

Brain drain and Brain gain

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Discussion of F.Docquier and H. Rapoport

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Migration is a selective process

- From time immemorial, being in **good health** has been an asset for migrating, resulting in migrants having often a longer life expectancy than non-migrants.
- Now that there is a global competition for the best and brightest, having **education and skills** has become an advantage for migrating, resulting in migrants being on average more educated and skilled than non-migrants in the sending country, and sometimes also in the receiving country.

- The term brain drain was for the first time coined in post-World-War-II Great Britain to name the emigration of British scientists to the US.

EDUCATED MIGRANTS

- Even if it is frequently used to stress the migration of workers needed or even vital for the economic and social development of the country of origin either skilled or not.
- **NEEDED MIGRANTS**

- My comments will be of course distorted by the research project CARIM
- Federiquier Docquier and & has done a miracle but it is not clear to me if tertiary education means also tertiary-skilled job.
- For doctors, nurses, scientists is clear but for all the other?

Destination countries

- With the recent data-revision the countries of destination has increased:
- Different policies in the destination and different effects
- USA; Canada; Australia; UK

Point system, Large student' programs, large wage premium

-The continental EU

-The Arab Countries

Return migration

- First return migration is very frequent, especially if the destination country is not too far.
- Return migration is **selective**.
- Assimilation studies in Germany (Constance Massey), Sweden Finland (Rook Saarela) and Italy (Venturini Villosio) has shows that
- the **best return** and the worse remain.

Variables	Probit Random Effect			Weibull model		
	Coef.	Std. Err.	z	Haz. Ratio	Std. Err.	z
Years of stay in Italy	-0.797	0.0213	-37.4			
Years of stay squared	0.030	0.0013	22.9			
Growth rate of Real GDP per capita	-0.006	0.0031	-1.9	1.081	0.00979	8.6
Real Gross Domestic Product per Capita	-0.0001	0.0000	-5.3	1.000	0.00001	3.3
Age at entry	-0.044	0.0048	-9.2	1.035	0.00356	9.9
Share of irregular employment	-0.017	0.0050	-3.5	1.008	0.00497	1.7
P (shape parameter)				1.846	0.02571	
1/p				0.542	0.00755	
N. obs			36663			8439
Log likelihood			-9446.3693			-4145.0561
Chi2			6223.71			2495.00
Prob>chi2			0.0000			0.0000

Other controls include: firm size, sector, year of entry

Table 3 Fixed effect estimates of log weekly wage in nominal terms 18-45 male (robust s.e.)

	Foreign immigrants (Correction=IMR)		Foreign immigrants (Corr.=Haz.Rate)		Native immigrants		Locals	
	Coef.	t	Coef.	t	Coef.	t	Coef.	t
Log weekly wage								
_cons	4.425	17.5	4.482	18.9	4.498	34.1	4.454	114.4
Age	0.032	3.5	0.031	3.5	0.046	5.9	0.056	18.6
Age ^2	-0.00019	-3.0	-0.00013	-1.9	-0.00022	-5.1	-0.00026	-17.3
months of employment	0.0023	3.1	0.0023	3.1	0.0031	4.8	0.0020	8.1
months of employment ^2	-0.000003	-3.4	-0.000002	-2.5	-0.00001	-20.7	-0.00001	-45.2
months out of employm.	0.0009	1.3	0.0010	1.4	-0.0004	-0.7	-0.001	-2.3
Log VA	0.070	3.2	0.073	3.4	0.055	4.8	0.061	15.5
Reg. unemployment rate	0.002	0.8	0.002	0.8	-0.003	-2.3	-0.006	-20.1
Share of reg. for. employm.	0.256	0.2	0.043	0.0	-1.668	-2.9		
Share of reg. for. empl. ^2	0.016	0.0	-0.032	-0.1	0.103	1.7		
Correction for return migr.	-0.005	1.8	-0.032	-4.4				
apprentices	-0.361	-10.9	-0.362	-10.9	-0.298	-21.7	-0.281	-66.6
Blue collar	-0.081	-2.8	-0.085	-2.9	-0.104	-13.7	-0.087	-36.1
Atypicals	0.024	4.5	0.024	4.7	-0.012	-2.7	-0.020	-13.4
firm size 20_200	0.020	4.5	0.025	5.8	0.023	6.4	0.025	19.5
firm size 200_1000	0.037	4.7	0.049	6.5	0.042	8.5	0.052	27.7
firm size _over1000	0.076	6.1	0.099	8.1	0.080	14.0	0.078	35.3
N obs	27933		27933		60678		359527	
F					591.88		6031.63	
corr(u_i, Xb) =					-0.3118		-0.4073	
Prob > F =					0.0000		0.0000	
R-sq: within =					0.5296		0.6079	
between =					0.1855		0.237	
overall =					0.2599		0.3341	

Emigrants network

- The importance of expatriate networks
- Cannot be proxies by the **stock of migrants** abroad
- **Morocco**
- While skilled Moroccan emigrants go back frequently, buy properties at home and are also frequently involved in training program of natives (for instance TOKTEN program),
- **Algeria**
- Algerian skilled migrants hold very few contact with the country of origin and are not involved in training and retraining natives.

Is skilled migration really damaging the origin country?

- Longitudinal data
- Question: Are needed now or they will be needed tomorrow?
- Growth model, however, suggest that if a country invest in education, it will be able to attract foreign capital which will engender economic growth and employment, but this is not always the case many other factors are needed (flexible capital market, property rights etc).
- The supply side functions in efficient market economy (Ireland)
- These countries has poor institutions

Table. 3.3.1 Unemployment by sex, age and level of education (latest available year)

Unemployment (2007, latest available year)	Morocco			Algeria			Tunisia								
	M	F	TOT	M	F	TOT	M	F	TOT						
(by age, 000)	794,5	297,6	1092,1	1072	302,7	1374,7	334,1	174	508,1						
15-24	17,90%	15,50%	17,20%			27,40%			34,1%						
25-34	13,80%	15,80%	14,40%			17,30%			23,9%						
35-44	5,60%	6,50%	5,90%			6,10%			13,3%						
45-54	2,80%	1,50%	2,40%			3,10%			3,3%						
55-64	0,60%	0,40%	0,60%			1,50%			2,5%						
(by level of education, 000)															
None	3,00%	1,60%	2,40%						5,9%						
Primary	11,60%	14,10%	12,00%						13,5%						
Secondary	18,00%	25,60%	19,80%						15,4%						
University	17,20%	30,40%	21,80%						19,0%						
Unemployment rate	13,9%	20,9%	15,4%	12,9%	18,3%	13,8%	12,8%	17,8%	14,1%						
Unemployment (2007, latest available year)	Egypt*			Palestine			Jordan			Lebanon			TOTAL		
	M	F	TOT	M	F	TOT	M	F	TOT	M	F	TOT	M	F	TOT
(by age, 000)	861,6	1074,1	1935,8	190	38	228	142	66	208	111	35	153	3505,2	1987,4	5499,7
15-24	10,3%	27,0%	14,6%	38,8%	47,3%	40,2%	23,0%	47,8%	28,3%	20,0%	18,9%	19,7%	17,1%	26,0%	21,8%
25-34	9,6%	38,7%	17,5%	25,1%	27,2%	25,5%	8,0%	24,8%	12,0%	6,4%	9,2%	7,2%	12,3%	32,6%	17,2%
35-44	2,2%	13,1%	4,9%	21,3%	11,0%	19,5%	5,2%	11,6%	6,3%	3,7%	6,0%	4,2%	5,5%	11,5%	6,8%
45-54	0,8%	1,1%	0,9%	20,8%	6,1%	18,4%	4,4%	5,9%	4,6%	3,1%	3,3%	3,1%	3,7%	1,5%	2,9%
55-64	0,6%	0,0%	0,5%	20,3%	2,6%	16,9%	3,8%	3,5%	3,8%	3,3%	1,8%	3,1%	2,7%	0,3%	1,8%
(by level of education, 000)															
None	1,2%	0,4%	0,9%	30,4%	4,7%	23,8%	9,1%	11,0%	9,3%	5,8%	5,3%	5,2%	5,3%	1,3%	3,8%
Primary	1,7%	4,3%	2,0%	31,5%	6,0%	29,0%	11,8%	26,3%	12,6%	15,2%	8,1%	9,1%	9,5%	7,3%	8,4%
Secondary	6,6%	34,2%	13,8%	24,3%	16,6%	23,6%	8,1%	25,6%	12,4%	9,6%	9,8%	9,7%	12,8%	31,1%	15,9%
University	9,3%	24,9%	14,4%	18,5%	39,4%	27,2%	9,6%	26,1%	15,5%	11,4%	10,9%	11,1%	13,3%	26,1%	17,6%
Unemployment rate	4,7%	18,6%	8,3%	26,5%	23,5%	25,6%	12,0%	25,0%	13,8%	8,8%	10,2%	9,2%	11,7%	19,0%	12,6%

* For Egypt, the age brackets are different: 15-19, 20-29, 30-39, 40-49 and 50-59. Same for the level of education categories (see National Background Paper).

Source: National Background Papers based on national statistics. Syria has not been included for lack of data.

Brain drain brain gain is going together with brain unemployment

- Easterly and Nyarko (2008) Is the brain drain good for Africa, yes

How to attract skilled workers?

- The question should be: how to attract migrants without negatively affecting the development of origin countries?
- Not only the minimum share of human capital minimum (Docquier Rapoport) for professional is very clear but for the other not so
- share of social capital
- European commission has already 2 directives on this issue:
- Circular migration
- Blue card