Skill mismatch and migration in Egypt and Tunisia

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MOBILISING MIGRANTS SKILLS FOR DEVELOPMENT IN THE MENA REGION
Making the most of young migrants skills
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Context

- Return migration can create "brain-gain"
- Issue of skills transferability and skill match
- Increase of the MENA countries' education level
- High unemployment rates, especially for highly educated youth

Research Questions

- What skills do migrants acquire prior and during their migration?
- How are these skills used upon return?
- To what extent do skills match the job level?
- How does migration impact this match?
- What are determinants of skill match and mismatch?
- The case of Egypt and Tunisia

Brief literature

- Evidence of wage premium and skill-upgrading for return migrants in Mexico (Co et al., 2000; Barrett and O'Connell, 2001; Reinhold, 2009)
- In Egypt, return migrants are more educated than non-migrants and have higher earnings (Wahba, 2007b,a)
- Evidence of over-education in Egypt, with high returns (El-Hamidi, 2009)

Data

- ETF "Migration and skill" project 2006-2007
- Focus on Egypt and Tunisia
- Sample : around 1000 return migrants and 1000 potential migrants in each country

Comparison of potential and return migrants

	Egypt	**Tunisia**
Age	-18.90***	-14.23***
Married	-0.58***	-0.35***
Years of education	0.19	3.18***
Education level		
Did not attend school	-0.027**	-0.02***
Less than primary	-0.02**	-0.04***
Primary	-0.018*	-0.17***
Preparatory/post-primary	0.01	-0.09***
Secondary general	0.21***	0.03
Secondary vocational	-0.03	0.05***
Post-secondary	-0.04**	0.01
University	-0.09***	0.24***
Considers education improves living standards	-0.57***	-0.55***
Important to invest in education	-0.90***	-0.72***
job level		
Professional	-0.09***	-0.09***
High management	-0.040***	-0.01
Middle management	-0.07***	0.05***
Skilled worker	-0.03	0.09***
Unskilled worker	0.05***	0.15***
Out of labor force	0.18***	-0.20***
Obs	1812	2019

Potential migrants

	Egypt	Tunisia
Age	25	28
Plans to migrate	47%	63%
Has sufficient information about destination country		
Yes	76%	61%
No	24%	39%
Do you plan to attend any training		
Yes	26%	29%
No	56%	44%
Doesn't know	18%	27%
What kind of training		
Language training	12%	11%
Cultural orientation	0%	1%
Vocational training	7%	10%
University studies	4%	5%
Other	3%	0%
Not applicable	74%	72%

Return migrants

	Egypt	**Tunisia**
Pre-departure training	6.0%	19.5%
Language training	*26.7%*	*21.5%*
Cultural orientation	*5.0%*	*1.1%*
Vocational training	*50.0%*	*44.6%*
University studies	*18.3%*	*32.8%*
Has obtained a certificate for this training	4.6%	15.3%
The certificate was useful to get a job	5.2%	15.6%
The certificate was necessary to get a job	3.9%	14.5%
Aware of programmes that help people go abroad	20.4%	24.0%
Government programmes	*30.4%*	*74.6%*
Recruitment companies	*58.3%*	*5.0%*
Both of the above	*11.3%*	*20.4%*

Skill mismatch measures

- Subjective measures:
  - Information provided by the worker or the employer
- Objective measures:
  - Job analysis
  - Realized matches
- The choice is imposed by data availability

Measuring skill mismatch

$$\textbf{Skill mismatch}_i = \begin{cases} 1 \rightarrow \textbf{Undereducated} & \text{if } \textit{Education level}_i \leq \textit{Norm}_k - \sigma_k \\ 2 \rightarrow \textbf{Skill match} & \text{if } \textit{Norm}_k - \sigma_k \leq \textit{Education level}_i \leq \textit{Norm}_k + \sigma_k \\ 3 \rightarrow \textbf{Overeducated} & \text{if } \textit{Education level}_i \geq \textit{Norm}_k + \sigma_k \end{cases}$$

- Present job level
- Present education level

Skill match and mismatch incidence

	Egypt	Tunisia
Undereducation	**15.8%**	**21.6%**
Non-migrant	14.3%	17.2%
Returnee	16.9%	27.8%
Skill match	**72.8%**	**66.2%**
Non-migrant	73.4%	68.4%
Returnee	72.4%	63.1%
Overeducation	**11.4%**	**12.2%**
Non-migrant	12.5%	14.4%
Returnee	10.7%	9.2%

Odd ratios for the determinants of skill mismatch

	Whole Sample	
	Undereducation	**Overeducation**
Returnee	-0.32	0.42*
Age	-0.32***	0.54***
Age squared	-0.00**	0.00
Male	-0.67**	0.93***
Sector		
Secondary	0.06	-0.25
Tertiary	-0.06	0.07
Ref: Primary		
Experience	0.49***	-0.57***
Wants to re-migrate	-0.14	0.62***
Cohort		
Adult	-0.82**	0.57
Young	-0.54	0.58
Ref: Elderly cohort		
Assets owned indicator	0.17***	-0.08
Income indicator	0.10	0.06
Observations	2,566	2,566
Pseudo R2	0.377	0.377

Odd ratios for the determinants of skill mismatch

	Egypt		Tunisia	
	Undereducation	**Overeducation**	**Undereducation**	**Overeducation**
Returnee	-0.31	0.10	-0.39	0.62**
Age	-0.35***	0.92***	-0.43***	0.37***
Age squared	-0.00	0.00	-0.00*	-0.00
Male	-0.84**	1.49***	-0.20	0.47
Sector				
Secondary	-0.14	1.05	-0.01	-0.62
Tertiary	0.02	0.02	-0.43	0.21
Ref: Primary				
Experience	0.46***	-1.00***	0.61***	-0.40***
Wants to re-migrate	-0.05	0.54**	-0.27	0.57**
Marital status				
Engaged	-0.18	-0.53	-0.21	0.68**
Married	0.21	0.79*	0.59*	0.03
Widowed	0.18	1.92	2.23*	0.99
Divorced	0.40	2.11**	0.18	0.21
Ref: Never married				
Cohort				
Adult	-1.08**	1.05*	0.18	-0.75
Young	-0.87	1.61**	0.52	-1.11
Ref: Elderly cohort				
Assets owned indicator	0.28***	-0.27**	0.11	-0.05
Income indicator	0.12	-0.09	0.00	0.21**
Observations	1,393	1,393	1,173	1,173

Conclusion

- Better integration of return migrants for benefit maximization
- Experience abroad improves labor market outcomes
- Evidence of skill mismatch in Tunisia and Egypt
- Migration decreases the incidence of over-education