Why people move?
The migration choice

Alessandra Venturini

The Economics of Migration, 2016

The economic analyses of migration focus on three main subjects

- **The migration choice**
- **The effect in the destination country**
  -on the GNP and innovation
  -in the labour market
  -on the welfare
  -integration (wage assimilation)
- **The effect in the sending countries**
  -economic and social remittances,
   -brain drain

Methodology

The research in economics is conditioned upon the dataset available, we use the economic theory and the statistical knowledge to overcome data limitation

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The migration choice

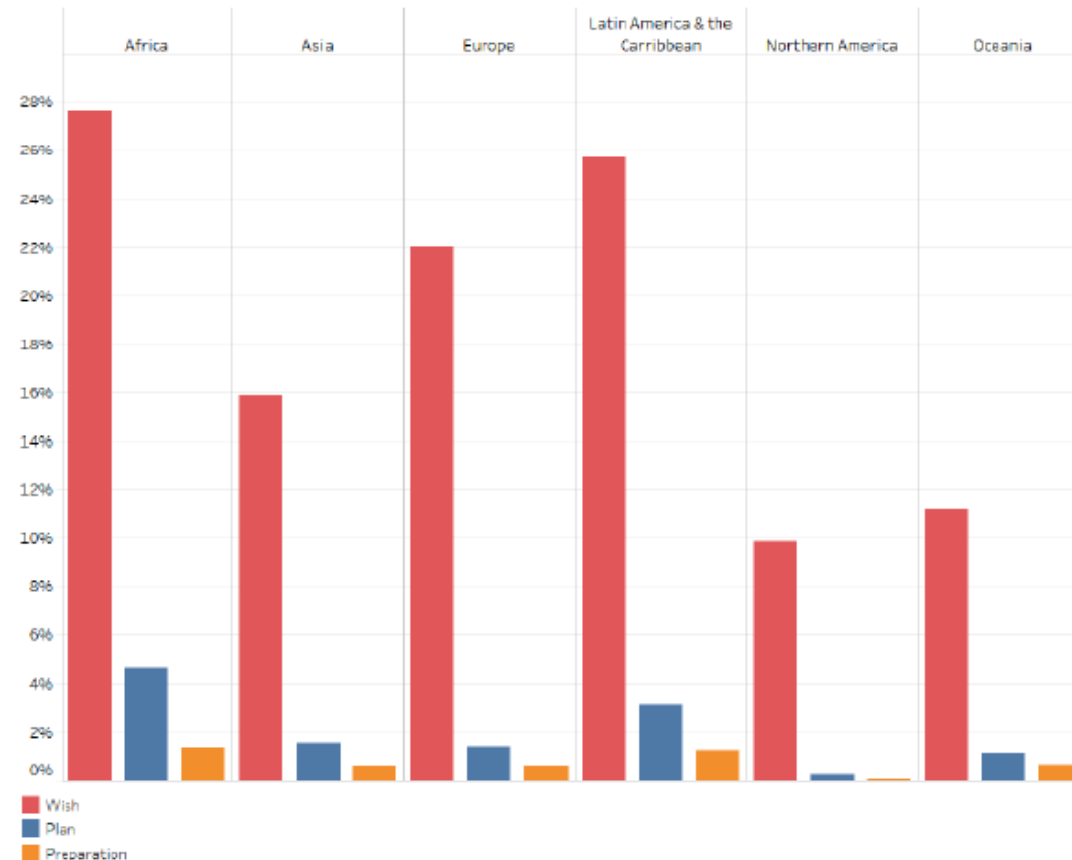**Why do people move?**
Who does move?
How many people do move?

- **95% of the research on labour migrants**

- **Now some research on refugees (Hatton Tim 2015; Dustmann et al 2016)**

- **Very little of family reunification**

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Who migrates: wish → plan → prepare

Figure: Intention to migrate to another country, by geographic area

Source: Migali and Scipioni (2018) using Gallup World Poll Survey 2010-2015 waves

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Who migrates: self-selection

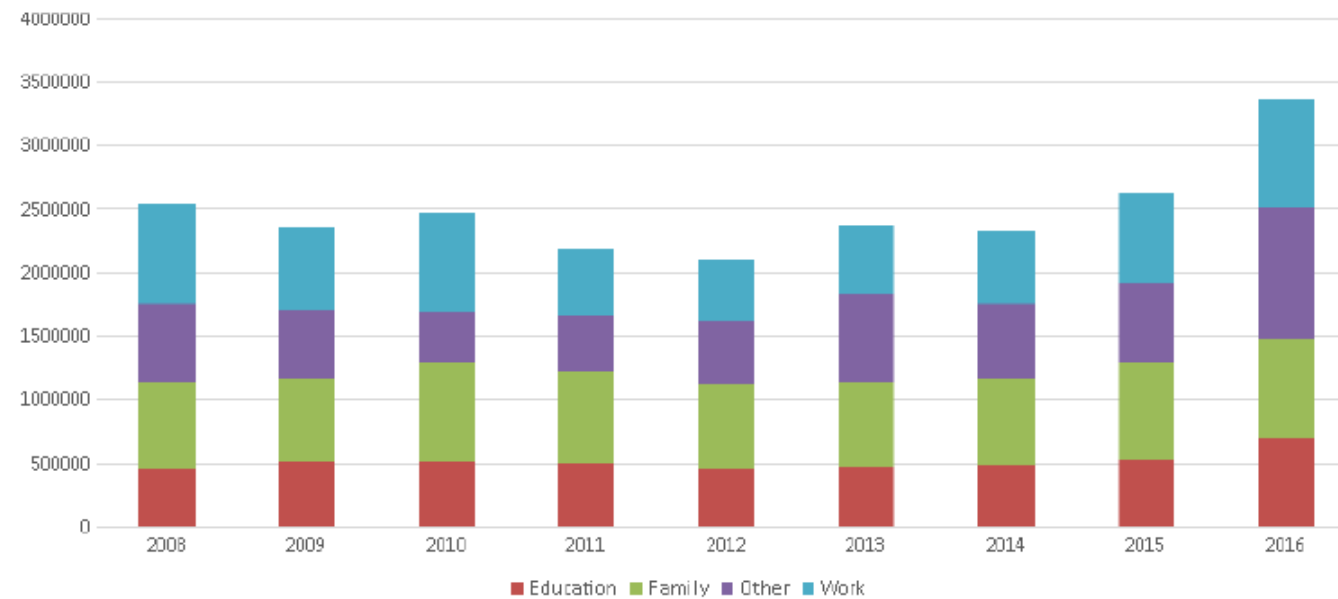**Figure:** Socio-economic profiles of individuals who plan to migrate to another country
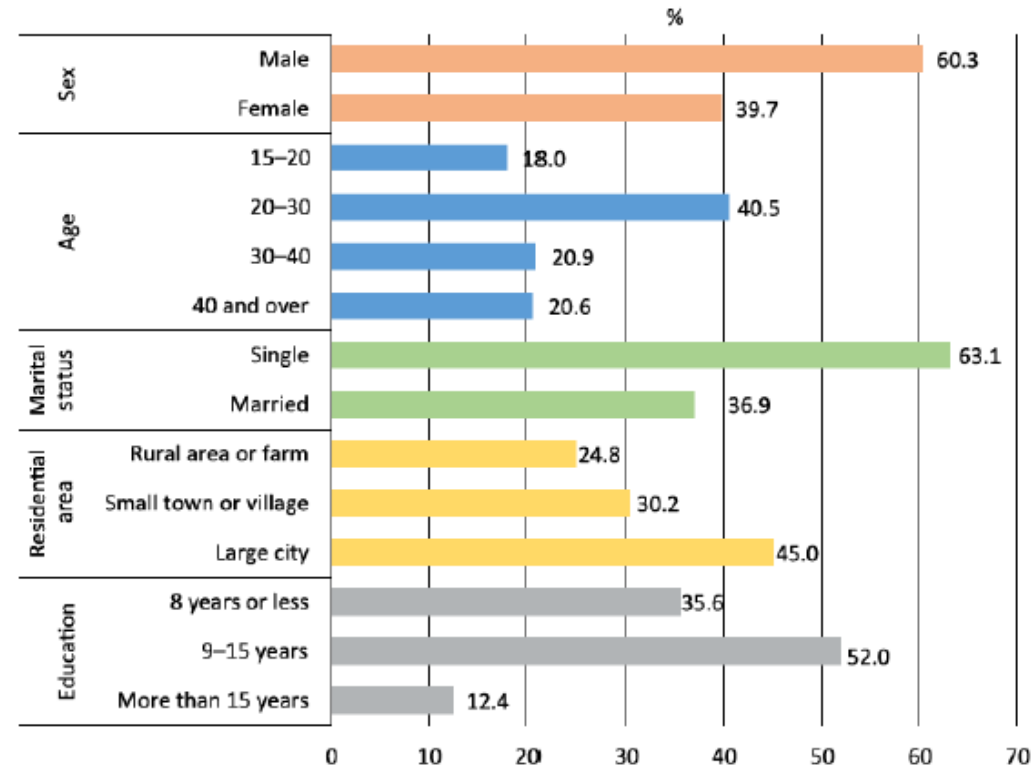
Source: GMDAC (2017) using Gallup World Poll Survey 2010-2015 waves

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Who migrates: reason

Issued residence permits by EU MS, by reason

Source: Eurostat, migr_resfirst
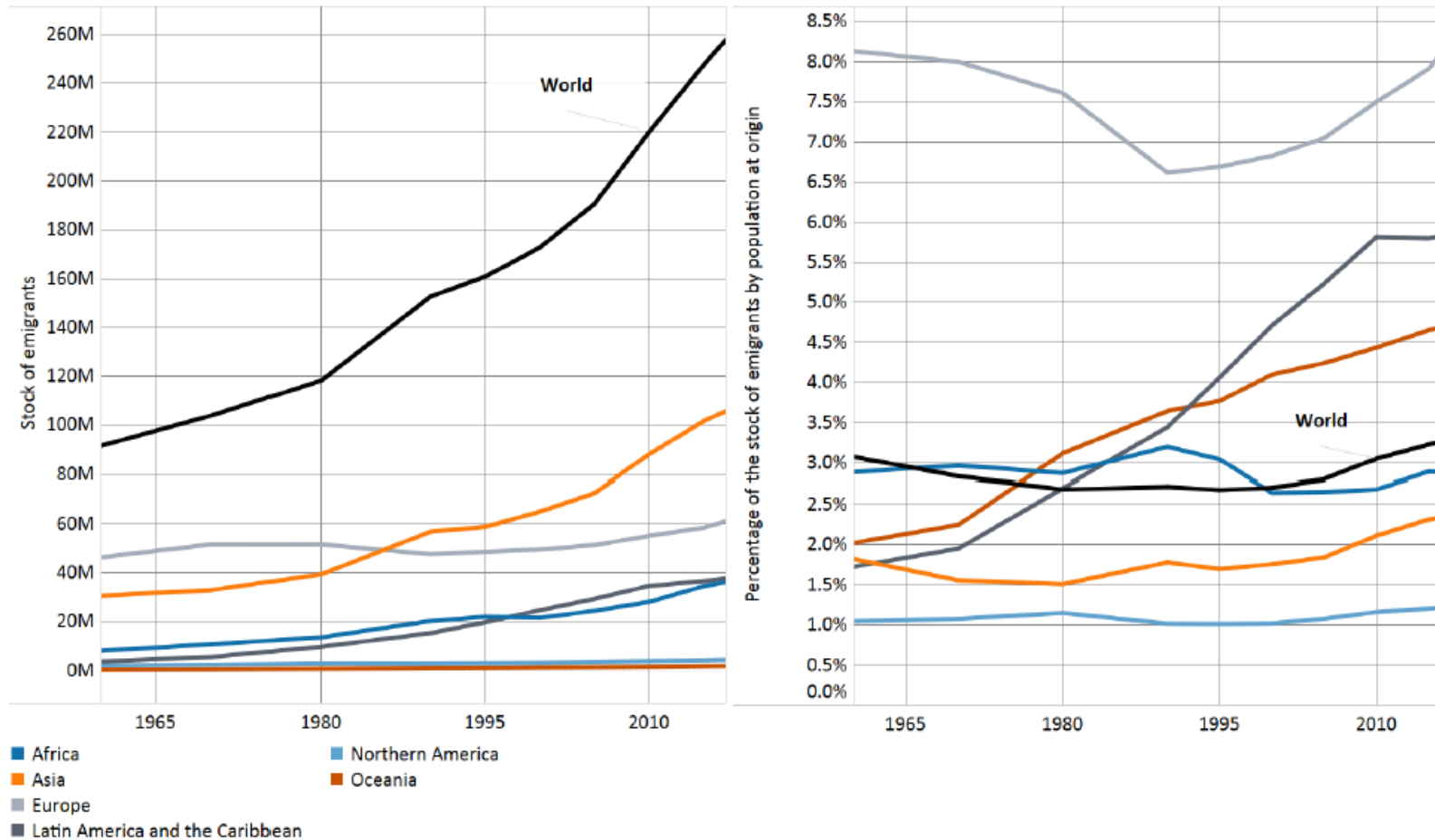
Figure 2 Evolution of the stock of emigrants by continent of origin in absolute numbers (left) and as percentage of the population at the origin (right). Source: own elaboration based on UNDESA and WB.
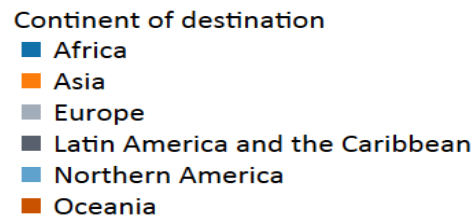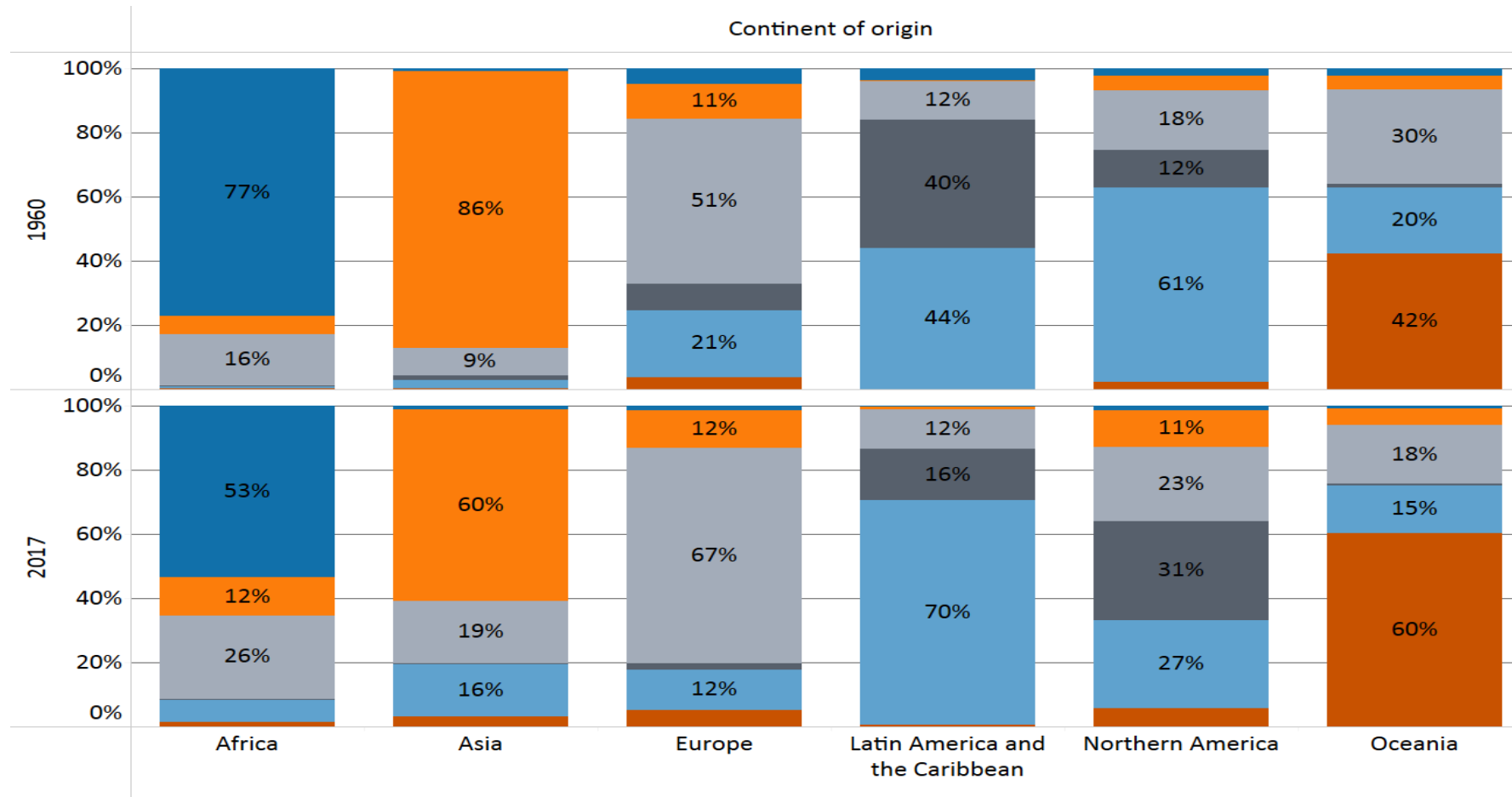
Figure 3 Breakdown of the stock of migrants for each continent of origin (100%) across continents of destination (colours) in 2017 and 1960. Source: own elaboration based on UNDESA and WB.

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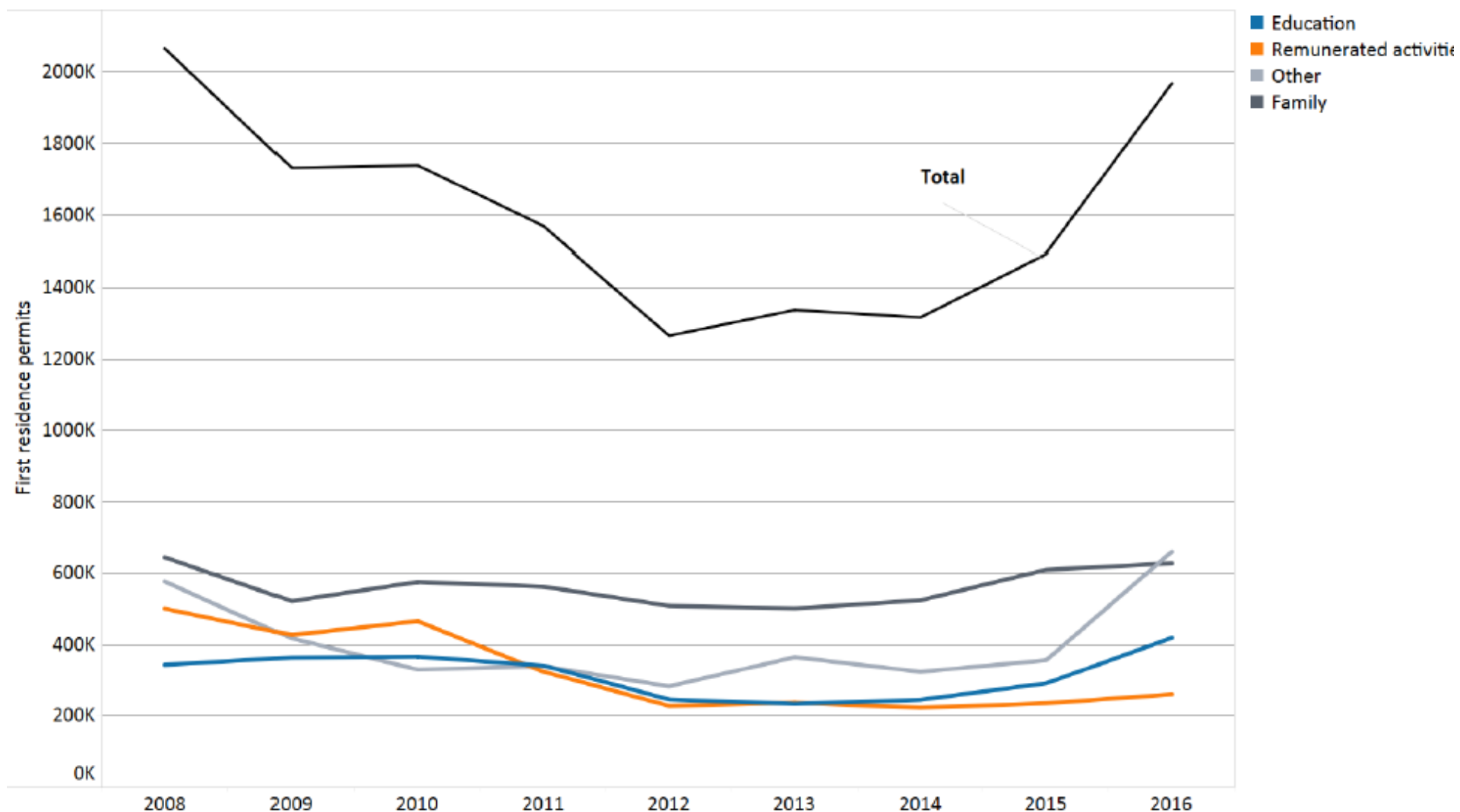
Figure 6 First residence permits by type in EU28, 2008-2016. Source: own elaboration based on EUROSTAT.
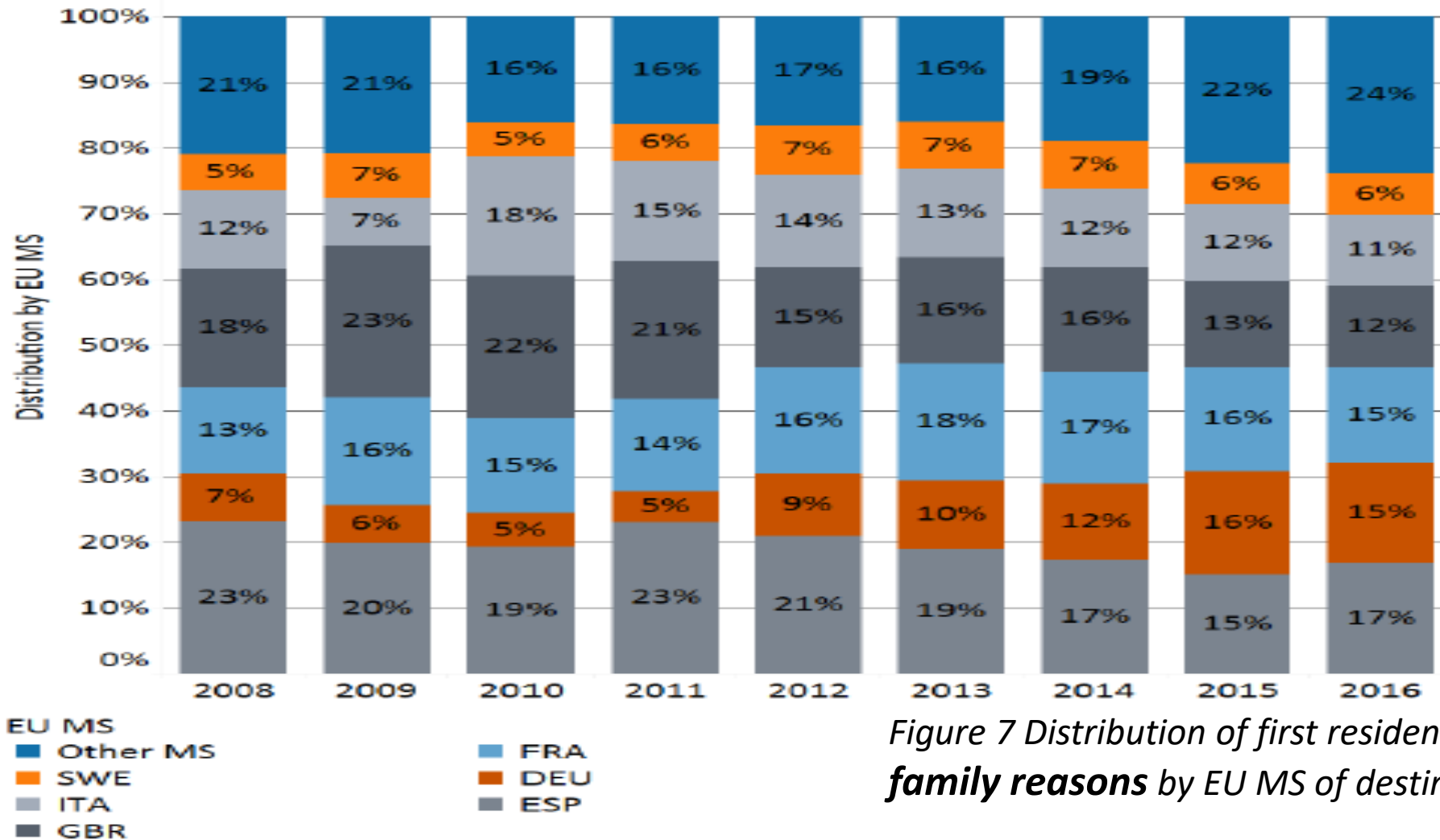
*Figure 7 Distribution of first residence permits for **family reasons** by EU MS of destination*
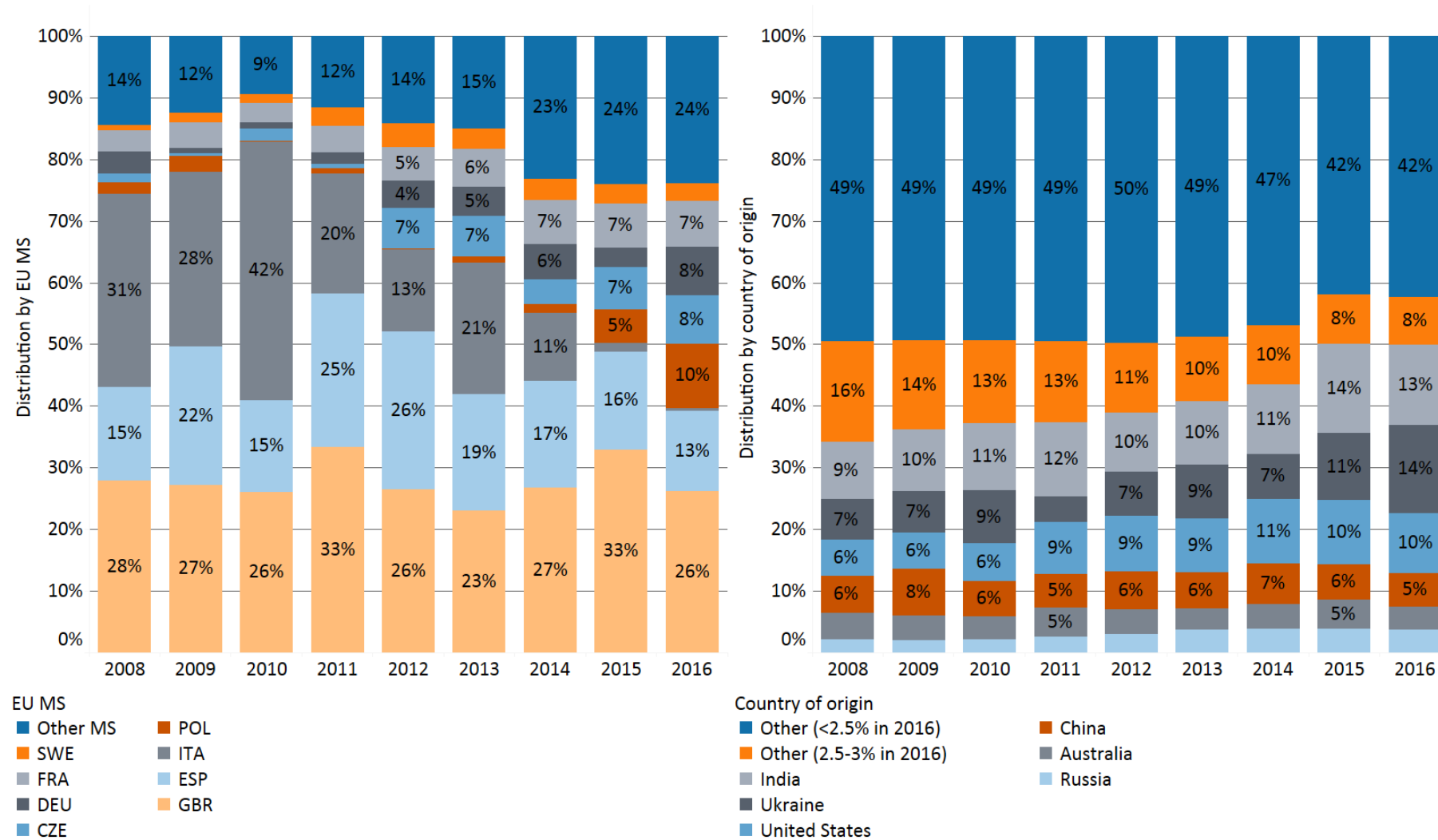
Figure 8 Distribution of first residence permits for work reasons by EU MS of destination (left) and by country of origin (right). Source: own elaboration based on EUROSTAT

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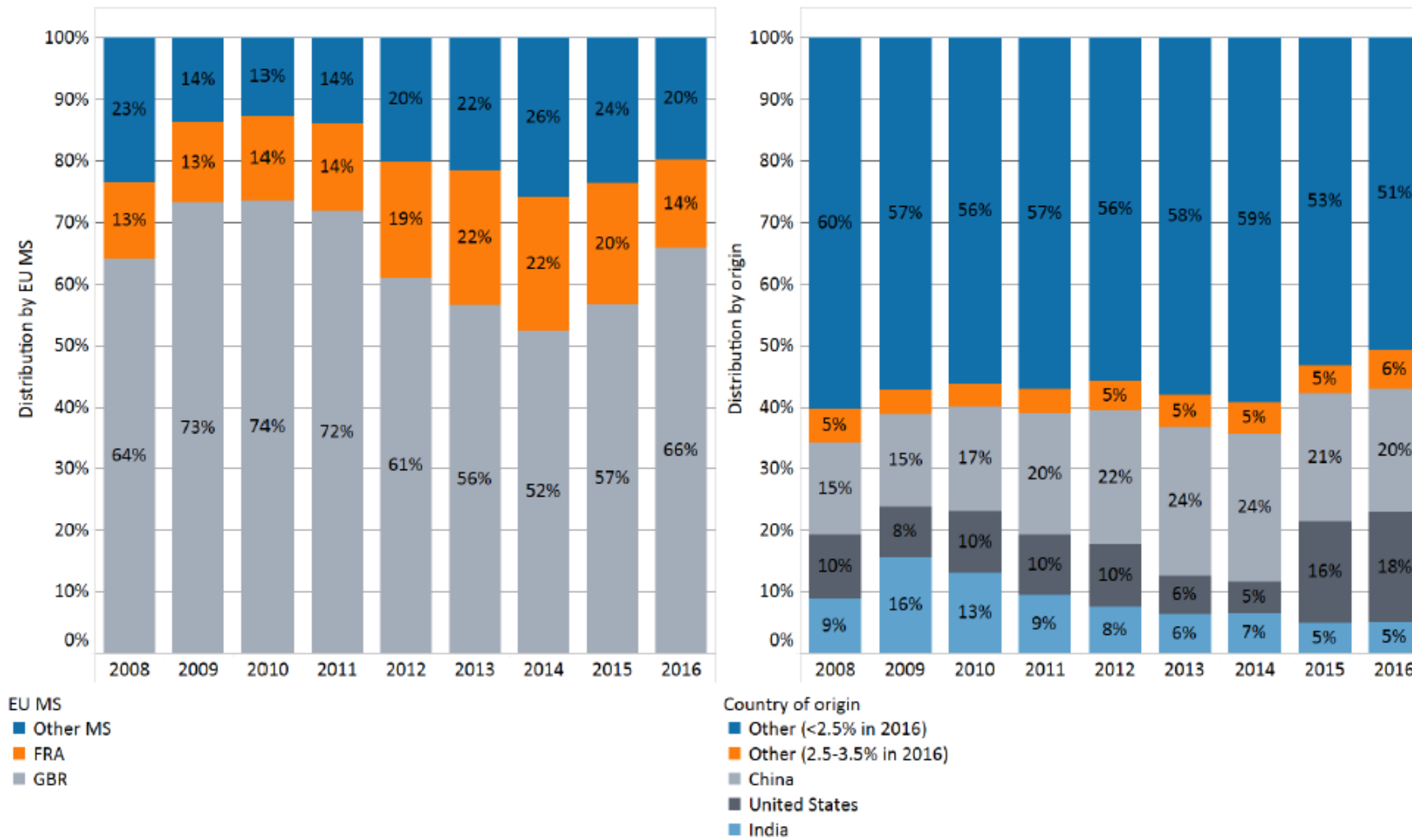
Figure 9 Distribution of first residence permits for education reasons by EU MS of destination (left) and by country of origin (right).
Source: own elaboration based on EUROSTAT.

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Figure 2.9 Income differentials in 2030: Average GDP per worker as % of EU average in selected regions
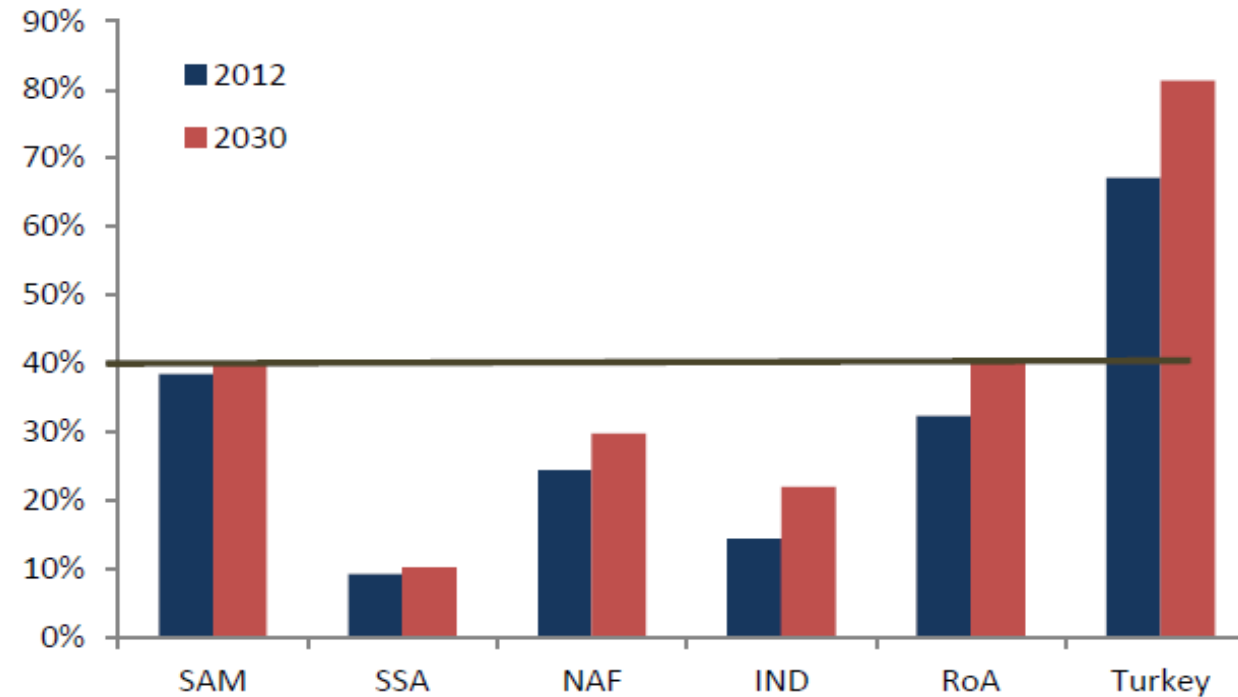
Note: SAM = South America, SSA = Sub-Saharan Africa, NAF = North Africa, IND = India and RoA = Rest of Asia.

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Wage inequality as a driver of migration?

Figure: US wages are the 'economic opportunity of a lifetime' for foreign workers

Wages for Identical Workers ($US/hour)
- in the United States
- at home

Source: Michael Clemens, Claudio Montenegro, and Lant Pritchett, "The Place Premium: Wage Differences for Identical Workers across the US Border," CGD Working Paper 148 (Washington: Center for Global Development, 2008).

Source: https://www.cgdev.org/sites/default/files/archive/doc/full_text/CGDBriefs/3120183/time-bound-labor-access.html

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Figure 2.10 Level of urbanisation by region, 2011 and 2030

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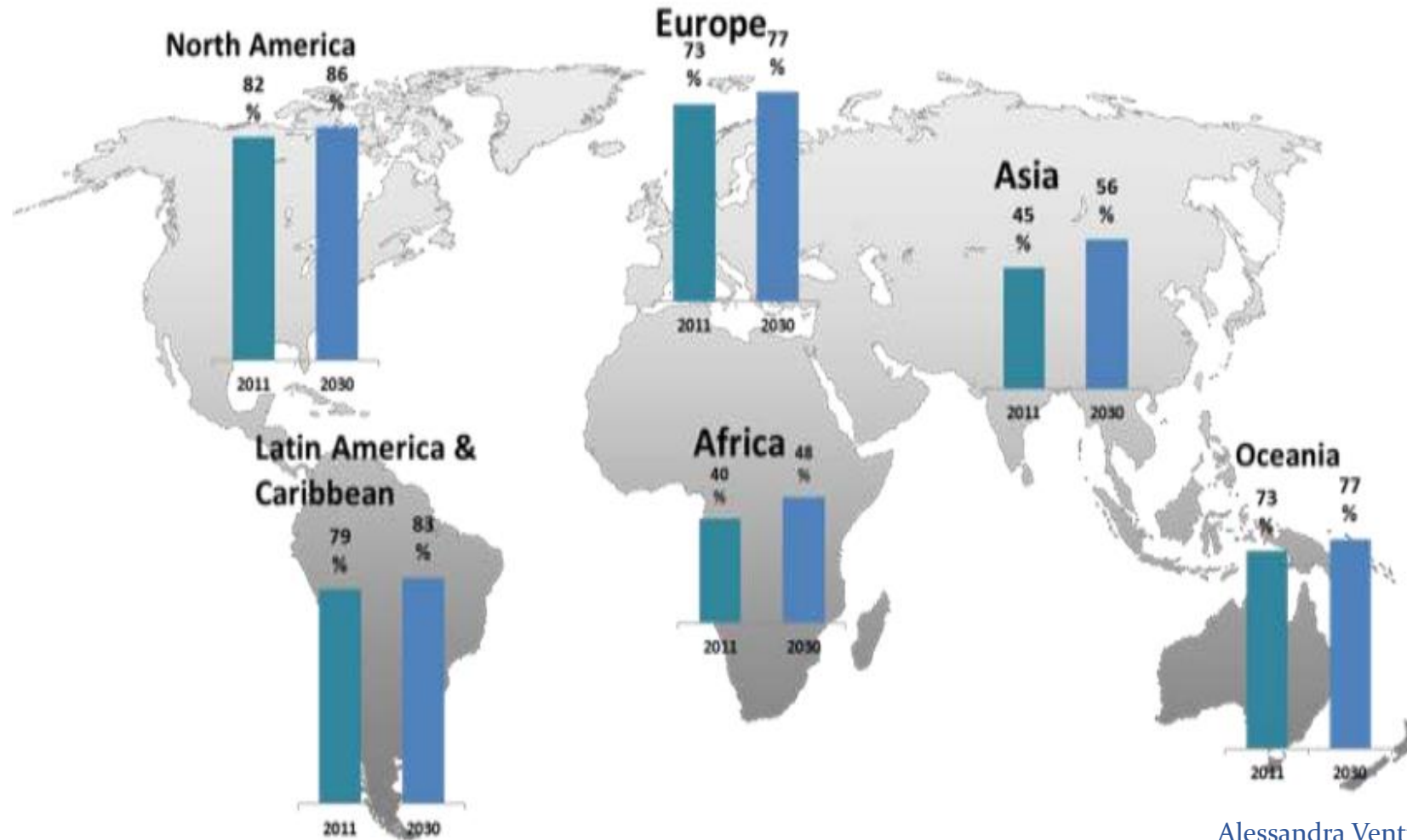
Figure 2.11 Urbanisation and income (change between 1985 and 2010)
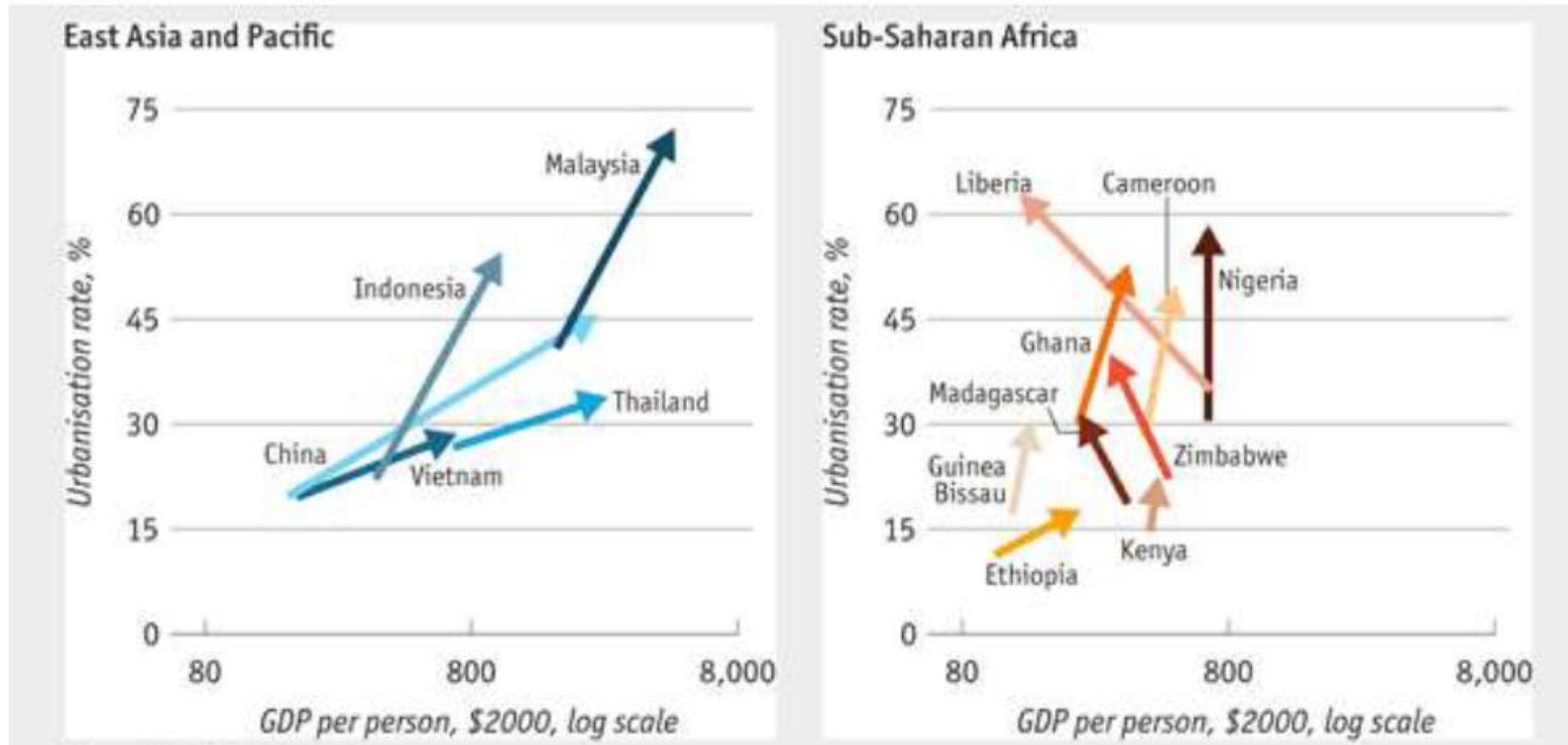
Source: World Bank

Figure 2.6 Changes in the global labour force (1980-2030)

(a) Total labour force (millions)

(b) Female participation rates
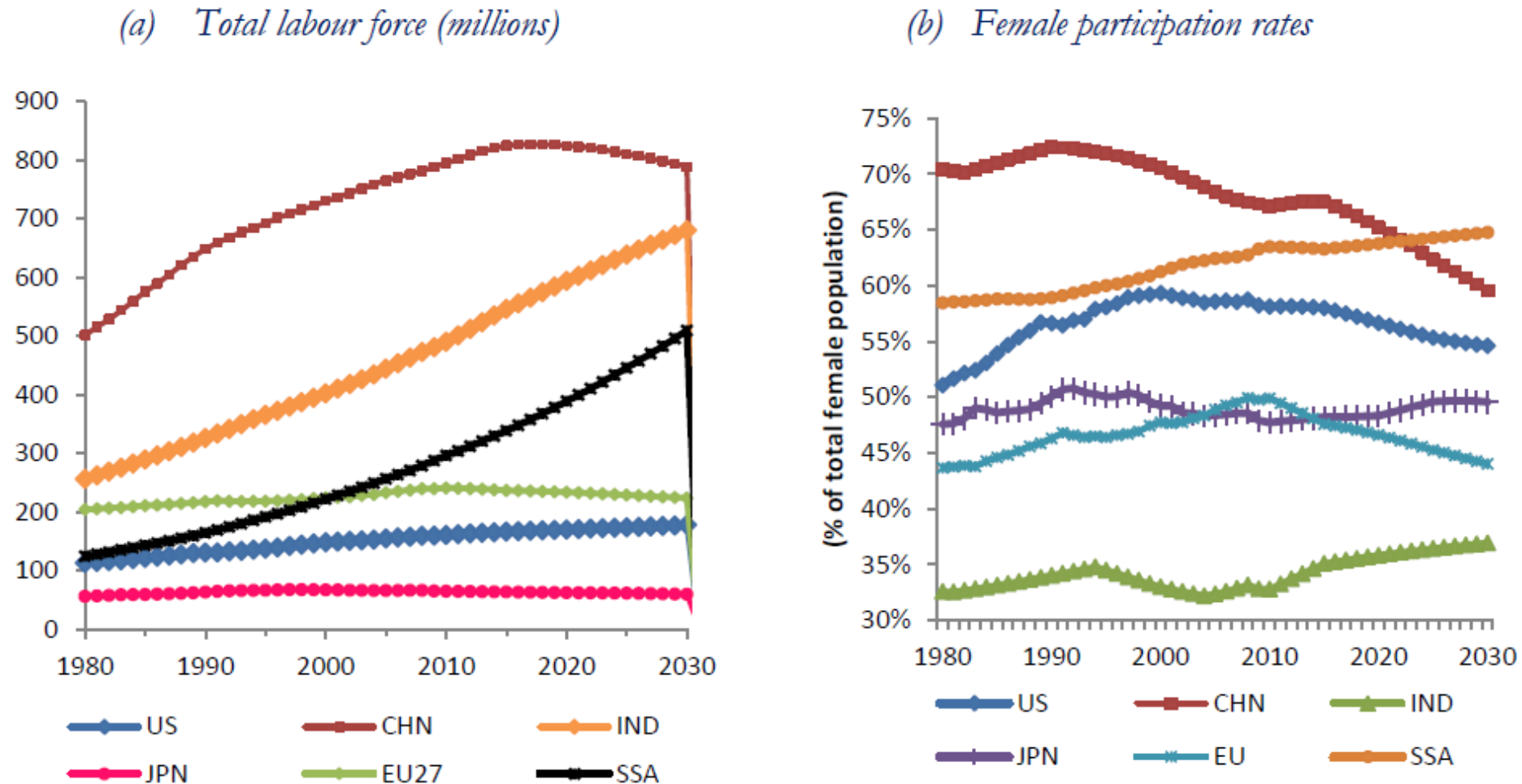
Source: MaGE estimations and projections.

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Figure 2.7 Paths of tertiary education expansion: MaGE Central scenario
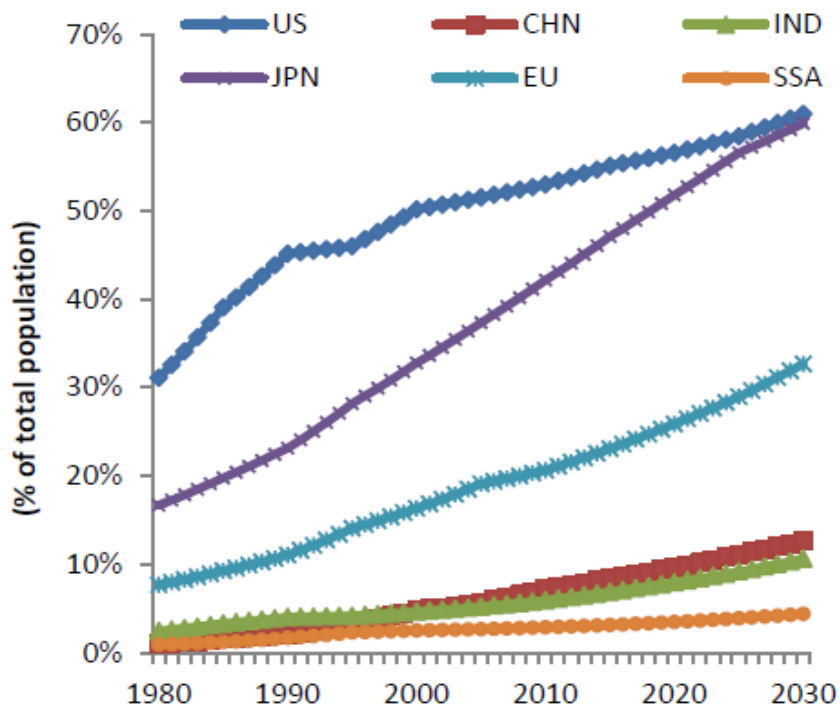
Figure 2.8 Paths of tertiary education expansion: MaGE alternative scenario

Source: MaGE estimations and projections.

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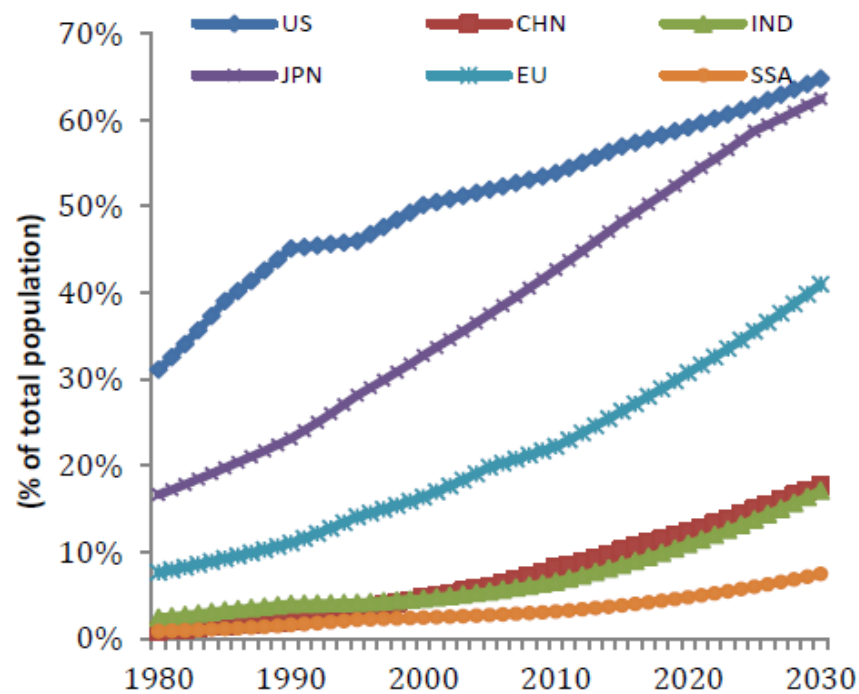
Many theories and many approaches

- Economic, Sociologic
- Micro, Macro

There is no single theory widely accepted by social scientists to account for emergence and perpetuation of international migration

• Fragmented set of theories developed in isolation from one another and usually segmented by disciplinary boundaries e.g. economics

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1- Macro Model

- **2- MICRO Model**:

- 2-a Human capital investment individual decision

- 2-b Family decision as insurance against income risk (Stark)

- 2-c Different utility of consumption (Faini)

- 2-d Roy Model self selection and skill

- **3-SOCIOLOGICAL model**

- **4-GRAVITY model**

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- **Migration theory 1885 British Geographer Ravenstein**
- Origin destination migration is function of spatial disequilibria:
- Harris Todaro 1970 economic disequilibria
- Lee 1966 demographic disequilibria
- PUSH-PULL
- Demographic reasons and poverty are not sufficient conditions
- Macro and individual decisions

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Macro model 1. HIcks

- Hicks (1932: 76): *„differences in net economic advantages,*
- *Chiefly differences in wages, are the main causes of migration"*

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Assumptions:

- People are rational and tend to maximize their utility
- People are mobile
- -migration occur without costs
- -there is no risk or uncertainty

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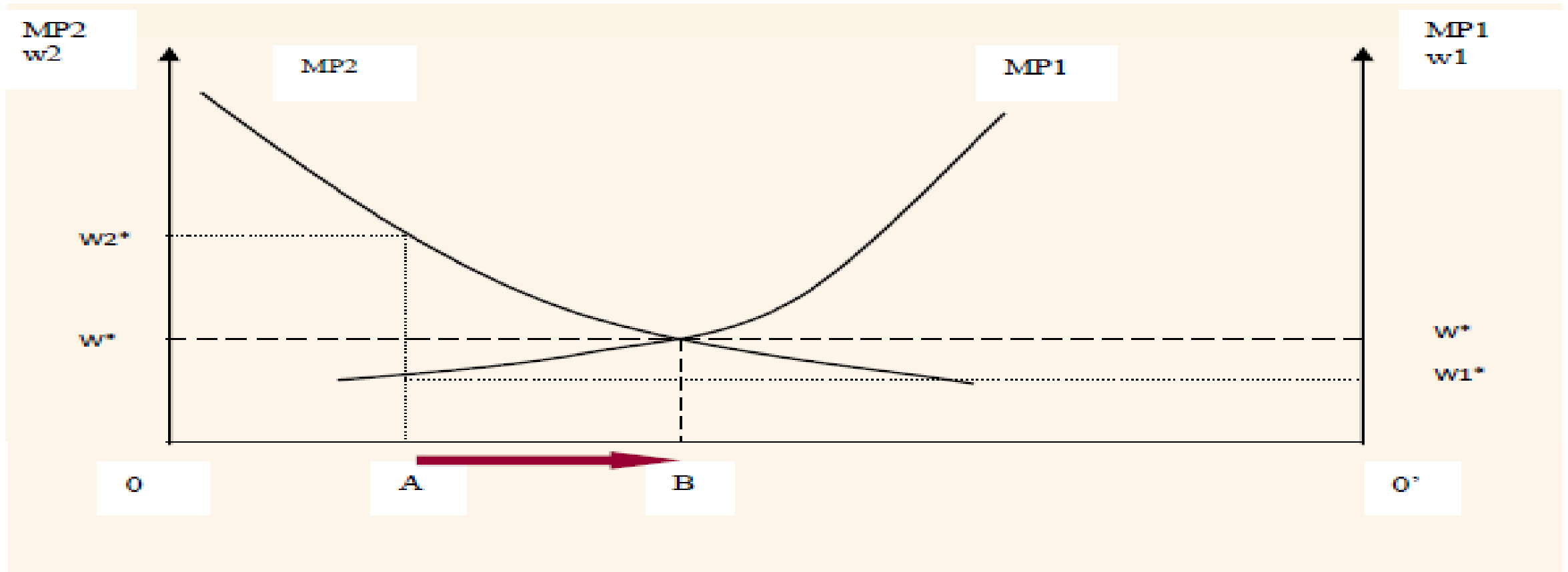
Source: Bhagwati and Srinivasan 1998: 468.

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2 Micro

2.a Individual model Investment in migration (Todaro)

- Assumptions:
  - Individuals behave in a rational way, they gather all information and
    are capable to compare different locations
  - Individuals have costless access to perfect information
  - Individuals maximize their utility
  - Migration has a temporal dimension – preferences regarding time and risk are important, individuals exhibit a more or less preference for the present
  - **Migration decision is taken individually, social context is neglected.**

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- **Labour mobility according to the human capital theory**

- Migration as an investment decision met with an intention to find maximal pay

- for a given level of skills investment which improves the productivity of human capital

- Idea: workers calculate the value of the employment opportunities available in each of the alternative labour markets, net out the costs of making the move

- and choose option which maximizes the net present value of lifetime earnings

- Migration decision is guided by the comparison of the present value of lifetime

- earnings in the alternative employment opportunities net gain positive

- **Problems:** risk and uncertainty, costs (pecuniary and non-pecuniary)

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- Basic assumption human capital model:
  - 1 Migration –→ higher wage
  - 2   Individuals' choice is based on financial considerations
- Investment decision:
  - Costs: direct expenses & forgone earnings
  - Benefits: higher wage (and employment rate)

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Migration – Theory
Graphical representation of migration choice

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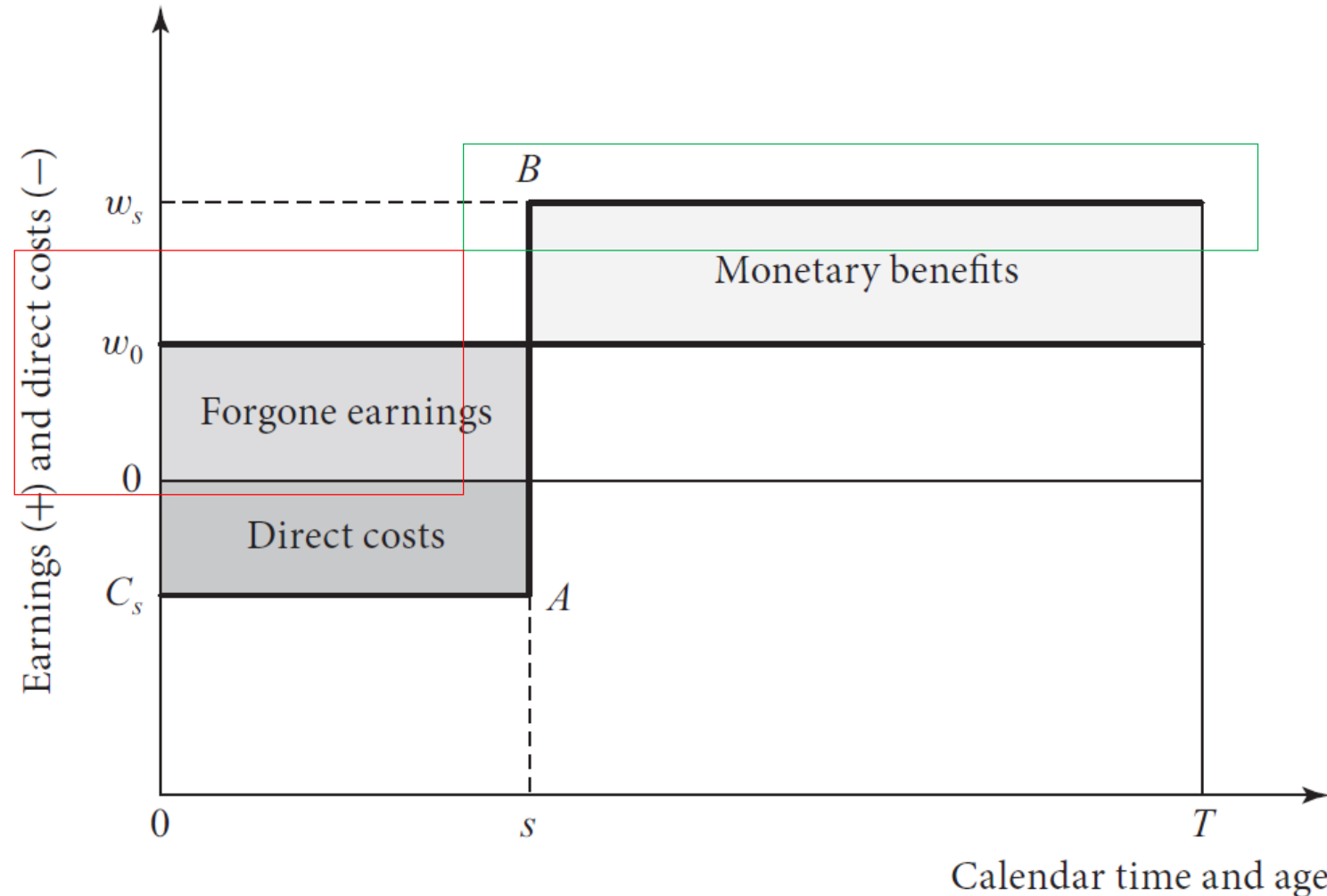
Moving decision – theory

- $PV_o = w_o + \sum_{t=1}^{T} w_o/(1+r)^t \approx w_o + w_o/r$

- $PV_{s+1} = -Cs + \sum_{t=1}^{T} w_{s+1}/(1+r)^t \approx -C_s + w_{s+1}/r$

- Migrate until $PV_o = PV_{s+1}$: $(w_{s+1} - w_o)/r = w_o + C_s$

- which means approximately: $\Delta w_s/w_o = r$

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year	2000	2001	2002
time	t	t+1	t+2
capital	100		
interest rate r	0.10	110	121
interest rate r	0.20	120	144

at the end of 3 periods the capital is 121 with an interest rate of 10%
at the end of 3 periods the capital is 144 with an interest rate of 20%

The higher the interest rate the higher the return,
the longer the period the higher the return
 Ko   K1= Ko(1+r) K2=K1(1+r) K2= Ko(1+r) (1+r)
Attualization
K2/ (1+r)(1+r)   121/(1,1*1,1)= 100   r=0.1
                 121/(1,2*1,2)= 84   r=0.2

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$$M = f(Wd - Wo) \qquad (1)$$

Where $f > 0$, $M = 1,0$, and $M = 1$ if $Wd > Wo$ and $M = 0$ if $Wd < Wo$.

$$Wd = \int_0^t Yd_t^{-rt}dt - C \qquad (2)$$

$$Wo = \int_0^t Yoe^{-rt}dt \qquad (3)$$

Where M indicates the individual's decision to migrate, positive or zero, Wi $i = d,o$ represents the flow of future incomes discounted for the present, r is the discount rate, Yi is the income in the two areas, and C is the cost of migration.

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- **More problems:**
- • *Potential migrants have perfect and costless information*
- Information is scarce and costly and limited information about economic
- and non-economic factors may lead to second-best solutions – individual may
- decide to stay even if it would be possible to realize a higher level of utility in a
- different location.
- • *Potential migrants behave in unconditionally rational manner*
- Rational behavior in a situation where a decision between different options has
- to be made a decision maker possessing complete and unconstrained information
- opts for the alternative that allows him to realize the highest level of utility
- rather: *Bounded (conditional) rationality* - conditional on the incomplete
- information
- • *The potential migrant is an autonomous human being with no social context*

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Table 2.2. *Economic model of human capital*

	C	LDIF	Eo	Ed						Do	Db	Dg	Dsv	Rsq	n	F	Chow	TEt	LM
2Po	−1.8	2.2	.6	9.9						−3.1**		−1.2**	−2**	.54	96	19**	2.5	9	73
	(−1.3)	(1.8)	(.13)	(1.9)						(−5)		(−3.4)	(−3)	(−10)					

	C	LDIF	Uo	Ud						Do	Db	Dg	Dsv	Rsq	n	F			
2Sp	−1.3	3.2*	.05*	−.06*						−3.6*	−4.9**	0.3	−2.4**	.85	139	115**	6	13	77
	(−1.7)	(2.2)	(2)	(−9)						(−8)	(−10)	(.9)	(−3)						

	C	LDIF	Uo	Ed						Do	Db	Du	Dsv	Rsq	n	F			
2Gr	−.2	2	−.07**	6**						−4.2**	−3.3**	−3.7*	−4.2**	.86	117	105**	1.4	5.7	62
	(−.3)	(2.4)	(−3.6)	(2.3)						(−24)	(−16)	(−16)	(−22)						

	C	LDIF	LDIF80	Eo	Eo80	Ed	Ed80	D80	Df	Do	Db	Du	Dsv	Rsq	n	F			
2It	−.18	2.9**	−2.8**	−12**	10	11**	−10**	−.09	−.10	−4.2**	−2.7**	−5.4**	−1.9**	.96	166	343*	9	2.5	43
	(−.9)	(3.8)	(−3.3)	(−3.5)	(.7)	(3.9)	(−3)	(−.7)	(−.9)	(−47)	(−19)	(−49)	(−5.8)						

C = constant.

Dependent variable: Emigration rate logarithm.

LDIF = per-capita income differential log receiving country over country of origin, Eo, Ed = level of increase in employment in the receiving country and the country of origin, Uo, Ud = level of unemployment in receiving country and country of origin.

Do = dummy for Netherlands, Db = Belgium, Dsv = Switzerland, Df = France, Dg = Germans for Spain and Portugal, Du = Sweden for Greece and Italy.

The constant for Italy and Greece is Germany; for Spain and Portugal, France.

Statistics: Rsq, n = number of observations, F = test of coefficients other than zero, t statistic under the corresponding variable. TEt = heteroschedasticity test of squared fitted values; Chow = test of parameter constants, LM = test of autocorrelation residuals, ** significant at 99% and * significant at 95%.

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2.B   Family decision as insurance against income risk (Stark)

- **Assumptions:**

- Labour is a specific factor of production

- Individuals are acting in a social context focus on the family or the household

- Migration is to be perceived as a complex social phenomenon: *„Migration can*

- *be looked upon as a process of innovation, adoption and diffusion"* (Stark and Bloom 1985: 176)

- Migration does not have to be permanent, in contemporary world temporary

- mobility is very common.

- **Side note:** Role of family / houshehold in migration social structures, cognitive structures, gender roles etc. (Mincer, Boyd, Harbison etc.)

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Key idea:

migration decisions are not made by isolated individuals but by larger units of related people (families, households, communities)

people can act collectively not only to maximize expected income but also

to **minimize risk** and to **loosen constraints** associated with various kinds of   **market failures**

households are able to control risks to their economic well-being by diversifying the allocation of resources (family labour) to different labour markets.

• **Critical** risks and market failures: agriculture, labour market, pension system, financial market and credit market

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- **Migration and risk diversification – an example:**

- A village household – 2 adults with following income patterns:

- „Good year" – 100 x 2 = 200

- „Bad year" – 50 x 2 = 100

- What happened if the amount of money necessary to survive equals 150?

- Migration to the town if the income in the town is perfectly negatively

- correlated with village income there is a chance to minimize risk

- completely...

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Model 2.C Utility of Consumtion (Faini)

$$|U(Wi, fi)|$$

where W identifies the wage, f is the localization factor, and i is the area of destination (d) and the area of origin (o). It is reasonable to assume that wages in the area of destination are higher than wages in the area of departure, so we have $W_d > W_o$ and $f_o > f_d$. Migration will take place if the wage differential is large enough to compensate the worker for the loss of utility due to localization being less attractive.

Migration will take place if $U(Wd, fd) > U(Wo, fo)$. Later, the authors

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Why don't we observe more migration?

- Migration is costly: monetary and non-monetary costs

Emigrant stocks, average across countries

Source: https://www.newsdeeply.com/refugees/community/2016/10/31/development-aid-to-deter-migration-will-do-nothing-of-the-kind
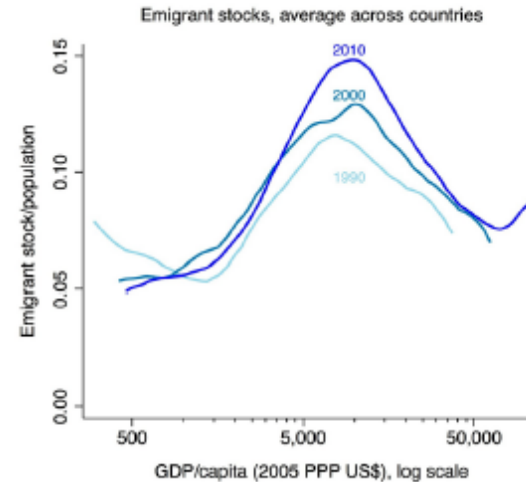
- Multitude of other factors shape migration decisions
- Destinations: restrictive immigration policies

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$$Ln(M/F) = \theta LnX_o + \theta Ln(W_d/W_o) - \theta p LnWo + \theta Ln(f_o - f_d)$$
$$+ \theta(1+p)Lnf_o + \varepsilon a LnW_o + \varepsilon b(LnWo)^2 - \varepsilon LnC$$

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Empirical version

- Testing the migration choice is very complex

- Which data could we use?

- Individual data with retrospective question

- Aggregate data in the country of destination

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	Greece	Spain	Portugal	Turkey
Constant	-189 (4.17)	-160 (1.44)	-159 (3.87)	-234 (2.6)
LY	45.2 (4.33)	36.7 (1.82)	37.9 (3.77)	57.9 (2.5)
LYSQ	-2.7 (4.40)	-2.1 (1.77)	-2.3 (3.69)	-3.6 (2.4)
LDIF	3.4 (1.68)	4.36 (2.72)	3.12 (3.23)	.39 (.32)
U_i [1]	.03 (1.03)	-.01 (.56)	.42 (3.73)	.01 (.33)
U_n	-.11 (2.30)	-.08 (1.07)	-.09 (1.68)	-.22 (4.1)
EG_n [2]	4.6 (1.62)	10.4 (2.52)	10.3 (2.19)	15.6 (3.1)
$EG80_n$	------	------	------	8.26 (2.0)
$\ln (M/P)_{-1}$	.37 (5.90)	.65 (5.97)	.34 (2.45)	.26 (2.3)
D	-.87 (11.2)	------	.84 (13.7)	------
R^2	.96	.94	.96	.91
DW	1.48	2.25	1.92	1.89
SER	.15	.21	.18	.20
LM ($\chi^2(1)$)	2.37	.41	.05	.28
Chow ($F_{1,18}$)	0.17	0.41	0.32	3.37
H ($\chi^2(1)$)	.62	.61	.61	5.87
Sample period	1961-1988	1961-1988	1961-1988	1962-1988

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Source Country

Destination Country

"Push" Factors

famine
poverty
low wages
unemployment
overpopulation
high taxes
discrimination
religious persecution
civil war
violence and crime
forced military service
social immobility

"Stay" factors

family ties
friendships
social status
cultural familiarity
employment
property
familiarity
certainty
political privileges

?

Costs of Moving

transport costs
dangers of the voyage
time of travel
lost income during move

Formal Exit Barriers

Exit Visa
ExitTax
Prohibition
Imprisonment
Penalties on Family

Formal Entry Barriers

Entry Visa
Quota
Prohibition
Imprisonment
Fines

"Pull" factors

high wages
employment
property rights
personal freedom
economic freedom
law and order
peace
religious freedom
educational opportunity
social mobility
low taxes
family reunion

"Stay away" factors

language barriers
cultural barriers
discrimination
low social status
unemployment
low wages
lack of political rights
unfamiliarity
uncertainty
war
crime

Figure 1 The immigration decision. (Bodvarsson and Van den Berg 2013: 6)

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2.D Selection and Sorting The Roy model

Although it is important to determine the size and direction of migration flows, it is equally important to determine *which* persons find it most worthwhile to migrate to the receiving country. Even in the absence of legal restrictions impeding international migration, only a subset of persons in the host country chooses to move.

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Positive and negative selection of migrants varies across countries

Figure: Immigrant stock as percent of population, 1980-2010, by skill level

Source: MEDAM Assessment report (2017)

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What explains selection and sorting of migrants?

Utility from migration = attractiveness of destination - costs of migration

Individuals' characteristics: education (high- vs. low-skilled), health, risk aversion, etc
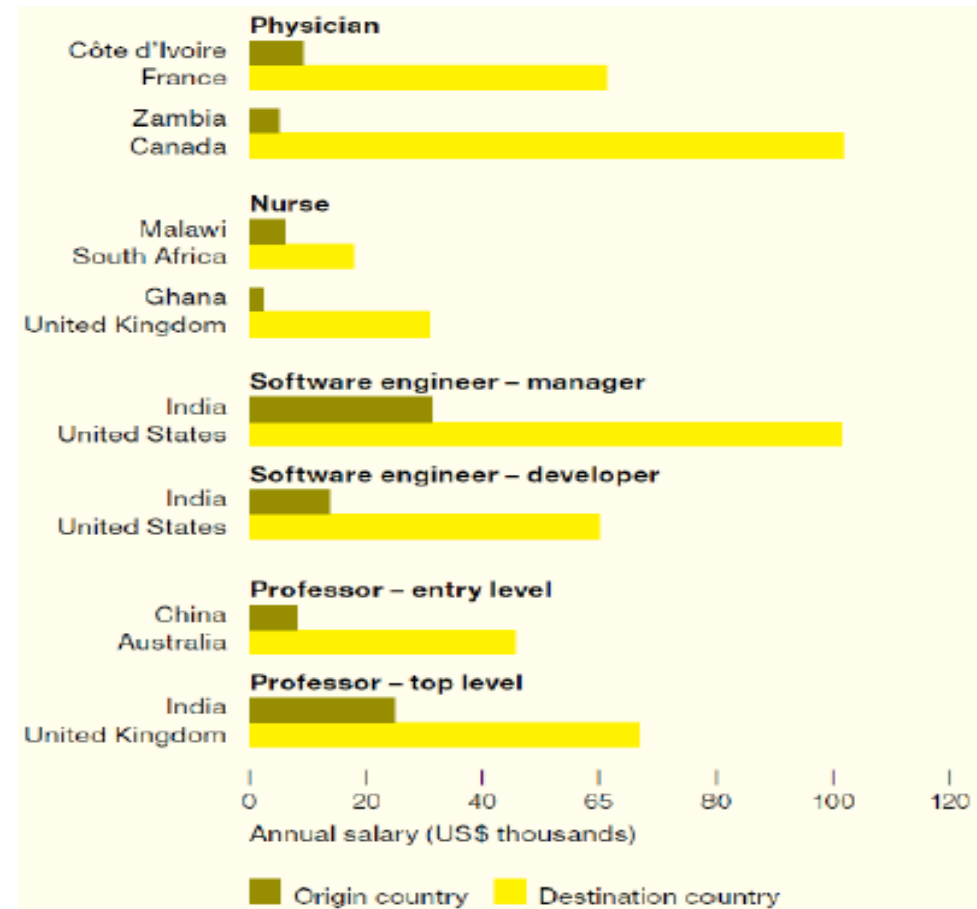
Pull and push factors
- Income at destination
- Unemployment rate at destination
- Amenities and institutions at destination
- Poverty vs. credit constraints at origin
- Environment, conflict at origin
- Distance, language, cultural proximity
- Networks
- Immigration policies

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Wage inequality as a driver of migration?

Figure: **Wage gains for qualified migrants**

Source: Human Development Report 2009, Figure 3.2

2.D Roy Model

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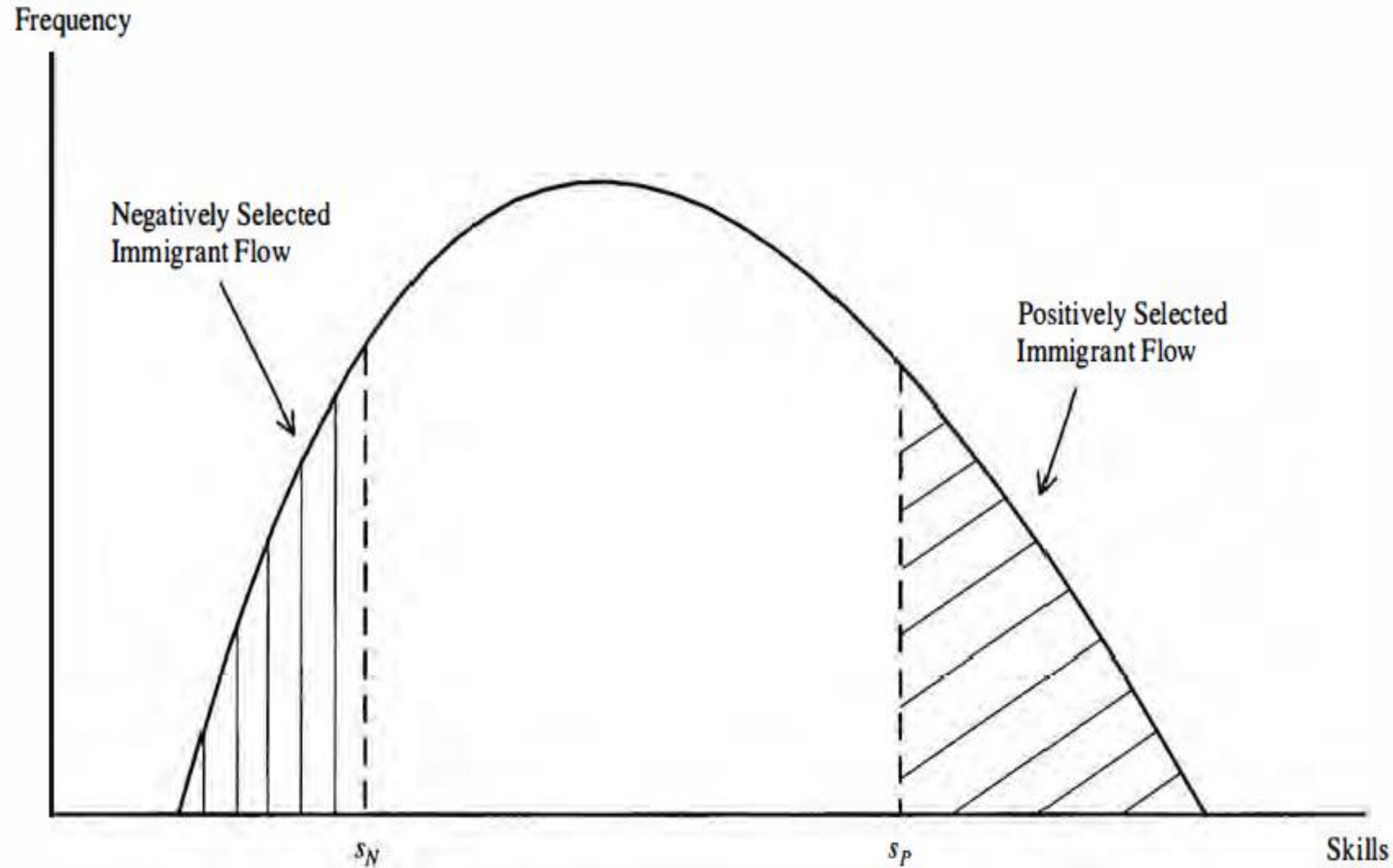
ro and r1 are the return of skill in the two labour markets
if abilities are perfectly transferable from one labour market to the
other

$$\log w_0 = \alpha_0 + r_0 s,$$

$$\log w_1 = \alpha_1 + r_1 s,$$

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Self Selection

(a) Positive selection

(b) Negative selection

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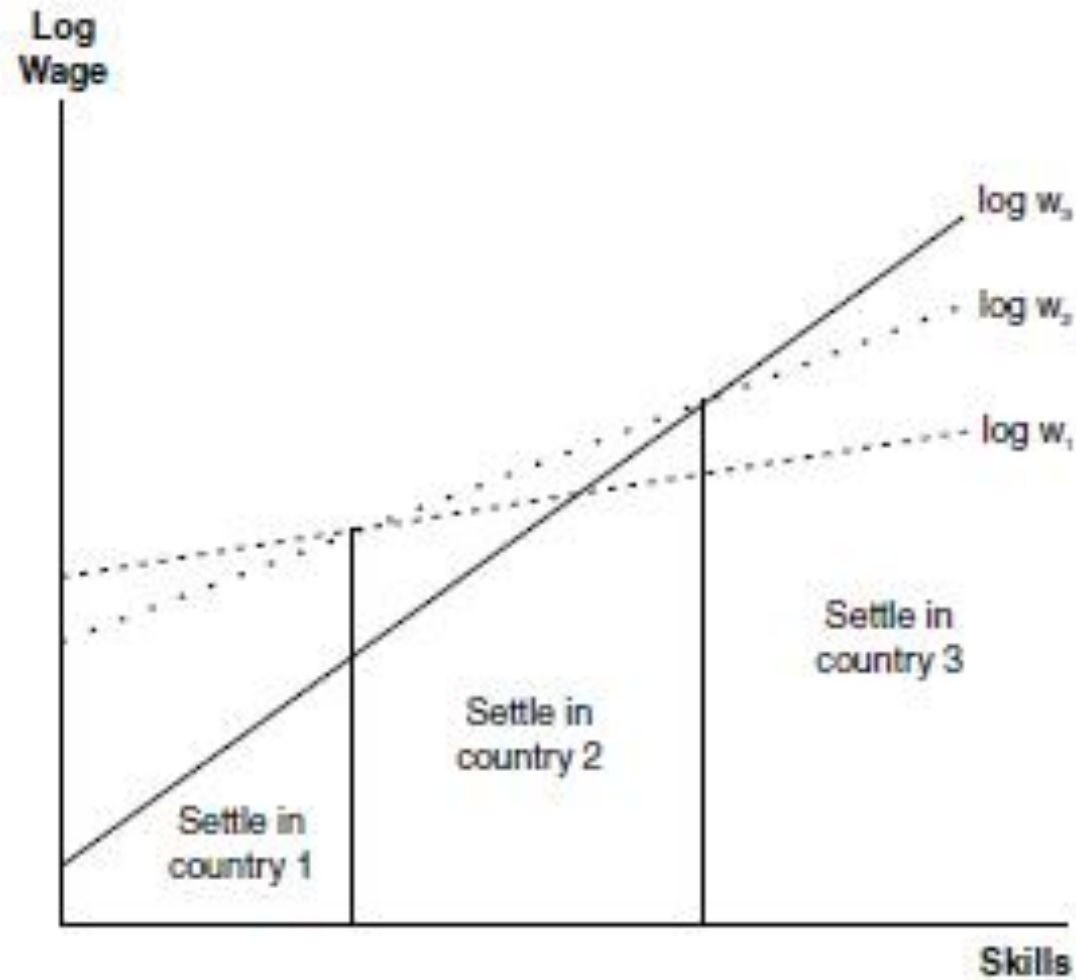
Figure 1.2. Selection in a Roy Model with Multiple Destinations

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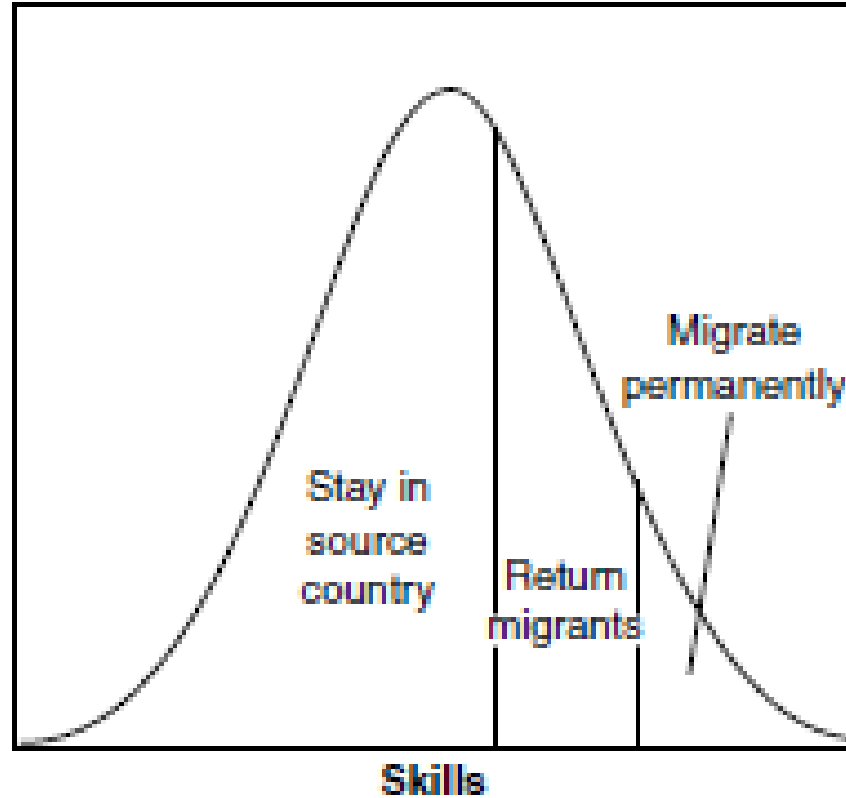
A. Positive Selection
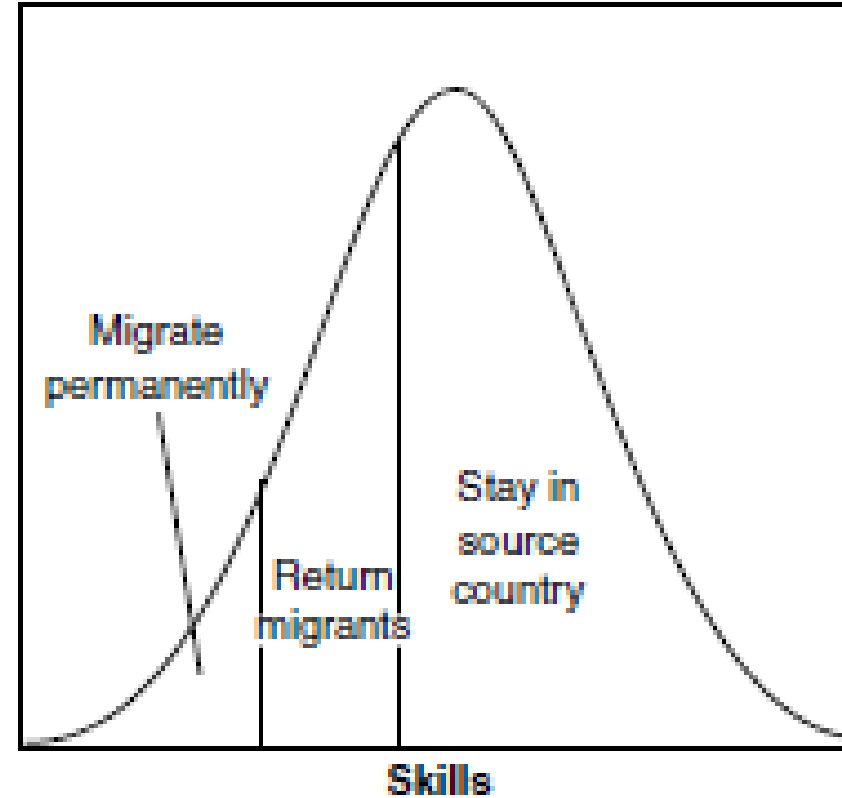
B. Negative Selection

Figure 1.3. Distribution of Skills and Selection in a Roy Model with Return Migration

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Theoretical considerations: economic migration

- People choose their location based on expected returns to skills (net of migration costs)

- Income distributions (inequality) at destination and origin matter

- Countries with high inequality (ex: USA, UK) attract more high-skilled migrants empirically confirmed

- If an origin country has more unequal income distribution than a destination (ex: a pair Mexico-USA), emigrants will be negatively selected and vice versa (ex: a pair Germany-USA) mixed evidence

- Skill-dependence of migration costs + financial constraints attenuate potential negative self-selection

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3 Sociological model or network effect

The cost of migration and the information of the destination country are diffused by the community abroad, the diaspora.

The network drives the inflows.

In the empirical version is used the stock of migrants abroad or the sum on the last 10 years inflows

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4 Gravity model

- Empirical versions of the gravitational approach to migration do not have

- a definite standard form, but it is generally represented as [a,b].[11]

- (a) $Mij/(PiPj) = Bi\ Aj\ f(Dij)$

- (b) $Mij = Pi\ Pj\ Bi\ Aj\ \exp(Dij)$ **(20)**

- where Mij represents the net flow of immigrants from i to j ;

- as previously mentioned, Pi,j is the population in i and j ;

- Aj and Bi represent the factors of attraction and expulsion;

- and D is the distance between i and j.

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Empirical evidence: gravity model to explain migration flows between countries

$$Flow_{ijt} = \beta + \beta_0 GDP_{it-1} + \beta_1 GDP_{jt-1} + \beta_2 dist_{ij} + \beta_3 border_{ij} +$$
$$+ \beta_4 comlang_{ij} + \beta_5 colony_{ij} + \beta_6 GDP_{it-1} * immigpol_{jt} +$$
$$+ \beta_7 GDP_{jt-1} * immigpol_{jt} + \beta_8 youngpop_{it-1} + \epsilon_{ijt}$$

- i - origin country, j - destination, t - year

- $Flow_{ijt}$ - number of immigrants from i coming to j in a given year

- β's - important! the coefficients show the sign and magnitude of the effect, i.e. β_1 shows how $Flow$ changes if GDP at origin changes

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Equation	1	2	3	4	5	6	7	8	9	10
Dependent variable					**Emigration rate**					
log per worker gdp (destination)	24.62	24.79	29.41	29.34	33.01	52.05	167.41	103.07	17.35	20.66
	11.30*	11.27*	11.48*	11.53*	12.55**	23.09*	57.55**	40.79*	8.15*	9.40*
log per worker gdp (origin)	-0.77	-1.03	3.32	3.94	-9.04	-2.4	-2.98	-1.44	7.63	7.45
	7.23	7.09	8.02	8.22	5.63	2.07	3.19	1.65	8.71	8.73
log distance	-41.01	-40.65	-40.66	-37.94		-9.61	-20.63	-10.94	-41.85	-41.84
	9.50**	9.08**	9.08**	8.00**		3.21**	6.18**	2.57**	8.41**	8.41**
land border	-28.16	-36.97	-36.95							
	19.67	23.23	23.28							
common language		22.05	22.03							
		15.87	15.87							
colony		3.03	2.89							
		16.89	16.93							
share of young population (origin)			242.36	248.25	165.76	292.87	521.77	155.71	281.48	283.68
			110.23*	112.35*	88.77+	118.63*	177.22**	60.80*	118.34*	116.99*
per worker gdp (destination)*immig policy change									7.56	17.17
									2.04**	5.84**
per worker gdp (origin)*immig policy change									-3.37	-3.2
									1.37*	1.44*
log distance*immig policy change									-10.2	-10.18
									2.50**	2.48**
share of young population (origin)*immig policy change									144.47	149.85
									48.43**	48.47**
immig policy change										-106.51
										69.14
number of observations	8010	8010	8010	8010	8010	551	606	650	8010	8010
R-squared	0.24	0.25	0.25	0.24	0.85	0.04	0.07	0.06	0.27	0.27

Source: Mayda, A. (2007) International migration: A panel data analysis of the determinants of bilateral flows.
Table 1 (p. 26)

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Table 1 – Benchmark Model (Pooled OLS)

	(1) $\ln(EM_{in,t}+1)$	(2) $\ln(EM_{in,t}+1)$	(3) $\ln(EM_{in,t}+1)$	(4) $\ln(EM_{in,t}+1)$	(5) $\ln(EM_{in,t}+1)$
$\ln(ImpTot_{ni,t-1})$		0.138*** (5.83)	0.144*** (5.85)	0.138*** (5.84)	0.143*** (5.81)
$\ln(ImpCultShare_{ni,t-1})$		0.068*** (6.74)	0.070*** (6.63)	0.066*** (6.59)	0.068*** (6.45)
$\ln(ImpCult)$	0.070** (7.02)				
$\ln(ExpTot_{in,t-1})$	0.062*** (5.18)	0.049*** (4.29)	0.047*** (3.84)	0.050*** (4.28)	0.047*** (3.84)
$\ln(ImmStock_{in,t-1})$	0.540*** (13.96)	0.534*** (13.77)	0.537*** (13.34)	0.527*** (13.52)	0.530*** (13.07)
$lndist_{ni}$	-0.311*** (-5.79)	-0.241*** (-4.29)	-0.231*** (-3.97)	-0.245*** (-4.34)	-0.236*** (-4.02)
$Colony_{ni}$	0.572*** (4.29)	0.537*** (4.12)	0.500*** (3.80)	0.551*** (4.20)	0.512*** (3.87)
$Lang_{ni}$	0.270*** (2.78)	0.279*** (2.85)	0.290*** (2.93)	0.288*** (2.94)	0.300*** (3.02)
$Comleg_{ni}$	0.078 (1.14)	0.059 (0.69)	0.055 (0.79)	0.060 (0.87)	0.054 (0.78)
$lnGDPpc_{i,t-1}$	-0.847*** (-7.01)	-0.881*** (-7.23)		-0.859*** (-6.97)	
$lnGDPpc_{n,t-1}$	0.541*** (5.59)	0.497*** (5.19)	0.467*** (4.27)		
S_i	X	X	X	X	X
S_n	X	X	X	X	X
S_t	X	X	X	X	X
$S_{n,t}$				X	X
$S_{i,t}$			X		X
N	8579	8565	8655	8565	8655
R-sq	0.85	0.85	0.85	0.85	0.87

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Standard Errors are clustered by country pair. The model includes the intercept

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Table 2.1. *Gravitational model*

Country	C	LFo	LFd	LDod	LDodSq	Rsq	n	F	Chow	T.Et.	LM
1 Portugal	7,105**	−10**	6.1**	−1,861**	121**	0.54	96	29**	6	10	69
	(4.8)	(−4.4)	(4.5)	(−4.8)	(4.8)						
1 Spain	6,336**	45**	22**	−1,716**	117**	0.62	144	61**	9	0.8	103
	(9.4)	(8)	(12)	(−9)	(−9.3)						
1 Greece	86**	4.2	2.7**	−10**	–	0.25	117	13**	5	26	99
	(5.3)	(1.5)	(2.3)	(−5)							
1 Italy	30**	0.5	0.18	−4**	–	0.37	166	33**	6	16	150
	(7.8)	(0.2)	(0.2)	(−12)							

C = constant,
Dependent variable: Emigration rate logarithm,
LFo = activity rate log of origin country, LFd = activity rate log of departure country,
LDod = distance from departure-destination country log, LDodSq = distance squared,
T.Et. = eteroschedasticity test of squared fitted values, Chow = test of constant parameters,
F = test of coefficients other than zero, LM = test of autocorrelation of residuals,
n = number of observations; t statistic of the corresponding variable in parentheses, ** 99% significant,
* 95% significant.

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The gravity model is as follows:

$$\ln(\text{EM}_{in,t}) = \ln(\text{ImpCult}_{ni,t-1}) + \ln(\text{ImmStock}_{in,t-1}) + \ln(\text{dist}_{ni}) + \text{Colony}_{ni} + \text{Lang}_{ni} + \text{Comleg}_{ni} + S_{i,t} + S_{n,t} + u_{ni,t} \quad (1)$$

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	(1) $\ln(EM_{in,t})$	(2) $\ln(EM_{in,t})$	(3) $\ln(EM_{in,t})$	(4) $\ln(EM_{in,t})$	(5) $\ln(EM_{in,t})$	(6) $\ln(EM_{in,t})$
$\ln(ImpTot_{ni,t-1})$		0.163***	0.167***	0.164***	0.167***	0.188***
		(6.74)	(6.70)	(6.76)	(6.68)	(6.11)
$\ln(ImpCultShare_{ni,t-1})$		0.071***	0.073***	0.069***	0.071***	0.071***
		(7.06)	(6.92)	(6.90)	(6.74)	(6.74)
$\ln(ExpTot_{ini,t-1})$						0.094***
						(4.30)
$\ln(ExpCultShare_{in,t-1})$						0.060**
						(3.32)
$\ln(ImpCult_{ni,t-1})$	0.084***					
	(8.26)					
$\ln(ImmStock_{in,t-1})$	0.550***	0.540***	0.544***	0.533***	0.536***	0.509***
	(14.45)	(14.00)	(13.62)	(13.78)	(13.34)	(10.27)
$lndist_{ni}$	-0.354***	-0.264***	-0.253***	-0.269***	-0.258***	-0.258***
	(-6.74)	(-4.78)	(-4.42)	(-4.84)	(-4.47)	(-4.47)
$Colony_{ni}$	0.589***	0.553***	0.518***	0.567***	0.531***	0.453**
	(4.38)	(4.22)	(3.93)	(4.30)	(4.00)	(3.22)
$Lang_{ni}$	0.240**	0.268**	0.270**	0.272**	0.279**	0.377***
	(2.46)	(2.68)	(2.74)	(2.77)	(2.82)	(3.42)
$Comleg_{ni}$	0.116	0.079	0.075	0.080	0.075	0.041
	(1.71	(1.16)	(1.08)	(1.17)	(1.08)	(0.52)
$lnGDPpc_{i,t-1}$	-0.845***	-0.912***		-0.890***		
	(-7.74)	(-7.49)		(-7.23)		
$lnGDPpc_{n,t-1}$	0.506***	0.495***	0.446***			
	(6.06)	(5.17)	(4.16)			
S_i	X	X	X	X	X	X
S_n	X	X	X	X	X	X
S_t	X	X	X	X	X	X
$S_{n,t}$				X	X	X
$S_{i,t}$			X		X	X
N	8628	8628	8689	8626	8687	6988
R-sq	0.83	0.84	0.85	0.85	0.85	0.84

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Strictness of immigration policy in 12 European countries (1994-2005)

Country	(1) # admission req.	(2) # residence req.	(3) # years to obtain perma residence	(4) # admin. involved	(5) Length of the first stay	(6) Existence of a quota system	(7) Asylum legislation	(8) Overall index
Austria	0	4.5	1	4	2	4	4	2.8
Denmark	0	6	2	4	4	2	4.5	3.2
Finland	4	3	1	2	4	2	3.5	2.8
France	0	0	1	2	2	2	3.5	1.5
Germany	0	6	1	2	2	2	5	2.6
Greece	0	3	4	4	2	2	4	2.7
Ireland	2	4.5	4	4	2	2	2	2.9
Italy	4	4.5	2	2	2	4	3.5	3.1
Netherlands	4	1.5	1	4	4	2	4.5	3
Portugal	4	3	3	2	2	4	3.5	3.1
Spain	6	1.5	1	4	2	4	4	3.2
United Kingdom	2	1.5	4	4	2	2	4.9	2.9