242
Hausman test statistic (FE vs RE)	15.960	14.850	1.220	5.340	6.930	10.620
P-value	0.3157	0.3886	1	0.9805	0.9374	0.7155

Standard errors in parentheses \* $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$

Estimated on panel of potential migs, demographics of migrants, demographics of SA, and other recruitment related variables.

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# FE models

Table: Causal effect of migrant's perception of SA on wages

Perception indicator	Y = monthly wage					
	(1)	(2)	(3)	(4)	(5)	(6)
SA official representative	800.6 (1514.8)					
SA officially recognized		-750.6 (1495.8)				
SA has more power in recruitment			-1026.0 (1495.8)			
SA decides incentives for migrant				-88.25 (1639.3)		
SA compulsory					-3611.0** (1573.8)	
SA showed ID						-3841.8*** (1368.9)
Sigma u	9413	9316	9389	9368	9298	9338
Sigma e	9514	9515	9509	9521	9392	9330
Rho (fraction of variance due to u i)	0.4947	0.4895	0.4936	0.4919	0.4950	0.5004
N	418	418	418	418	418	418
Hausman test statistic (FE vs RE)	33.09	34.23	33.96	33.57	32	35.69
P-value	0.011	0.0078	0.0085	0.0095	0.015	0.005

Standard errors in parentheses \* $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$

Estimated on full panel, demographics of migrants, demographics of SA, other recruitment related variables, & for current/potential status.

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# Robustness Check

Table: Causal effect of migrant's perception of SA on wages

Perception indicator	Y = monthly wage					
	(1)	(2)	(3)	(4)	(5)	(6)
SA official rep	574.3 (2363.1)					
SA officially recognized		-3067.0 (2916.7)				
SA has more power in recruitment			800.3 (1888.3)			
SA decides incentives for migrants				2978.2 (1985.4)		
SA compulsory					-6692.7** (2778.6)	
SA showed ID						-2898.7 (1911.5)
Sigma u	15661	15968	15900	16278	16366	15841
Sigma e	6527	6423	6514	6314	6011	6310
Rho (fraction of variance due to u i)	0.8520	0.8607	0.8563	0.8692	0.8812	0.8631
N	257	257	257	257	257	257
Hausman test statistic (FE vs RE)	24.41	29.94	23.99	31.31	43.38	31.77
P-value	0.0409	0.0078	0.046	0.005	0.0001	0.0043

Standard errors in parentheses \* $p < 0.10$  \*\* $p < 0.05$  \*\*\* $p < 0.01$

Estimated on panel of potential migs, demographics of migrants, demographics of SA, and other recruitment related variables.

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# PSM models

Table: Causal effect of maturity in recruitment process on various continuous outcomes

	Monthly wage		Incentive	
	(ATE)	(TOT)	(ATE)	(TOT)
Mature	3178.2* (1929.6)	5487.9*** (1350.0)	-7183.8 (9238.9)	-15113.1 (11807.4)
N	418	418	370	370

Standard errors in parentheses \* $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$   
neighbor(1) matching of wave1/wave2 on demographics of migrants,  
demographics of SA, & other recruitment related variables.

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# PSM models

Table: Causal effect of maturity in recruitment process on probability of perceiving :

	(1) SA official rep. ATE	(2) TOT	(3) SA officially recognized ATE	(4) TOT	(5) SA more power in recruit. ATE	(6) TOT	(7) SA decides incentives ATE	(8) TOT
Mature	0.0450 (0.0923)	0.0284 (0.0667)	-0.0900 (0.0871)	0.0142 (0.0691)	-0.564*** (0.0508)	-0.517*** (0.0754)	-0.417*** (0.0508)	-0.365*** (0.0738)
N	422	422	422	422	422	422	422	422
	(9) SA compulsory ATE	(10) TOT	(11) SA showed ID ATE	(12) TOT	(13) > incentives without SA ATE	(14) TOT	(15) > salary without SA ATE	(16) TOT
Mature	-0.166*** (0.0550)	-0.194*** (0.0736)	0.107 (0.0859)	0.209*** (0.0666)	-0.141*** (0.0476)	-0.0474 (0.0639)	-0.116*** (0.0285)	-0.0806* (0.0438)
N	422	422	422	422	422	422	422	422

Standard errors in parentheses \* $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$

nneighbor(1) matching of wave1/wave2 on demographics of migrants, demographics of SA, & other recruitment related variables.

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# PSM models

Table: Causal effect of migration on probability of perceiving :

	(1) SA official rep. ATE	(2) TOT	(3) SA officially recognized ATE	(4) TOT	(5) SA more power in recruit. ATE	(6) TOT	(7) SA decides incentives ATE	(8) TOT
Current mig.	-0.0703 (0.0494)	-0.0625 (0.0682)	-0.0693 (0.0533)	-0.0417 (0.0791)	-0.567*** (0.0343)	-0.560*** (0.0502)	-0.440*** (0.0437)	-0.396*** (0.0643)
N	517	517	517	517	517	517	517	517
	(9) SA compulsory ATE	(10) TOT	(11) SA showed ID ATE	(12) TOT	(13) > incentives without SA ATE	(14) TOT	(15) > salary without SA ATE	(16) TOT
Current mig.	-0.187*** (0.0496)	-0.181*** (0.0643)	0.176*** (0.0565)	0.248*** (0.0674)	-0.0709 (0.0473)	-0.0604 (0.0517)	-0.132*** (0.0238)	-0.0875*** (0.0329)
N	517	517	517	517	517	517	517	517

Standard errors in parentheses \* $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$   
neighbor(1) matching of migs/potential on demographics of migrants, demographics of SA, & other recruitment related variables.

# Summary of Findings

- ▶ Migrant's belief that SA is formal leads to lower wages / incentives.
- ▶ Maturity in the recruitment process leads to
  - ▶ higher monthly wages promised.
  - ▶ lower probability for one to perceive SA as formal.
  - ▶ lower probability of perceiving that mig could have negotiated higher wages/ incentives without a SA.
- ▶ Transition from potential to current migrants leads to
  - ▶ lower probability for perceiving SA as formal.
  - ▶ lower probability for perceiving SA is compulsory for recruitment.
  - ▶ lower probability of perceiving that mig could have negotiated higher wages/ incentives without a SA.

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# Policy Concerns

- ▶ Migrants take time in the recruitment process to distinguish formal vs informal recruitment intermediaries.
- ▶ Formalizing SA would lead to lower wages/incentives for migrants.
- ▶ Regulations for SA ought to spell out the role and capacity of SAs in the recruitment process.
- ▶ Regulations for SA have to be widely disseminated to potential migrants.
- ▶ Better information on SA to potential migrants earlier on in the recruitment process would lead to better migration outcomes.

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