



The Effect of Migration in the Sending Countries *The Human Capital*

Lesson 12 bis

lessandra Venturini

The Economics of Migration



UNIVERSITÀ
DEGLI STUDI
DI TORINO



Dipartimento di
Economia e Statistica
Cognetti de Martiis

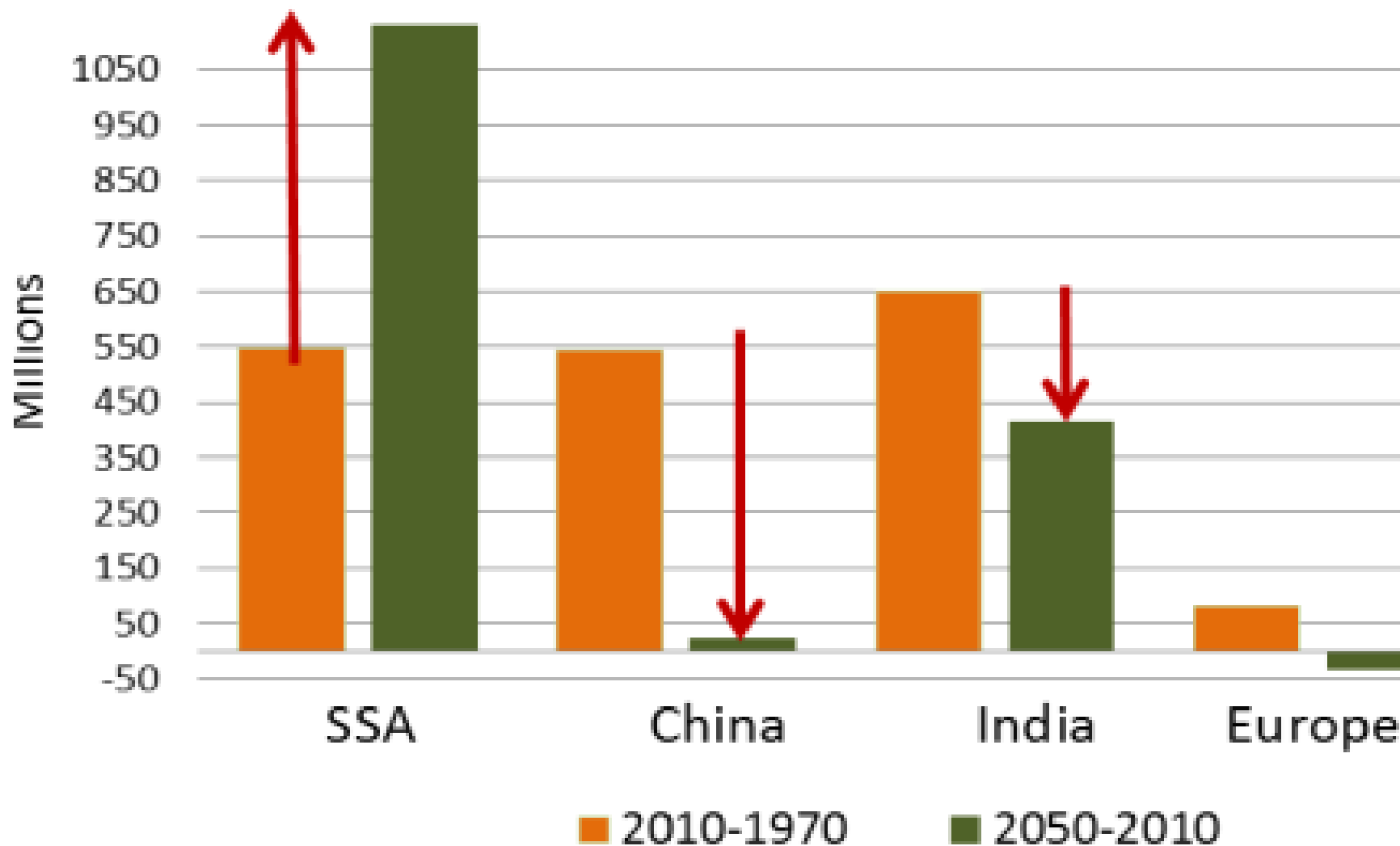


- Population is an asset for development
- Always?
- When?
- Relationship between population and resources:
 - Capital, land
 - GOVERNANCE

Migration in Europe

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The Relationship between Economic Development and Population Growth Rate for Developing Nations

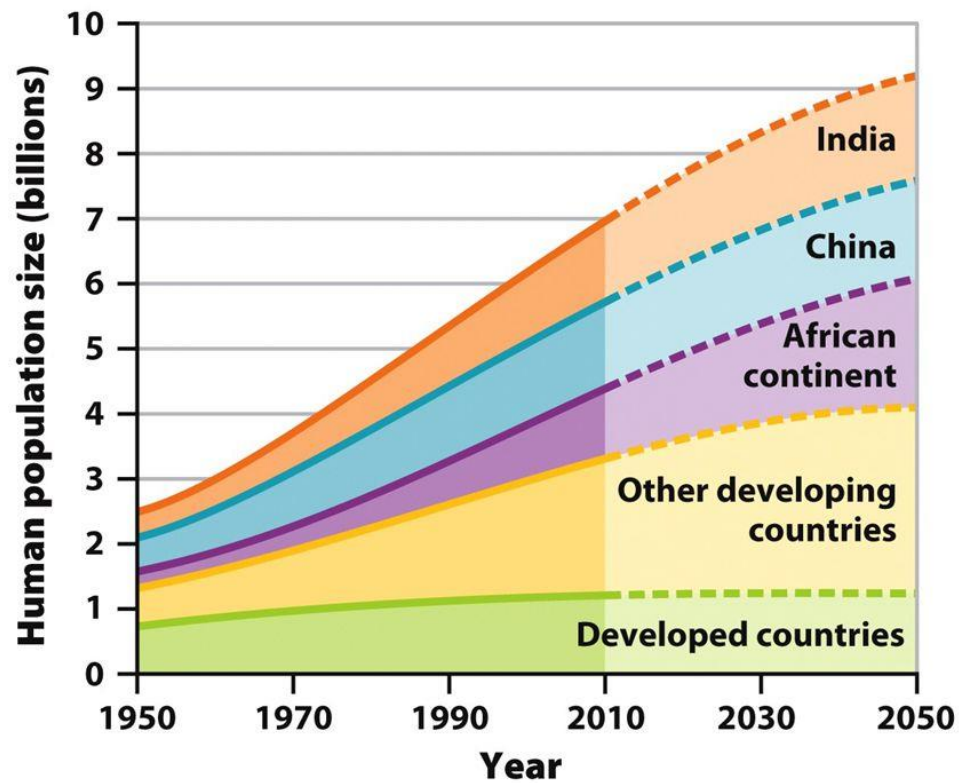
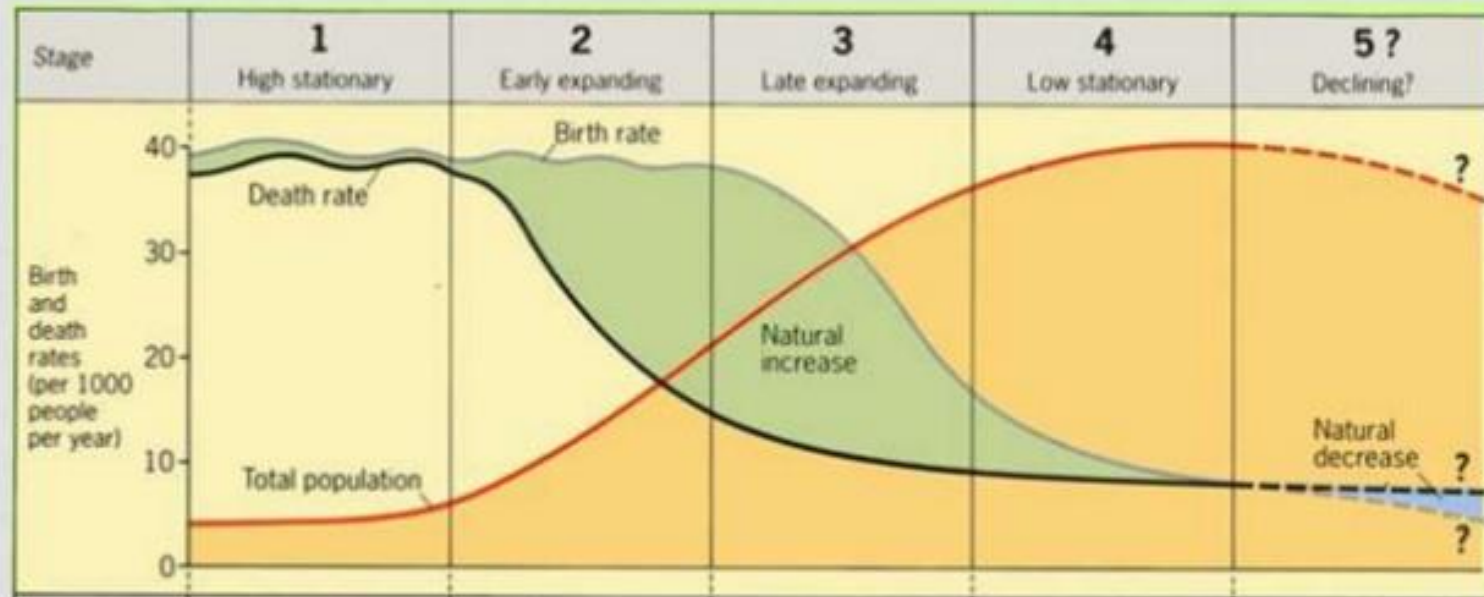


Figure 7.14
Environmental Science
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DEMOGRAPHIC TRANSITION MODEL



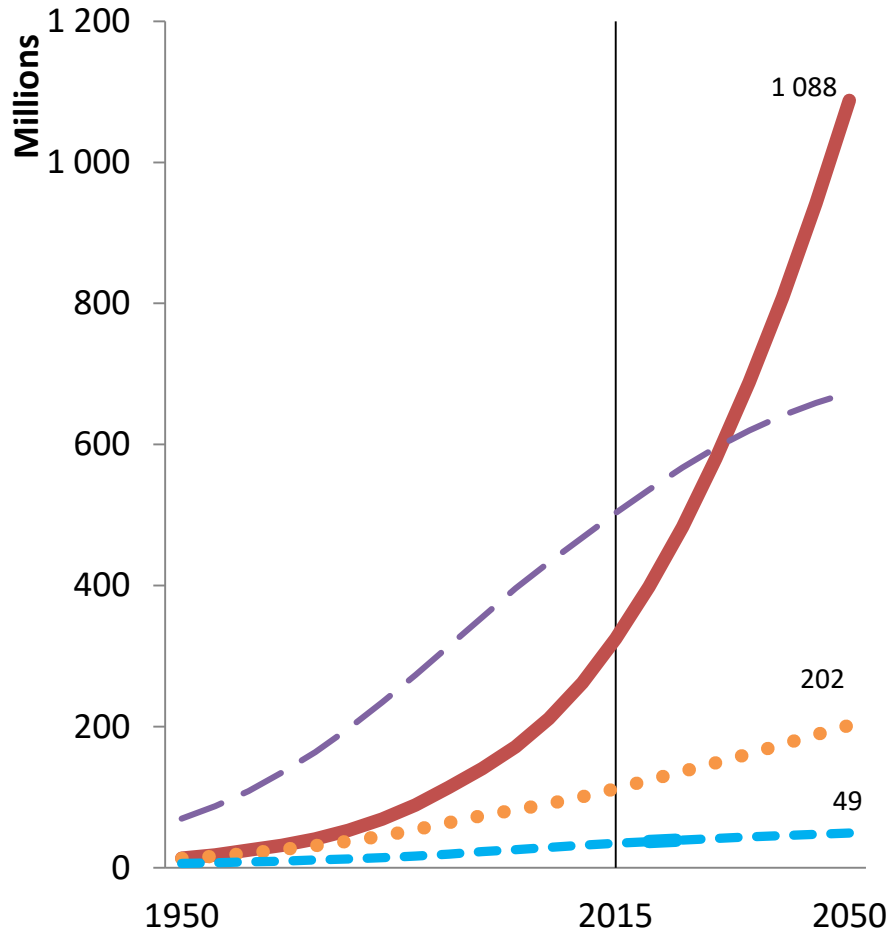
DTM shows **population change over time,**

how birth rate and death rate affect the total population of a country

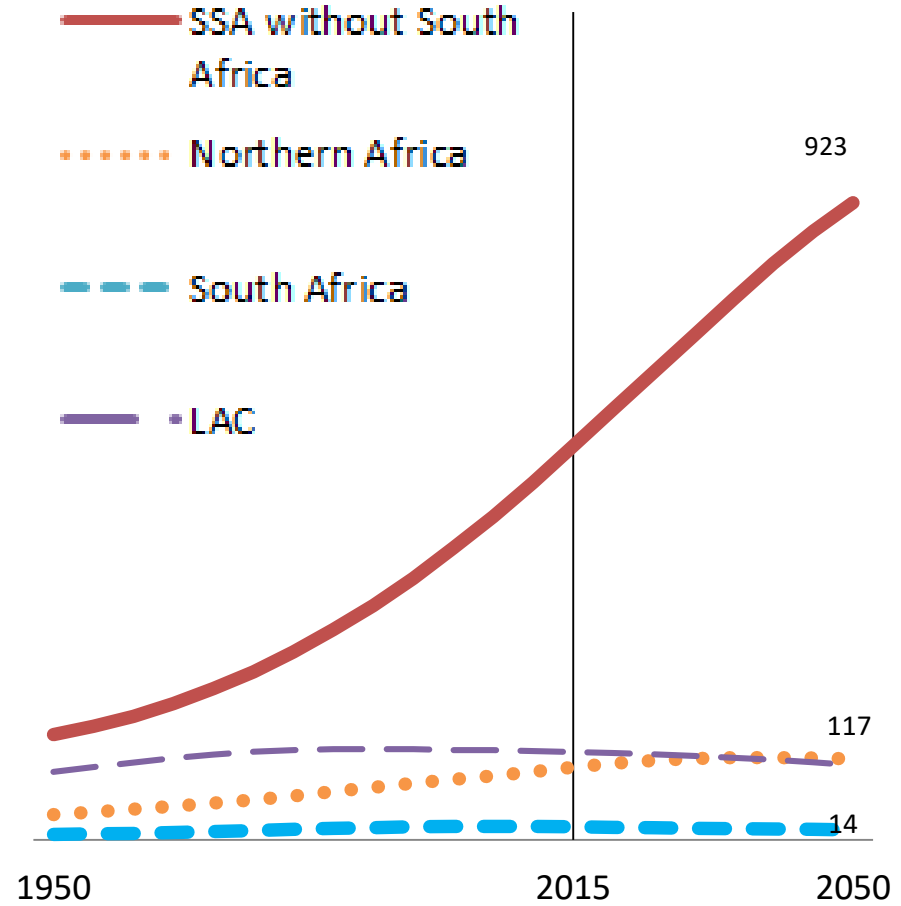


Urban and rural population growth

Total urban population



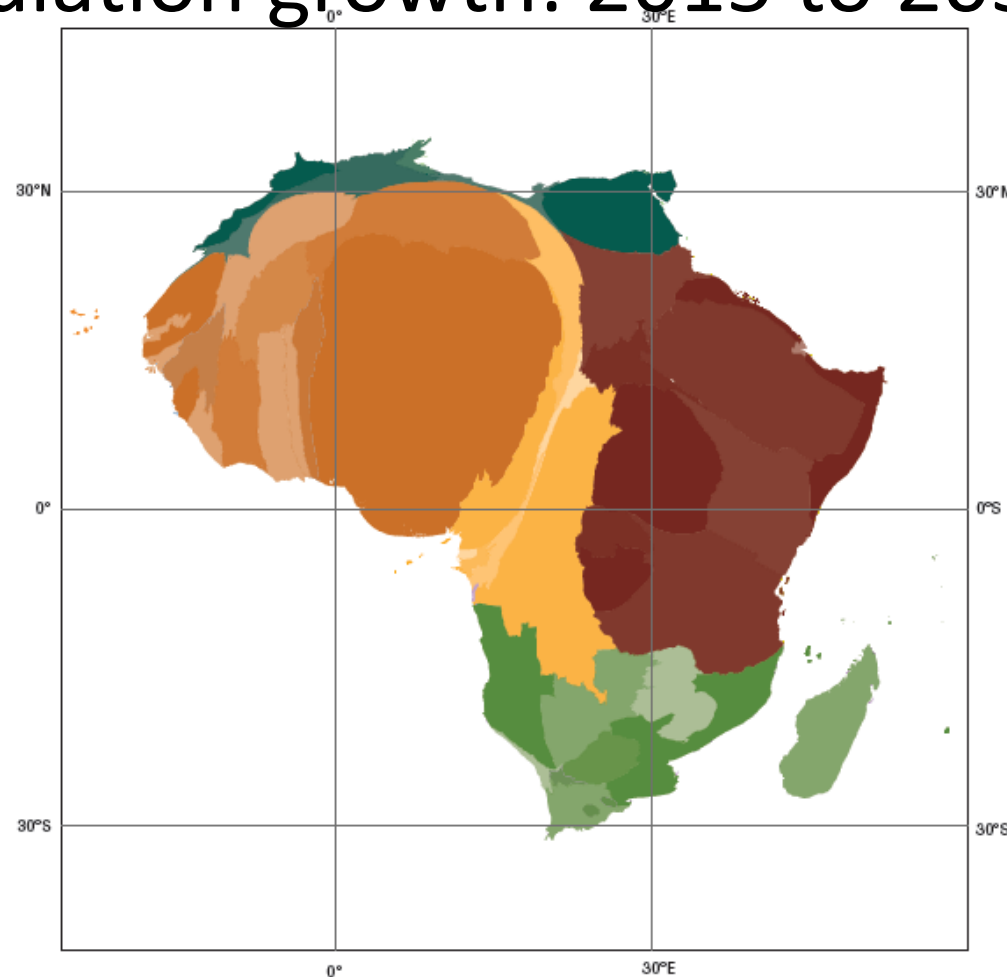
Total rural population





Africa's population growth: 2015 to 2050

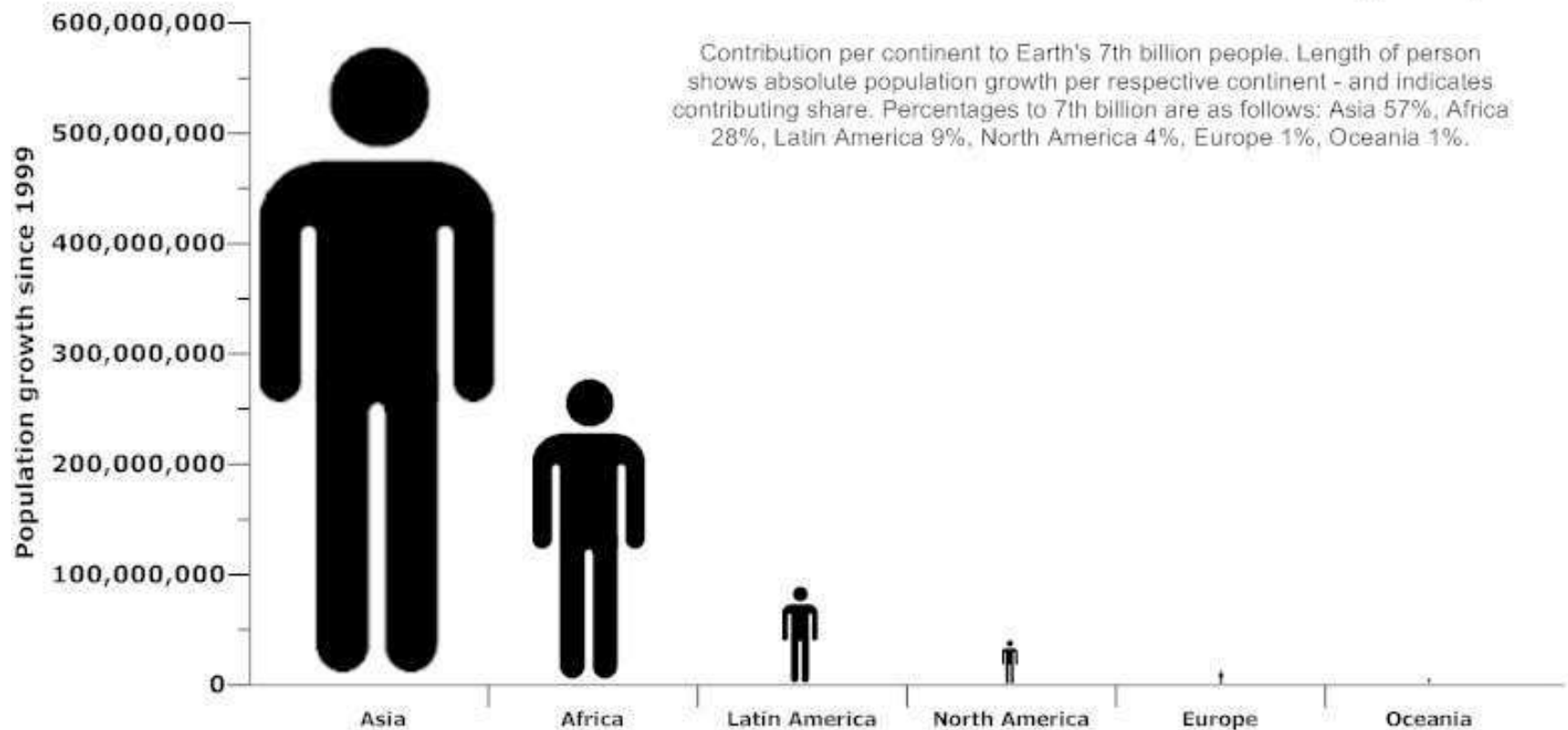
- Between 2015 and 2050, population in
- West Africa will grow by 133% (465 million)
 - East Africa will grow by 120% (475 million)



Source: World Population Prospects, 2012
Medium Fertility Scenario
Cirad Cartography Unit



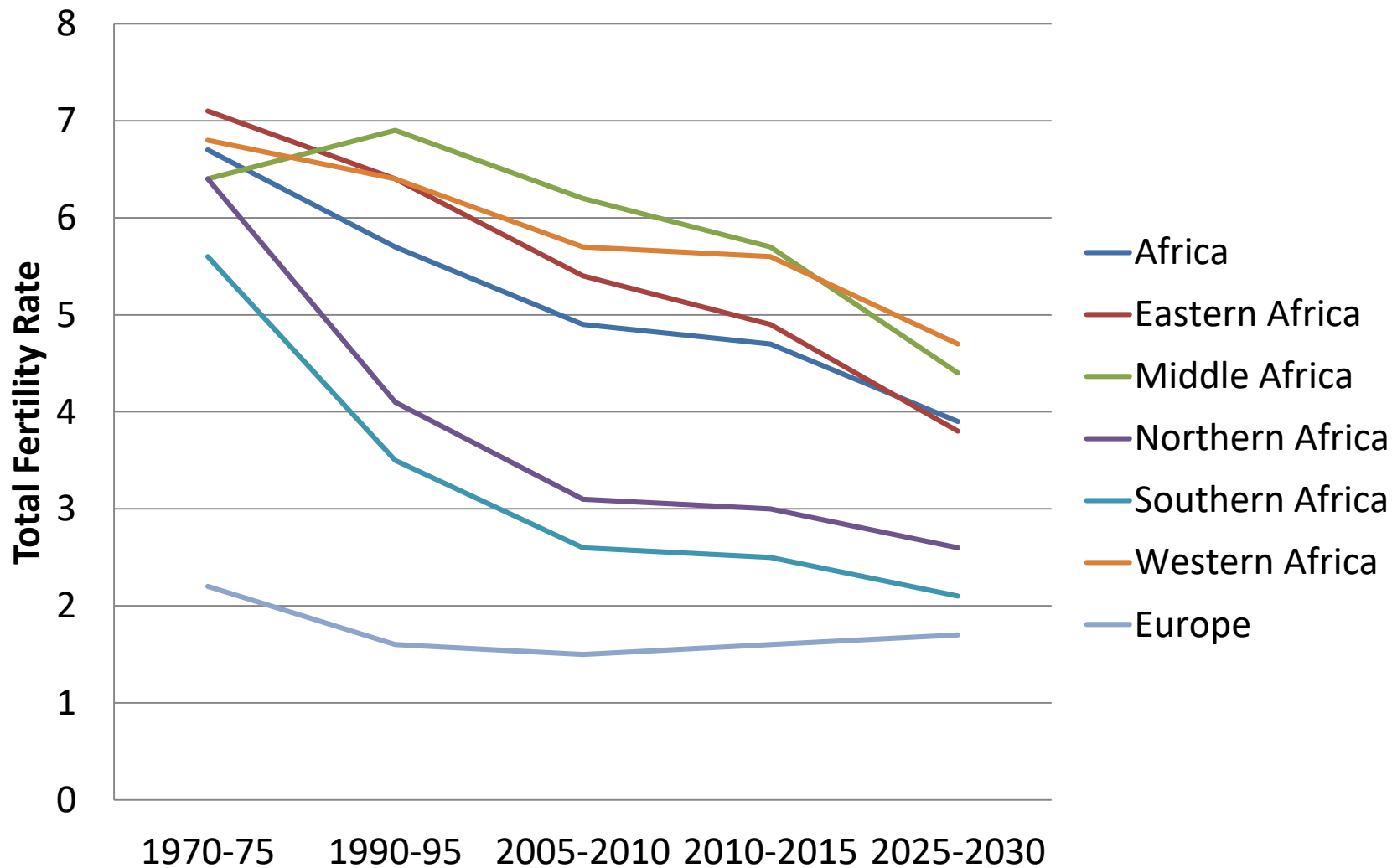
From 6 billion to 7 billion people



Data: UN World Population Prospects 2010 Rev. | Infographic: Bitsofscience.org

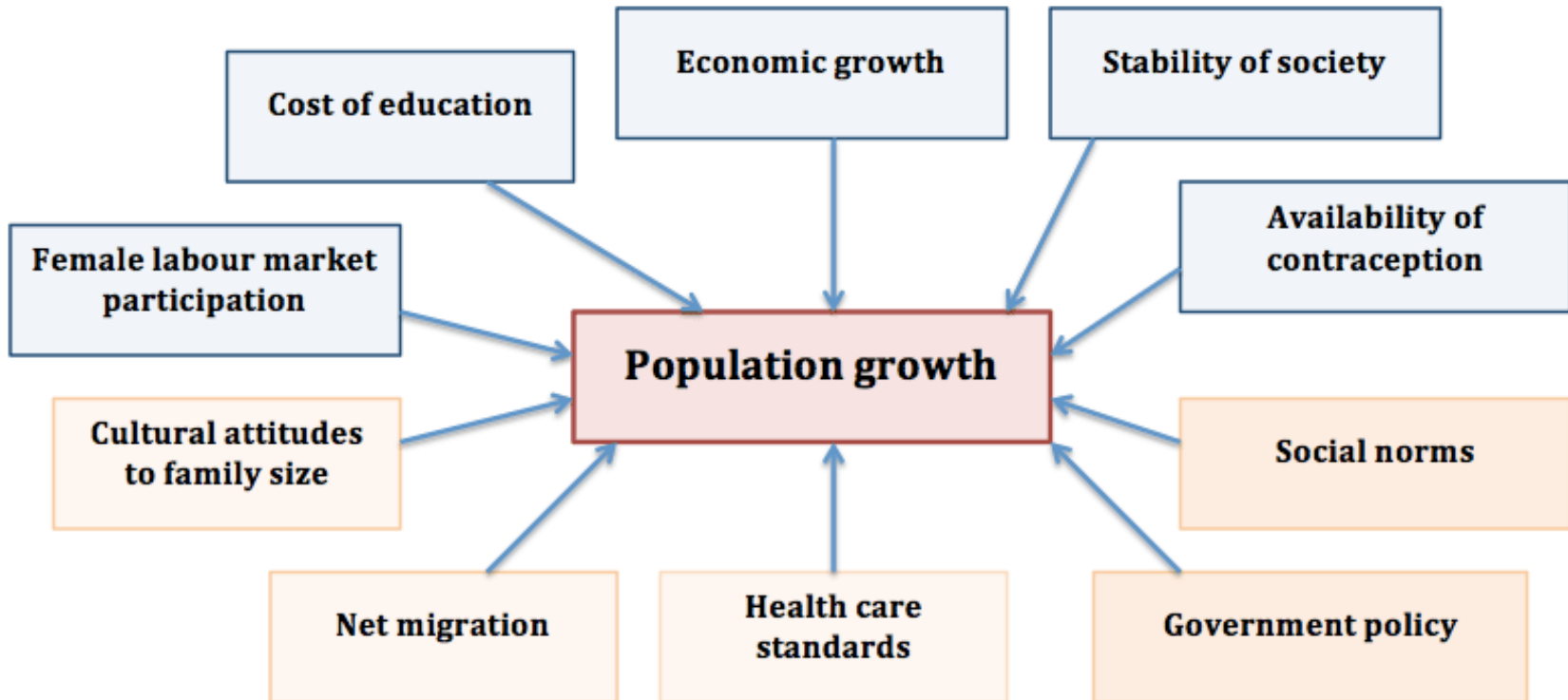


Trends in the Total Fertility Rate, UN Projections





Factors influencing Population growth

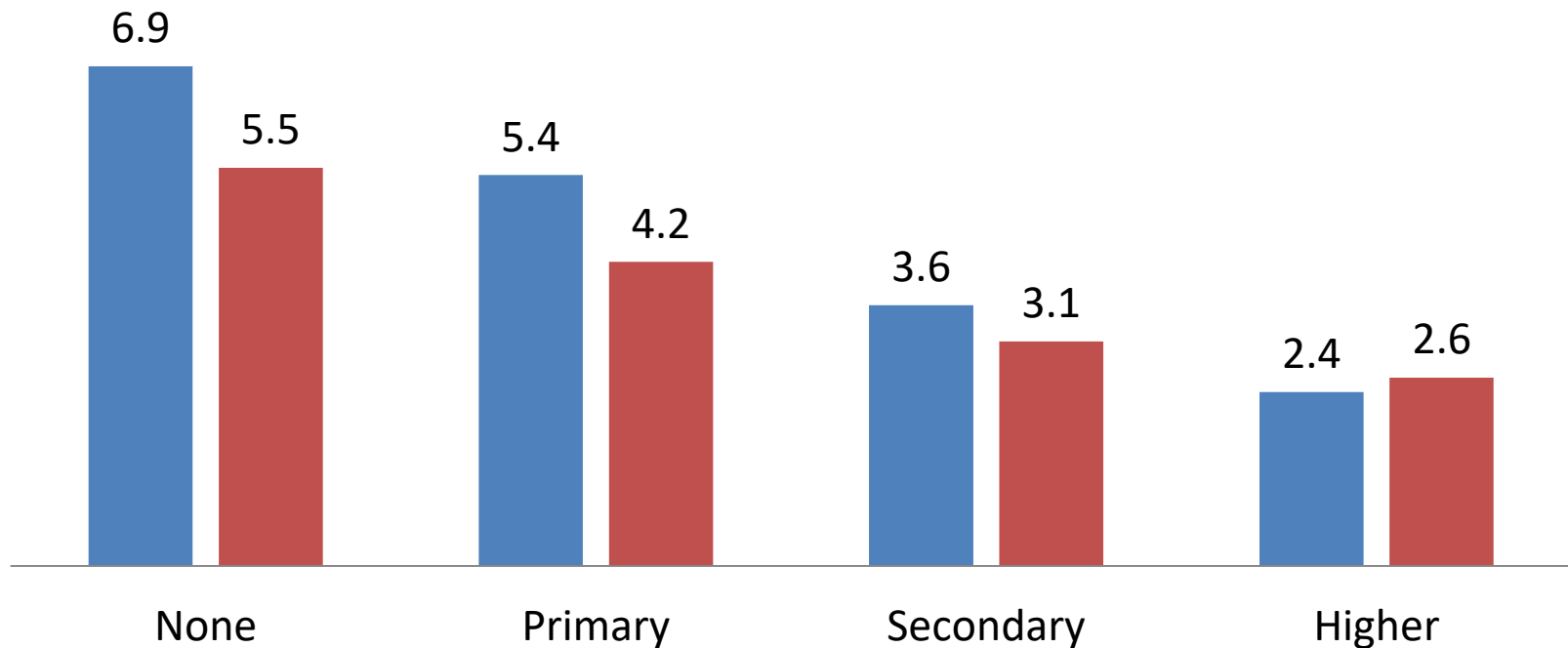




Women with more than secondary education tend to have fertility rates that are closer to replacement levels fertility rate and education

Eritrea

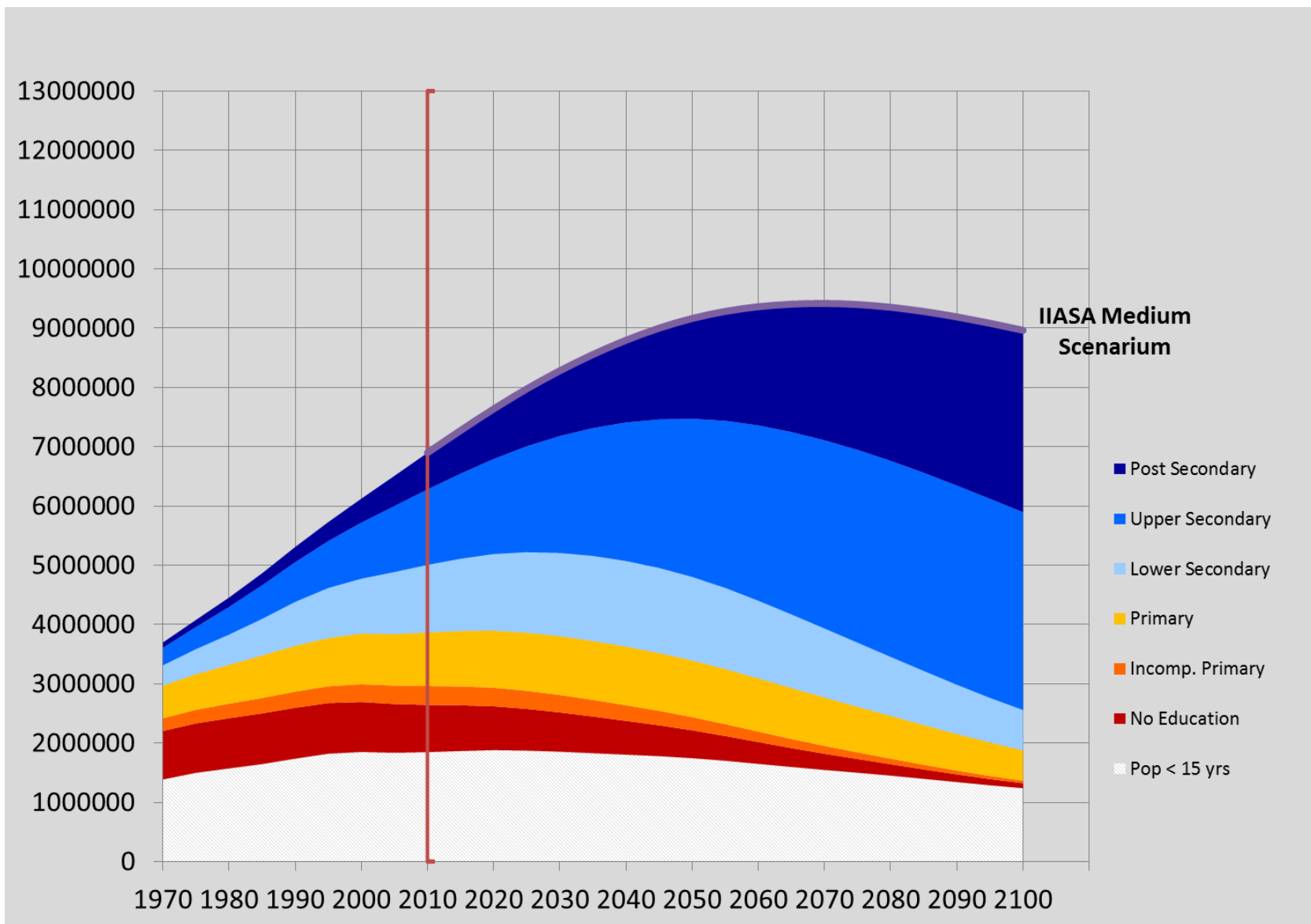
■ 1995 ■ 2002



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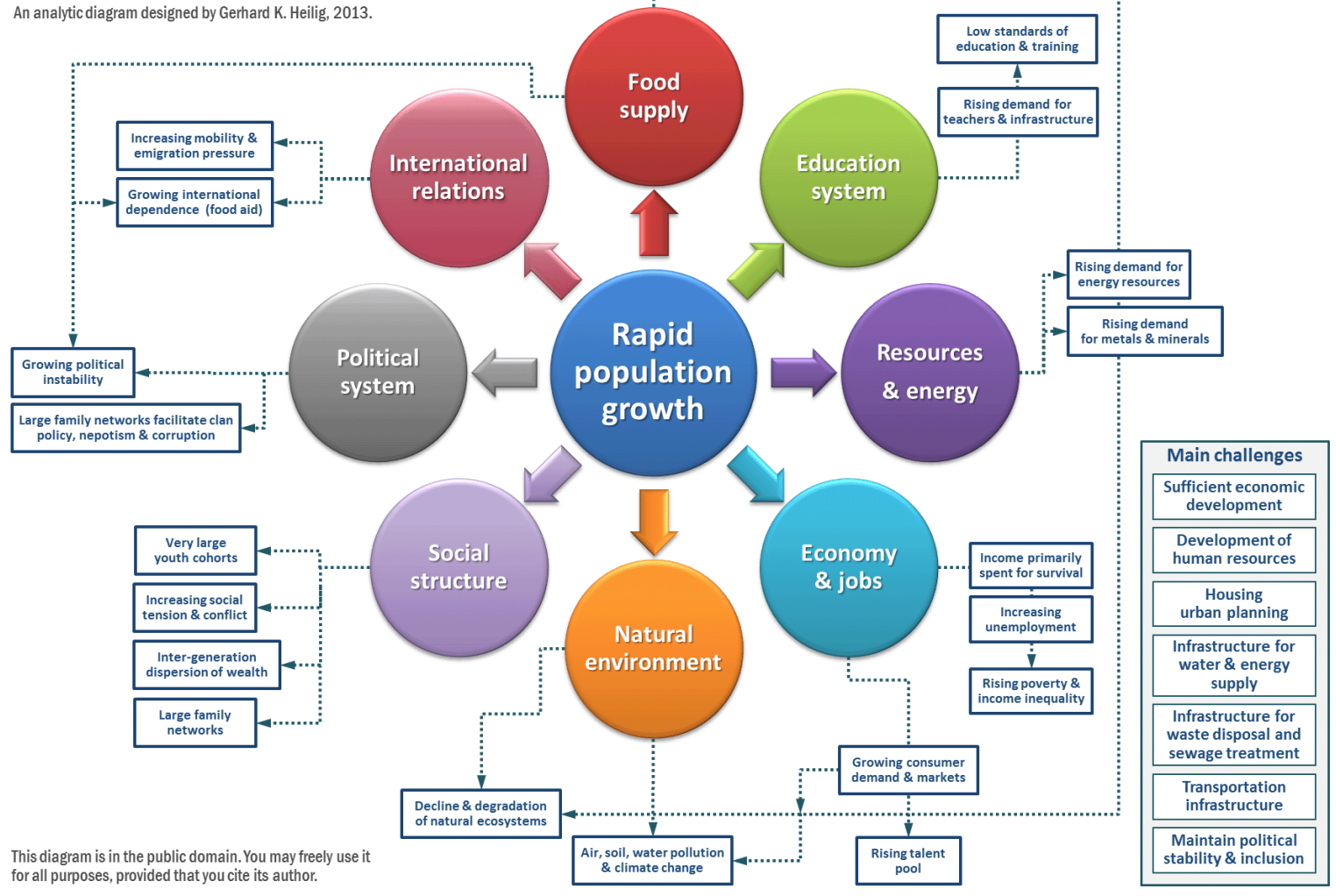
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Some consequences of rapid population growth

An analytic diagram designed by Gerhard K. Heilig, 2013.



This diagram is in the public domain. You may freely use it for all purposes, provided that you cite its author.

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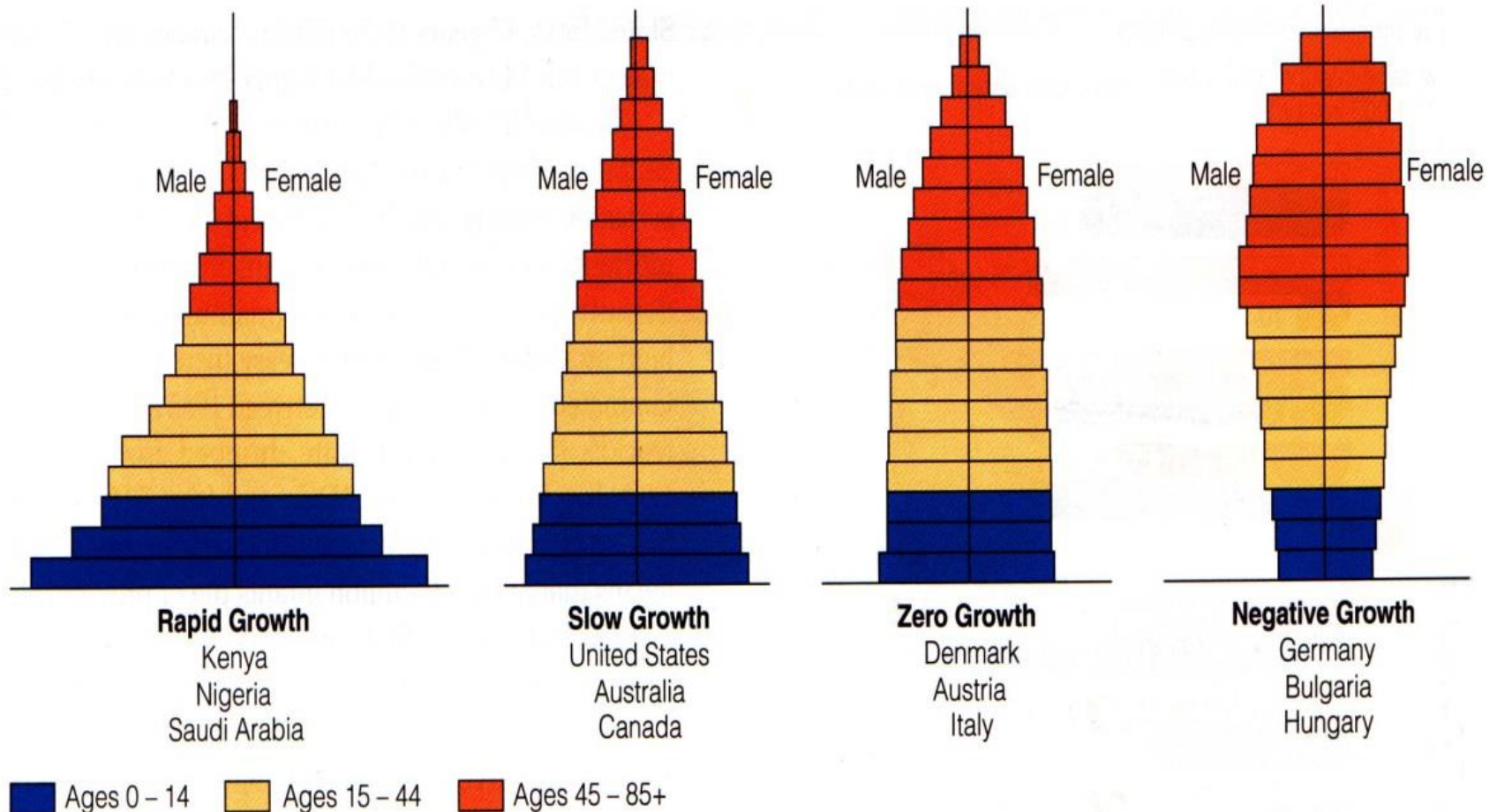


Figure 0 1 Population age structure diagrams for countries with rapid, slow, zero, and negative population growth rates. (Data from Population Reference Bureau)



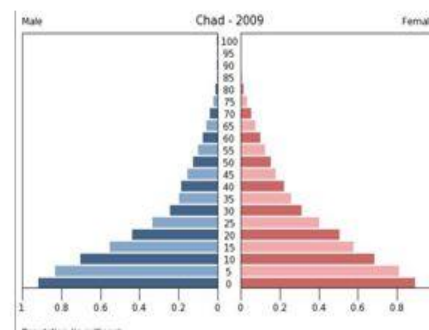
Rapid Population Growth

Problems:

- Farms becoming smaller
- Destruction of natural environment
- Land losing fertility due to overuse
- Rapid urban growth – poor housing
- High unemployment – crime rate increases
- Schools and hospitals overcrowded.

Solutions:

1. One Child Policy (China)
2. Family planning/sex education
3. Free contraception (Indonesia)
4. Equal education for women
5. Cash incentives for small families
6. Voluntary sterilisation (India)





- The debate on brain drain is complex
- Short run
- Long run



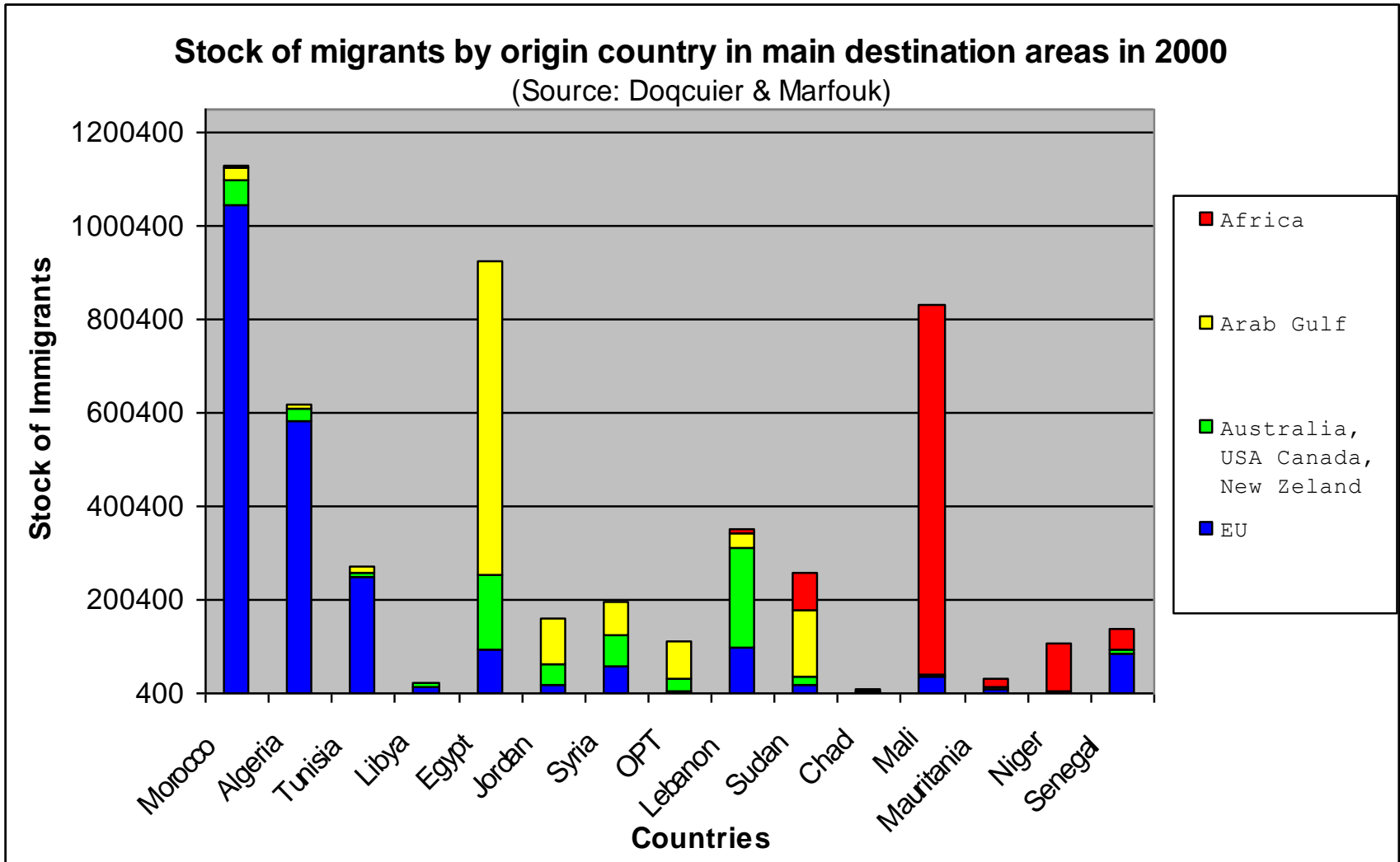
1. Stylized facts on Skilled migration

- Few OECD countries gain, most OECD countries lose HS individuals
- Only US, CA and AUS are net gainers Inflows of HS > outflows of HS
- The EU countries losers (Exceptions BE, LX, SWI, NOR)

Migration in Europe

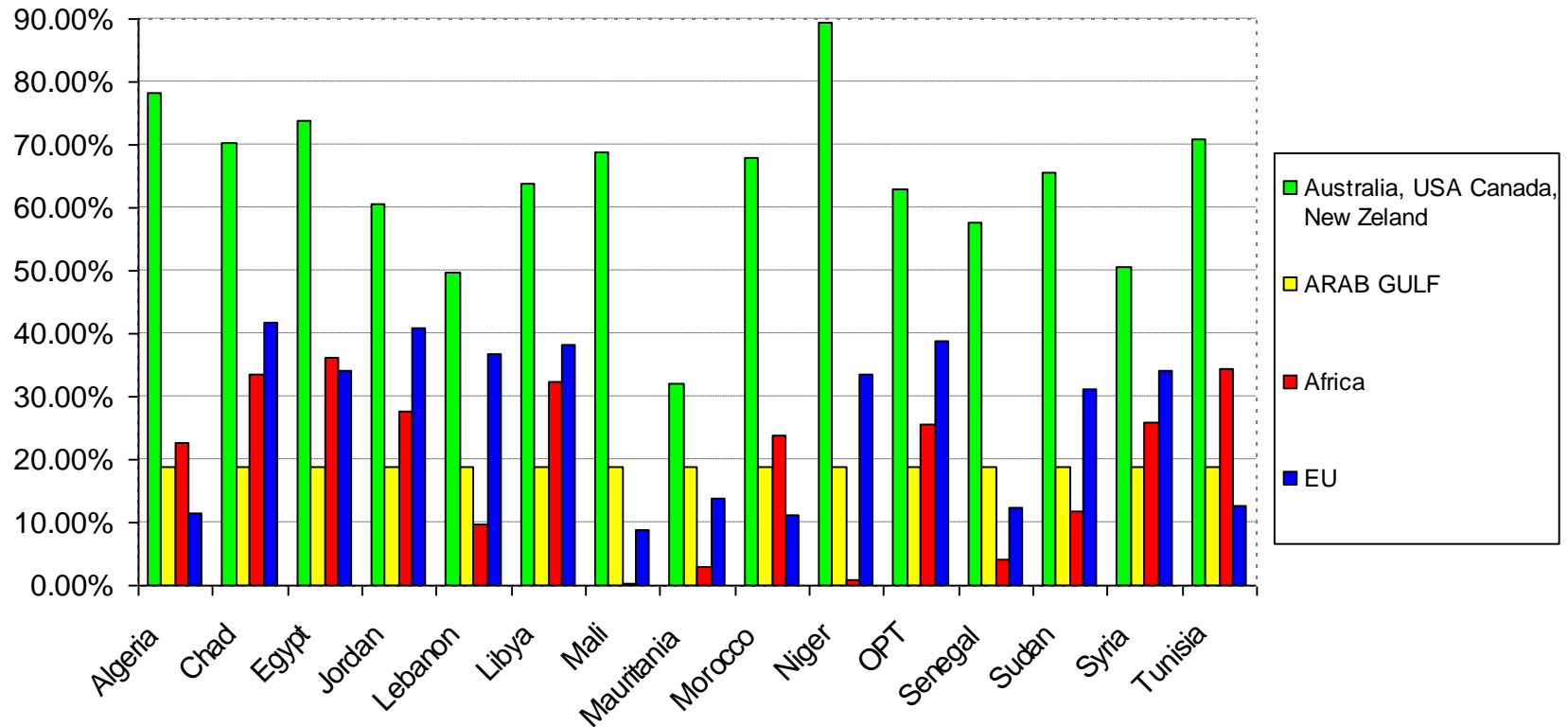
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Share of highly skilled migrants by country of origin to main destination areas in 2000
(Source: Docquier & Marfook)





- Immigrants are even more concentrated at the top of skill distribution

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Figure 2

Share of Foreign born employment by schooling group, 2000

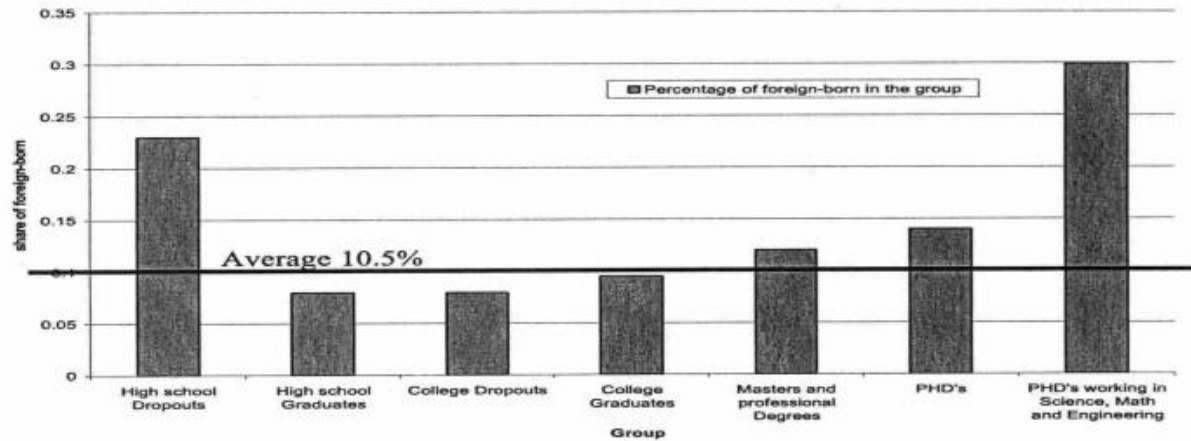
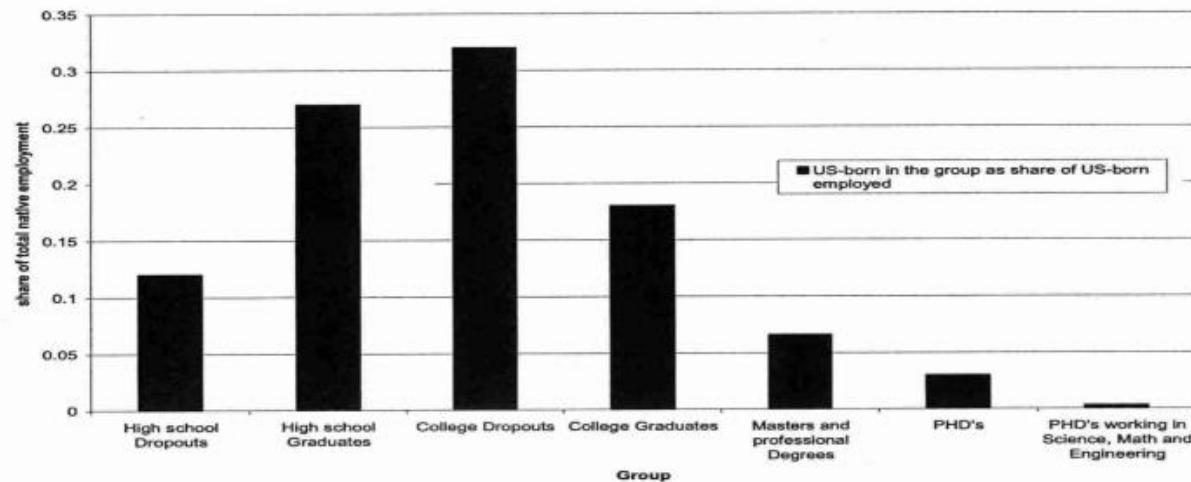


Figure 3

Distribution of US-born employed by schooling group, 2000





Why HS Migrants are mainly going to USA, Canada, Australia and New Zealand?

- **Legislation** Migration policy-point system
- Economic structure of destination countries-
HS jobs available
- **Wage premium-**
 - USA High wage 5 times low wage
 - France and Netherland 2.9, Demark and Switzerland 2.7
 - Belgium and Sweden 2.4
- **Education system**
- **Language**



- **Both destination and sending countries are in search of skills for similar reasons**



Brain drain and brain gain

The link between migration and growth in sending countries is however quite complex.

First, if the best will leave the country, total human capital will decline (*implying a lower growth path, less foreign direct investment and remittances are not enough to compensate for it*).

Second, migrants may return home after having acquired a set of productive skills with a beneficial impact on the growth prospects of their home country.



Finally, the policy bias in host countries toward skilled flows may not necessarily penalize sending countries. As argued most recently by Stark (1999, 2001), the incentive to acquire skills may be strengthened by the prospect of being able to migrate.

Even in the presence of a brain drain, therefore, the **average education level of those left behind in the home country may be higher than otherwise** and this will induce a higher growth path and attract foreign investment.



In this “revisionist” approach to the analysis of the brain drain, skilled migration may turn into a “brain gain” even if no account is taken of the potentially positive effects on the home country of remittances and return migration



A case study on High skilled migration



From the MENA
and SSA and few
Eastern Countries

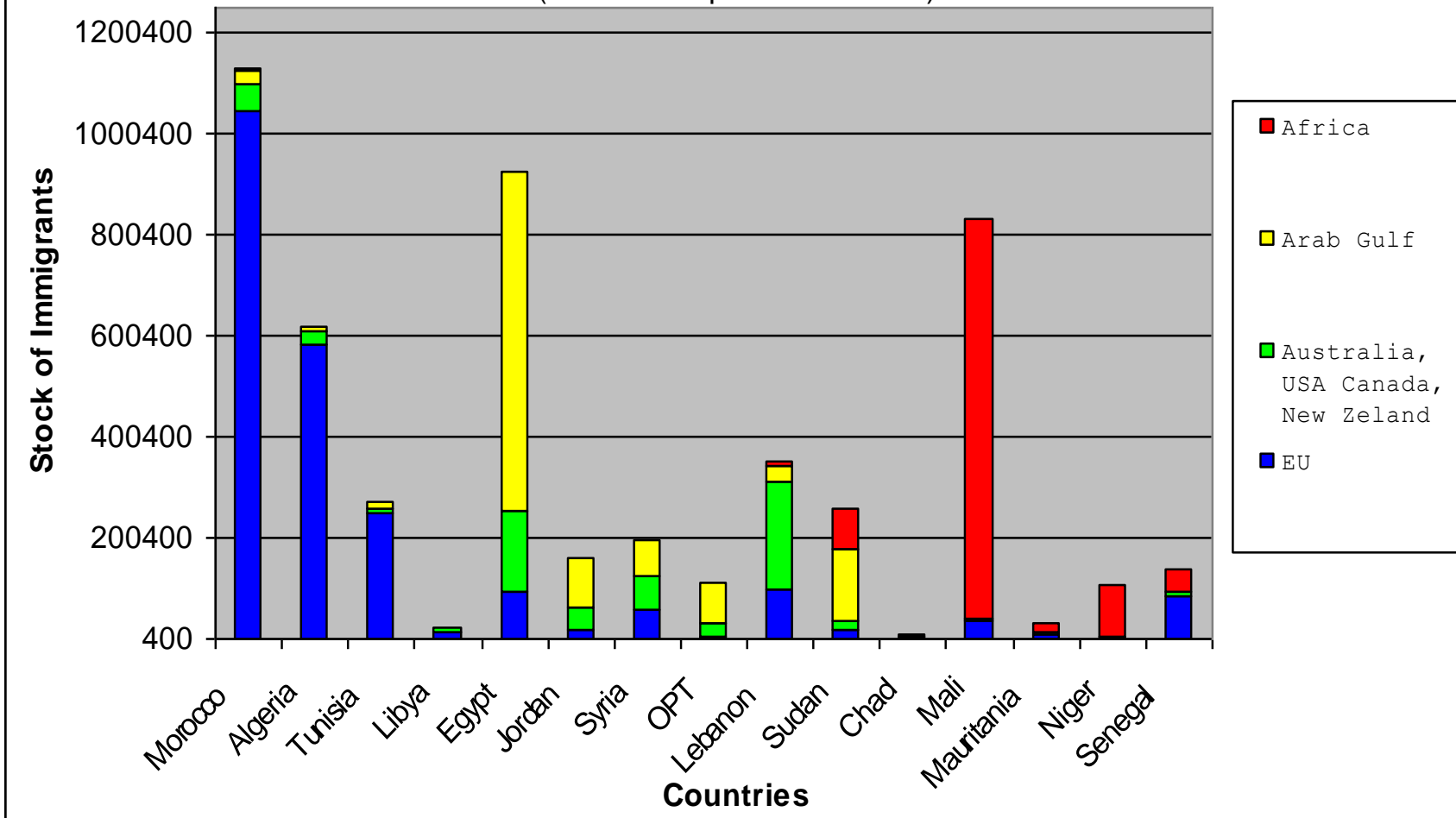


*Destination



Stock of migrants by origin country in main destination areas in 2000

(Source: Doqcuier & Marfouk)





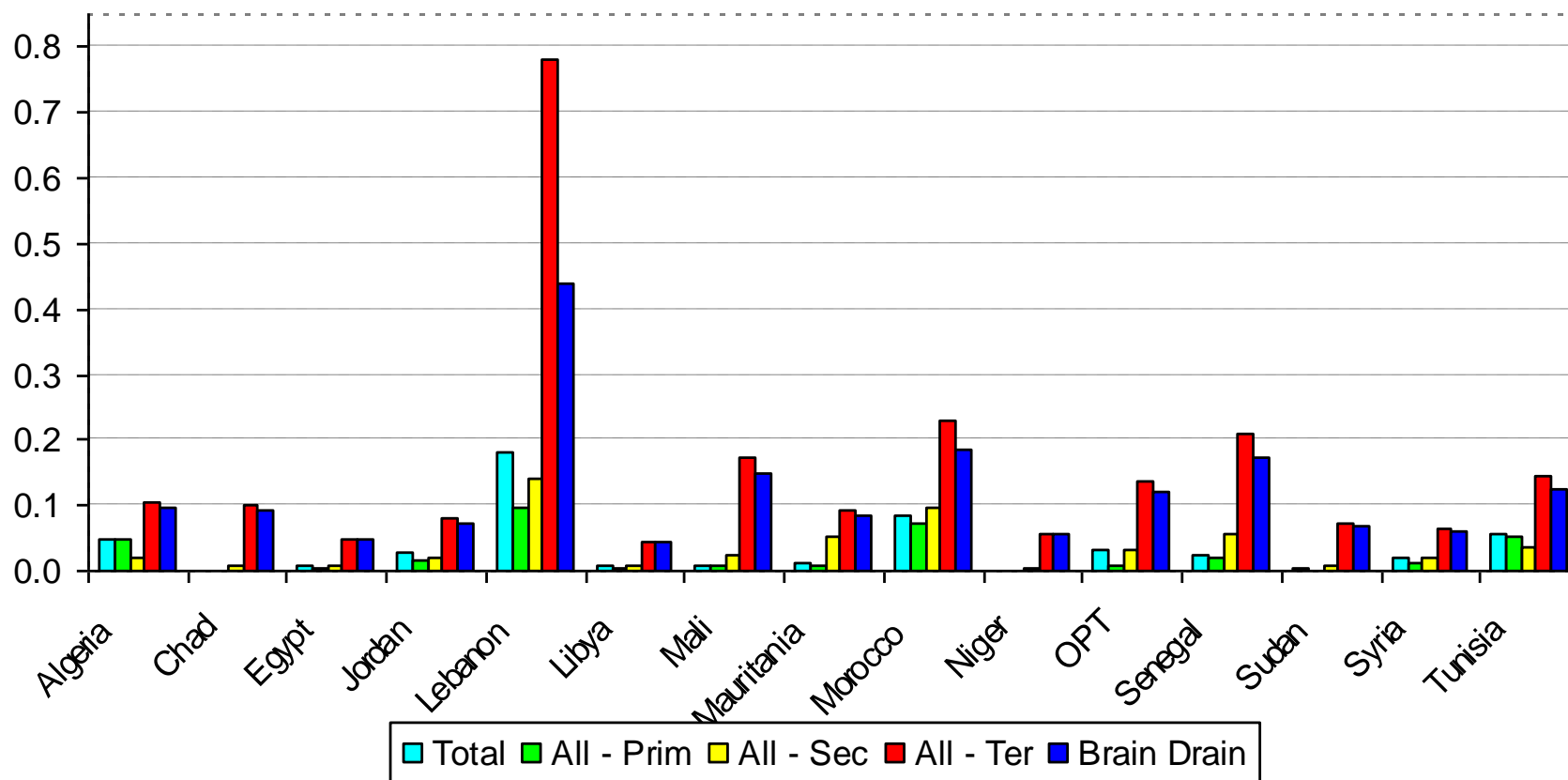
How many?

- The number
- And the measure of Brain drain
- Share of HSM of total HS (at home and abroad)



**Fig.4.2 Share of migrants to home labour force by skills
around 2000**

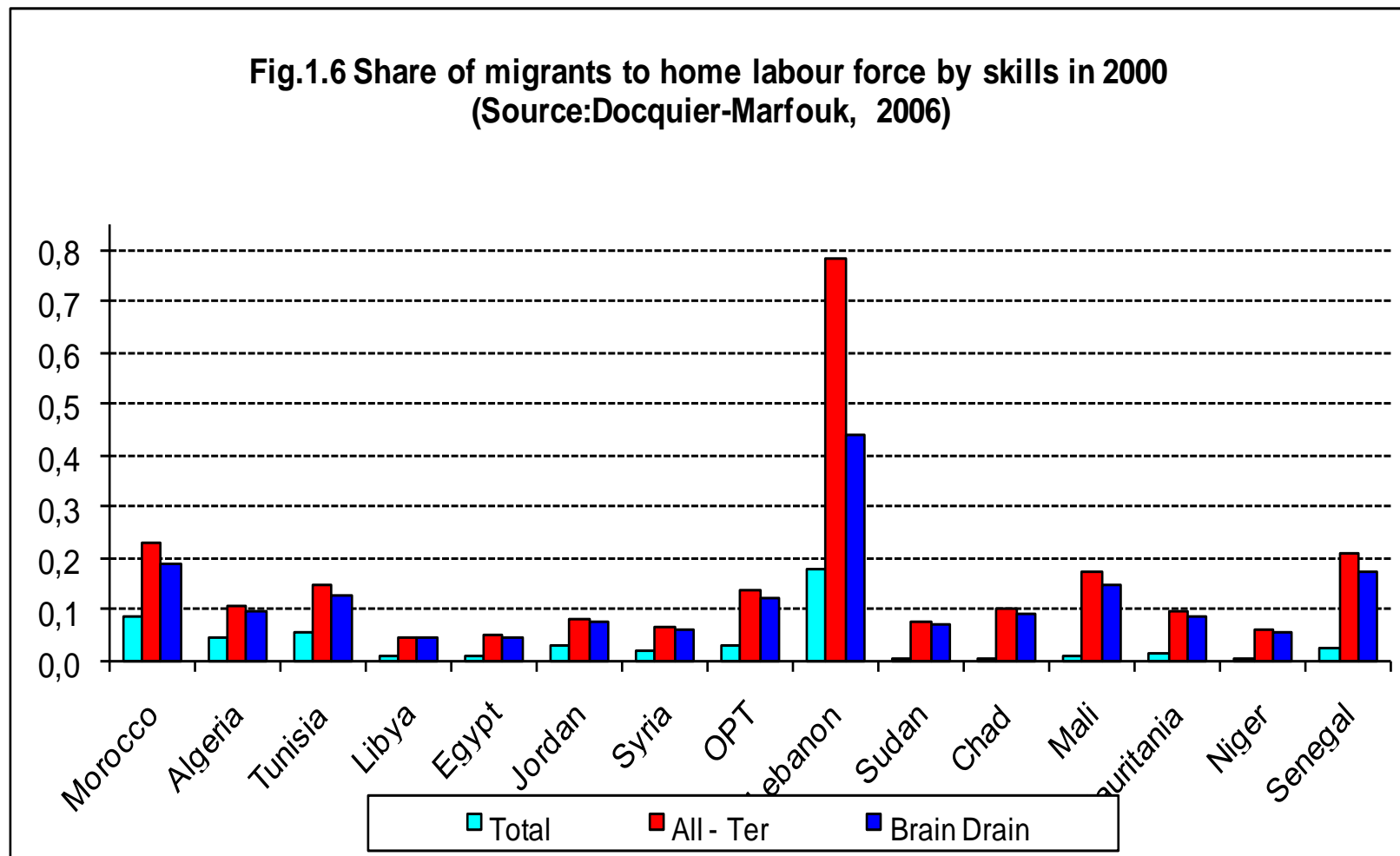
(Source: Doqquier & Marfouk)





4. Brain drain

Fig.1.6 Share of migrants to home labour force by skills in 2000
(Source:Docquier-Marfouk, 2006)



Migration in Europe

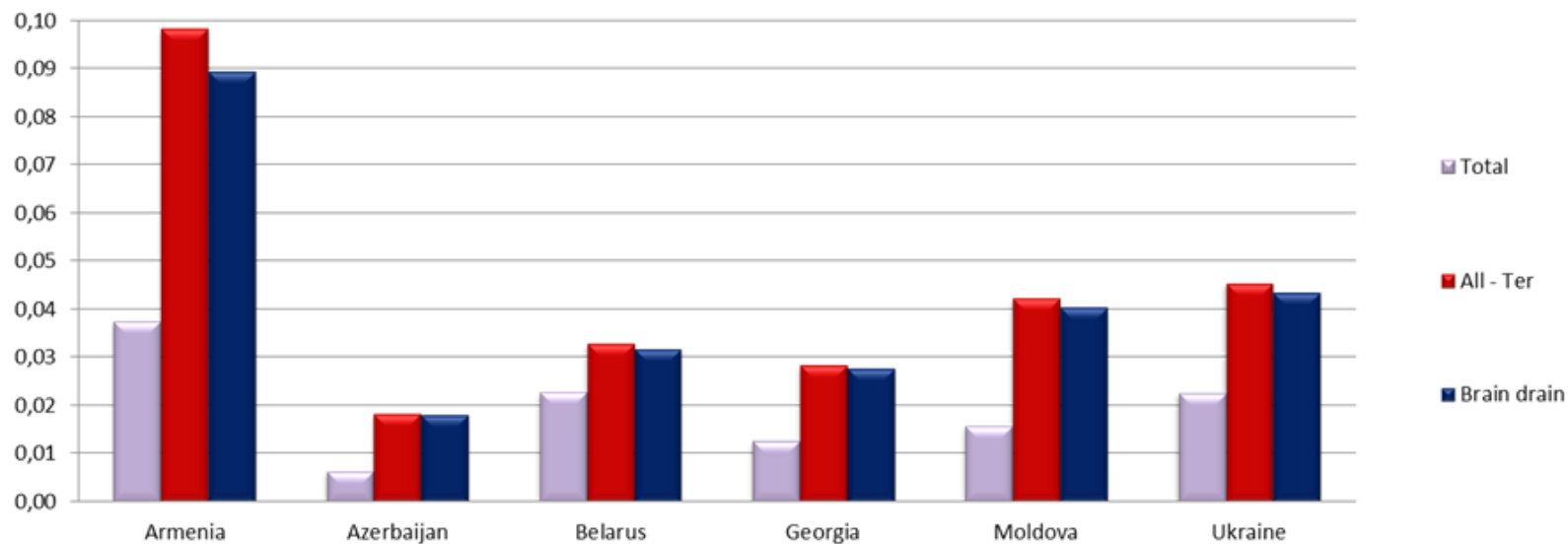
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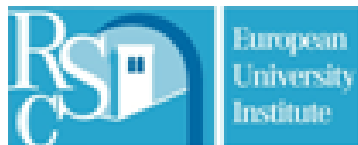
Share of migrants to home labour force by skills around 2000

(Source: Doqcuier & Marfouk)



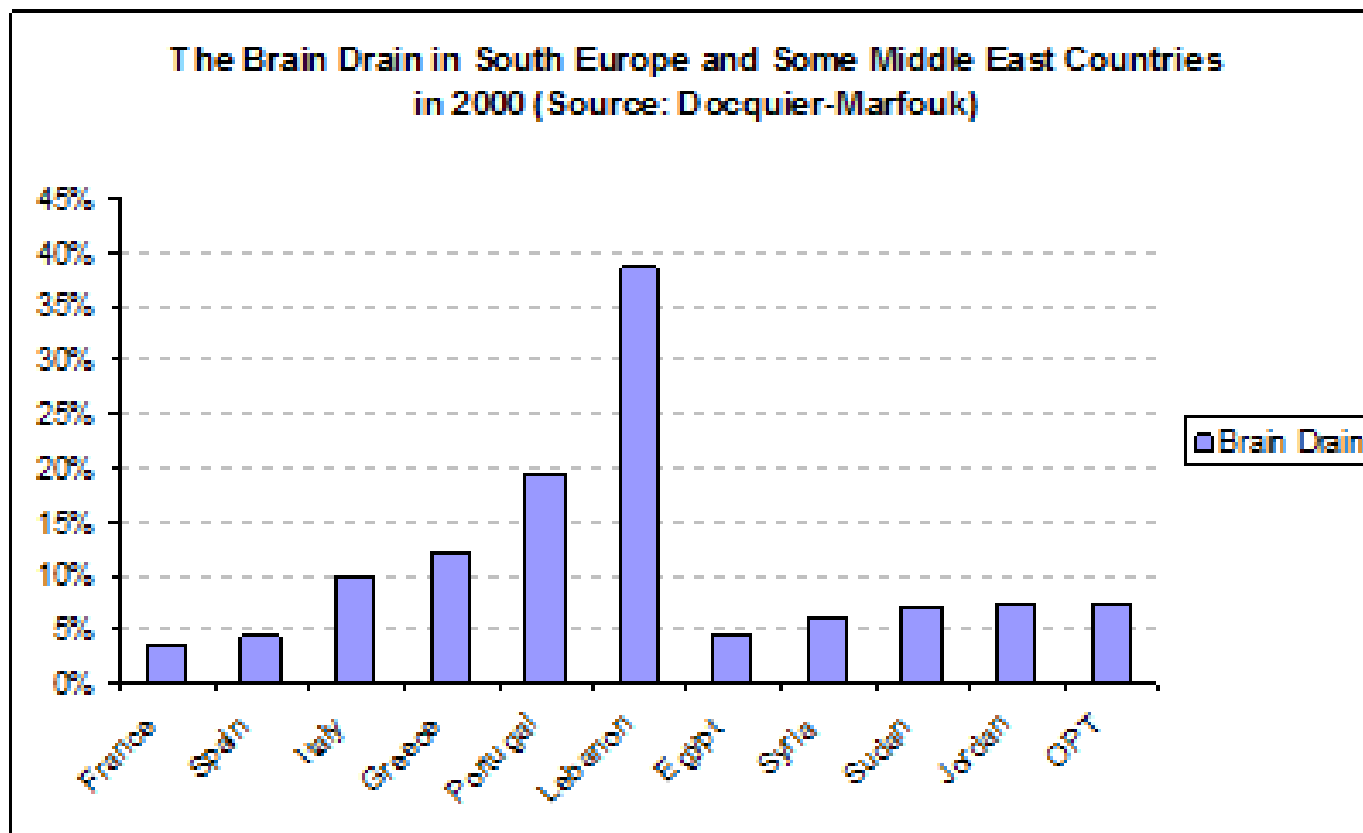


- Is Brain waste taking place only among third national countries?



Robert Schuman Centre for Advanced Studies

Consortium for Applied Research on International Migration - CARIM





Why HS migration takes place?

1. Demand side
2. Supply side
3. Mismatch between Supply and Demand (HS supply > HS Demand)
(quality of education & social versus hard sciences)

On the Supply side: Economic reasons

- A) Unemployment among HS
- B) Reduction of real income per capita (Moldova)
- C) Large informal sector (60% in Egypt, 77-87% Mauritania)
- D) Decline in the size of public sector (Egypt, Morocco)
- E) Low return on tertiary education (Egypt)

On the Supply side: Political reasons

- Political instability in Palestine, Lebanon, Sudan, Jourdan



Questions

- Is the educational policy appropriate?



- **Over-education & Over-occupation**
- Migrants in
 - 3 level of education: low, medium and high
 - level of job-skill: low, medium, high



Table 6.1 Distribution of occupation/education level to EU27

COUNTRIES	<i>occupation level</i>			COUNTRIES	<i>education level</i>		
	Low	Intermediate	High		Low	Intermediate	High
ALGERIA	35.46	26.28	38.26	ALGERIA	38.69	36.23	25.09
CHAd	20.28	25.34	54.38	CHAd	16.47	33.8	49.72
EGYPT	31.32	23.97	44.7	EGYPT	23.56	36.69	39.75
JORDAN	16.47	19.57	63.96	JORDAN	13.1	27.82	59.08
LEBANON	22.36	23.95	53.69	LEBANON	23.35	30.48	46.16
LYBIA	27.33	26.43	46.24	LYBIA	40.87	36.61	22.52
MALI	63.14	19.38	17.47	MALI	70.45	16.98	12.56
MAURITANI	64.18	19.35	16.47	MAURITANI	69.37	16.16	14.46
MOROCCO	52.79	22.94	24.27	MOROCCO	58.39	24.17	17.44
NIGER	32.28	18.25	49.47	NIGER	21.61	36.31	42.08
PSE	19.28	19.46	61.26	PSE	17.24	23.13	59.63
SENEGAL	61.89	14.79	23.32	SENEGAL	65.85	18.77	15.38
SUDAN	21.3	23.13	55.58	SUDAN	14.6	27.32	58.09
SYRIA	36.26	20.12	43.62	SYRIA	30.3	30.19	39.51
TUNISIA	48.17	17.07	34.76	TUNISIA	47.87	32.36	19.76
Mean	36.83	21.34	41.83	Mean	36.78	28.47	34.75

Source: Database on Immigrants in OECD countries (DIOC), around year 2000



Table 6.2 Distribution of occupation/education level to US, Australia, NZ and CANADA

<i>occupation level</i>				<i>education level</i>			
COUNTRIES	Low	Intermediate	High	COUNTRIES	Low	Intermediate	High
ALGERIA	19.97	30.65	49.37	ALGERIA	6.79	28.36	64.85
CHAd	37.29	27.85	34.87	CHAd	4.84	38.5	56.66
EGYPT	15.34	30.84	53.82	EGYPT	6.19	24.61	69.2
JORDAN	21.56	43.53	34.91	JORDAN	12.67	39.23	48.11
LEBANON	25.34	32.01	42.64	LEBANON	21.2	35.14	43.66
LYBIA	20.92	31.96	47.12	LYBIA	7.01	35.51	57.47
MALI	27.19	41.81	31.01	MALI	22.53	34.22	43.25
MAURITANI	41.51	37.54	20.95	MAURITANI	35.78	27.75	36.47
MOROCCO	18.73	37.8	43.47	MOROCCO	9.59	37.33	53.08
NIGER	26.69	45.43	27.89	NIGER	18.44	37.18	44.38
PSE	20.18	22.39	57.44	PSE	13.94	29.3	56.76
SENEGAL	24.9	42.44	32.67	SENEGAL	17.11	35.98	46.91
SUDAN	36.75	33.81	29.44	SUDAN	12.98	38.2	48.82
SYRIA	25.93	33.93	40.14	SYRIA	19.62	33.65	46.72
TUNISIA	17.33	28.56	54.1	TUNISIA	7.46	27.23	65.32
Mean	25.31	34.70	39.99	Mean	14.41	33.48	52.11

Source: Database on Immigrants in OECD countries (DIOC), around year 2000

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Table 1.4 Over-education and over-occupation rates by country of origin to main destinations

EU27 destinations							US, Australia, NZ and Canada						
Countries of Origin	Over-occupation		Matching	Over-education			COUNTRIES Of origin	Over-occupation		Matching	Over-education		
	Strong	Light		Light	Strong			Strong	Light		Strong		
	-2	-1	0	1	2	all		-2	-1	0	1	2	all
ALGERIA	6,3	22,64	53,91	15,49	1,65	516.759	ALGERIA	0,78	10,17	57,03	23,68	8,33	15.936
CHAD	3,5	17,74	58,22	16,96	3,58	2.683	CHAD	0	8,47	40,92	38,5	12,11	413
EGYPT	3,61	19,52	53,14	18,62	5,1	56.667	EGYPT	1,32	9,16	60,17	22,54	6,81	99.050
JORDAN	2,38	14,22	67,53	12,97	2,91	5.051	JORDAN	1,51	13,19	53,31	25,72	6,27	30.059
LEBANON	3,31	16,45	63,42	14,38	2,44	35.346	LEBANON	3,9	16,08	54,83	21,28	3,91	122.545
LIBYA	7,34	32,36	51,58	7,88	0,83	21.323	LIBIA	0,79	11,36	56,53	25,43	5,9	7.492
MALI	6,31	16,09	64,02	10,69	2,89	23.052	MALI	0,7	18,3	51,86	21,69	7,45	2.148
MAURITANIA	5,57	14,35	65,36	11,13	3,58	7.059	MAURITANIA	0,61	15,52	54,28	21,18	8,41	1.308
MOROCCO	4,4	19,63	61,82	12,33	1,82	600.215	MOROCCO	1,49	13,2	55,92	23,91	5,48	39.599
NIGER	4,21	14,47	58,25	19,82	3,25	1.140	NIGER		12,44	55,32	27,29	4,95	667
PSE	3,24	13,69	67,03	11,98	4,05	2.220	PSE	5,56	15,78	52,81	19,83	6,02	3.257
SENEGAL	6,14	14,86	66,09	10,65	2,26	57.356	SENEGAL	1,28	14,04	51,64	27,47	5,58	7.423
SUDAN	2,69	13,13	62,91	15,8	5,47	6.031	SUDAN	0,73	10,81	45,2	31,04	12,22	13.586
SYRIA	3,67	13,84	61,32	17,31	3,86	19.409	SYRIA	2,21	14,11	57,34	21,14	5,2	36.888
TUNISIA	7,2	20,42	54	16,73	1,66	127.355	TUNISIA	1,26	9,53	61,91	21,46	5,84	6.813
Mean	4,66	17,56	60,57	14,18	3,02	1.481.666	Mean	1,58	12,81	53,94	24,81	6,97	387.184
NATIVES	4.70	25.09	51.55	17.17	1.48	152.719.891	NATIVES	1.41	16.43	53.09	26.21	2.87	131.704.748

Note: Matching if education holds the same rank as occupation, Overeducation "strong" if education is two ranks above occupation rank, Overeducation "light" if education is one rank above occupation rank, Overoccupation "strong" if occupation is two ranks above education, Overoccupation "light" if occupation is one rank above education.

Source: Database on Immigrants in OECD countries (DIOC), around year 2000



Paradox:Paradox

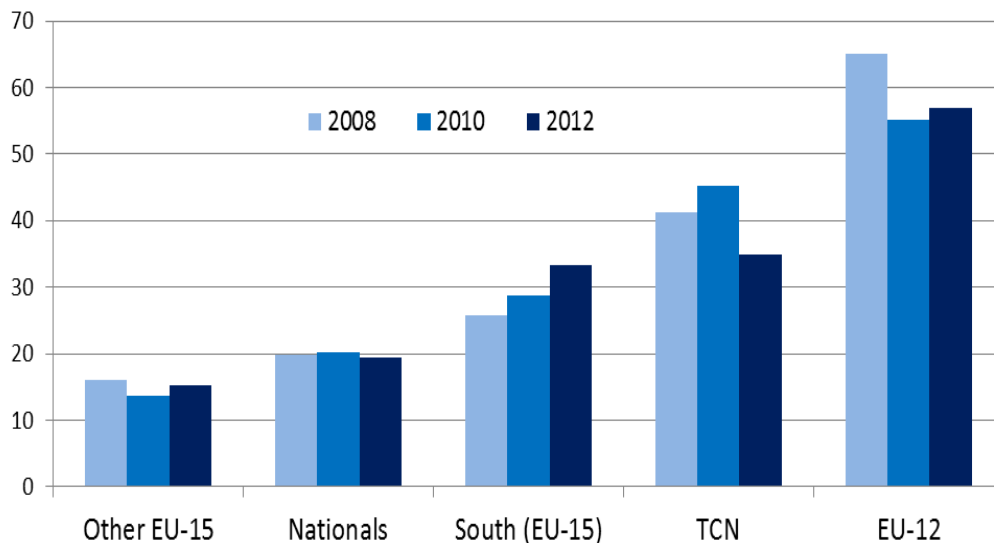
- The American dream seems reversed,
- In Europe uneducated migrants can more easily upgrade



Recent trends in intra-EU mobility (4)

- 3/5 of Southern movers are highly educated (vs 1/5 among unemployed in South)
- increase in over-qualification
- though highest rate is among EU-12 movers (>T.C.N.) with more than 50%

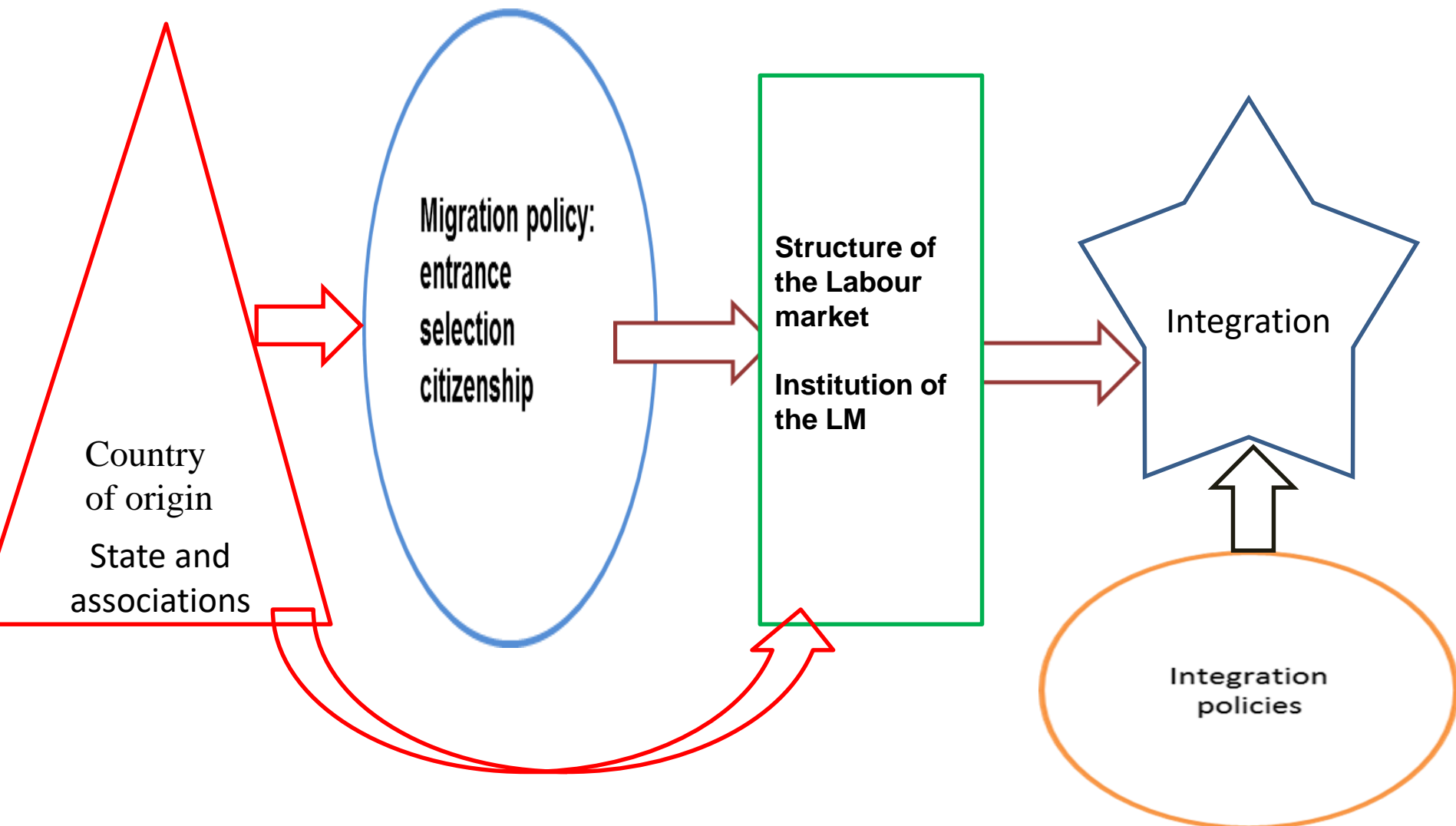
Over-qualification rate among recently established foreigners by group of nationality (in % of all highly educated in employment)



Source: Eurostat, LFS and DG EMPL calculations.



Integration pattern



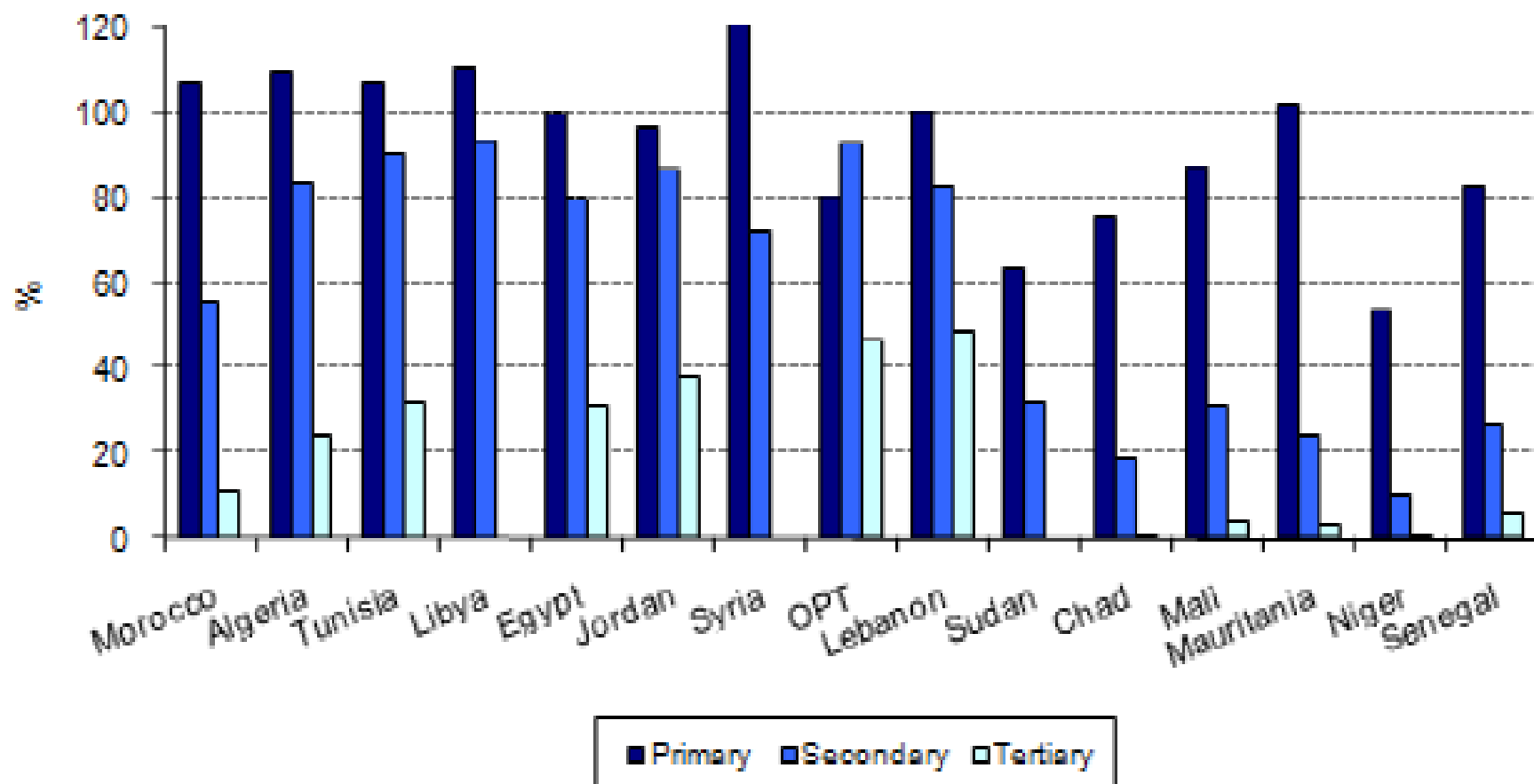


Differences in EDUCATION among countries in:

1. Tertiary education
2. Quality of education
3. Investment in public/private education
4. Public expenditure

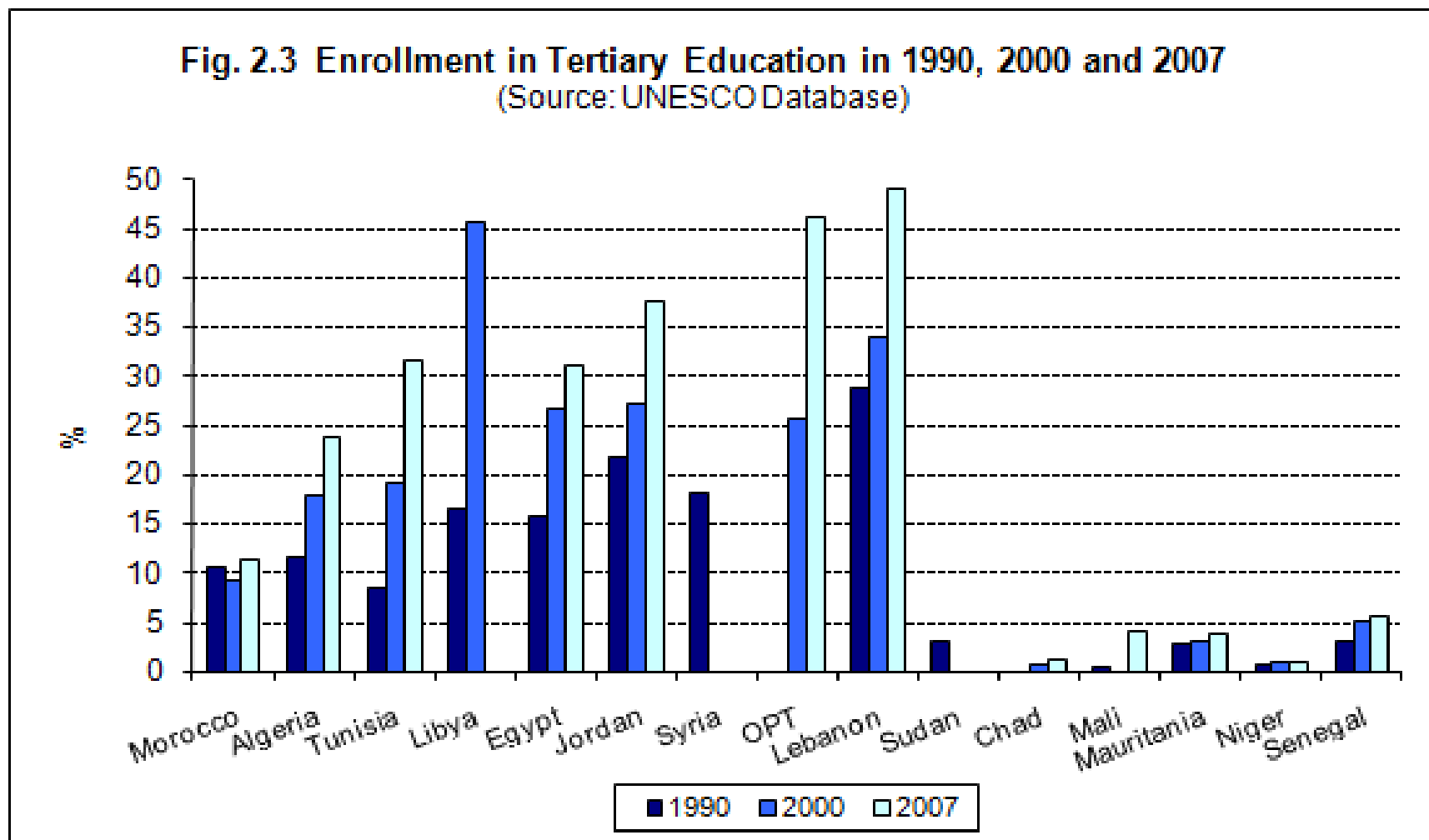


Fig. 2.1 Enrollment in Primary, Secondary and Tertiary education in 2007
(Source: UNESCO Database)





1. Tertiary Education





Increase in the supply of the highly skilled

- But not in the demand of highly skilled
- Quality of the education
- Field of education **Social sciences and Humanities and Education dominate the Hard Science and Engineering (66% in Egypt, 65% in Lebanon, 74% in Palestine, 54% in Jordan)**



Table 6.1: Estimated critical shortages of doctors, nurses and midwives, by region, 2000/01 and 2010/11

WHO region	Total	With critical shortages		Percentage of foreign-born medical professionals in OECD countries in the total estimated critical shortage	
		2000/01	2010/11	2000/01	2010/11
Africa	46	36	31	7%	13%
Americas	35	5	5	71%	74%
South-East Asia	11	6	7	8%	27%
Eastern Mediterranean	21	7	6	10%	17%
Western Pacific	27	3	5	11%	15%
Total number of countries with critical shortages	140	57	54		

Source: OECD (2015)