

Growth, labour markets and migration

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Global Convergence Scenarios: Structural and Policy Issues

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“Unused human capacity” (millions)

	Non- employed in 2005	Non- employed in 2050*	? Non- employed (2050-2005)
AFRICA	250	626	376
CHINA	150	136	-14
INDIA	221	340	119
EUROPE	185	140	-46
JAPAN	21	14	-7
USA	54	67	12

* 2002 non-employment rate * 2050 WAPOP

Outline

- **Theory:** predicted effects on levels and rates of changes in “capacity utilisation” and migration.
- **Evidence** on the skill composition of migration: brain gains and drains.
- **Reforms** in rich countries affecting skill content of migration. Political feasibility of migration.
- **Feedback effects.** How does the “brain drain” affect growth in developing countries? Which policies could support convergence?

Key messages

- Increased labour force affects growth *rates* insofar as it alters fertility rates or the average skills. Migration affects skills.
- Large cross-country variation in skill content of migration explained more by migration policies than by institutions-welfare shopping.
- Migration policies are becoming increasingly selective *de facto* if not *de jure*.
- But “brain drain” may not be negative for global income convergence if it is not too large and programs promote education in LDCs.

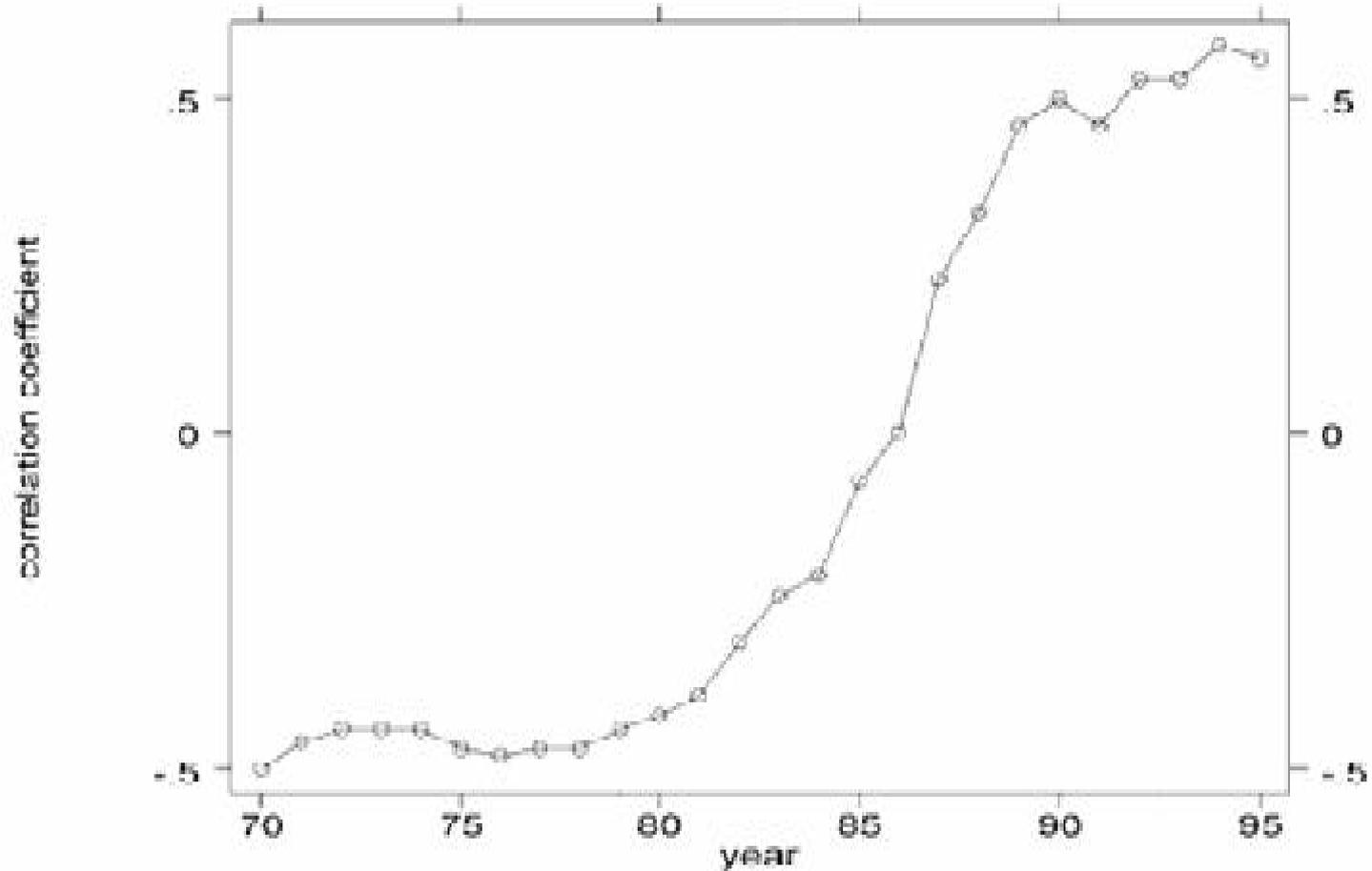
Levels and rates

- Discussion on capacity utilisation mixing-up level (once and for all) and rate (transitional and steady state) effects.
- Increasing labor force *by itself* bound to *mainly* (unless implausible scale effects) affect *levels*, not *rates* of growth
- Rates affected only insofar as increase in labor force involves changes in human capital accumulation or fertility

Potential rate effects

- Participation and fertility: women participation is no longer negatively correlated to fertility.
- Participation and skills: education more than age or gender affect human capital externalities
- Migration and fertility: positive on host, but vanishes within 2 generations
- Migration and skills: migrants are different from natives and those remaining at home. Potential effects on human capital accumulation.

A fertility women at work tradeoff?



Boeri, Del Boca, Pissarides, Women at Work, OUP, 2005

Human capital externalities

- Skilled migration like capital mobility.
- Spillovers of human capital. Migrants can:
 - transfer their human capital to natives
 - exert negative externalities on human capital accumulation among natives
 - acquire themselves more human capital via interactions with natives (e.g., on-the-job training)
- These externalities depend on the degree of *assimilation/dessimilation* of migrants

How about global convergence?

- Symmetric effects in the sending country. Skilled migration predicted to affect negatively growth rates (current and steady state) in LDCs.
- Conflict of interest (battle over brains) between rich and poor nations.
- But spillovers may also exert positive feedback effects on sending countries

Some evidence

- Skill content of migration
 - quantity
 - quality
- Assimilation of migrants and human capital externalities on the resident population
- Brain drain

Data on skills

Two main data sources

1. *Population Census and Labour Force Surveys*: Educational attainment for resident/foreign population stocks and flows (quantity measure)
2. *International Adult Literacy Survey*. Literacy tests for population aged 16-65 on prose, document and quantitative literacy (quality measure)

Migrants different than natives

Odds Ratio by skill

	low	medium	high
Australia	0.89	1.17	1.17
Canada	0.99	0.93	1.23
Switzerland	1.43	0.68	1.24
USA	1.90	0.82	1.13
France	1.39	0.65	0.99
Germany	1.91	0.74	0.84
UK	1.12	0.49	1.11
Belgium	1.23	0.77	0.91
Denmark	1.23	0.77	1.14
Finland	1.08	0.97	0.92
Netherlands	1.34	0.75	0.92
Austria	1.57	0.73	1.24
Spain	0.74	1.42	1.56

Quality of education: IALS average score

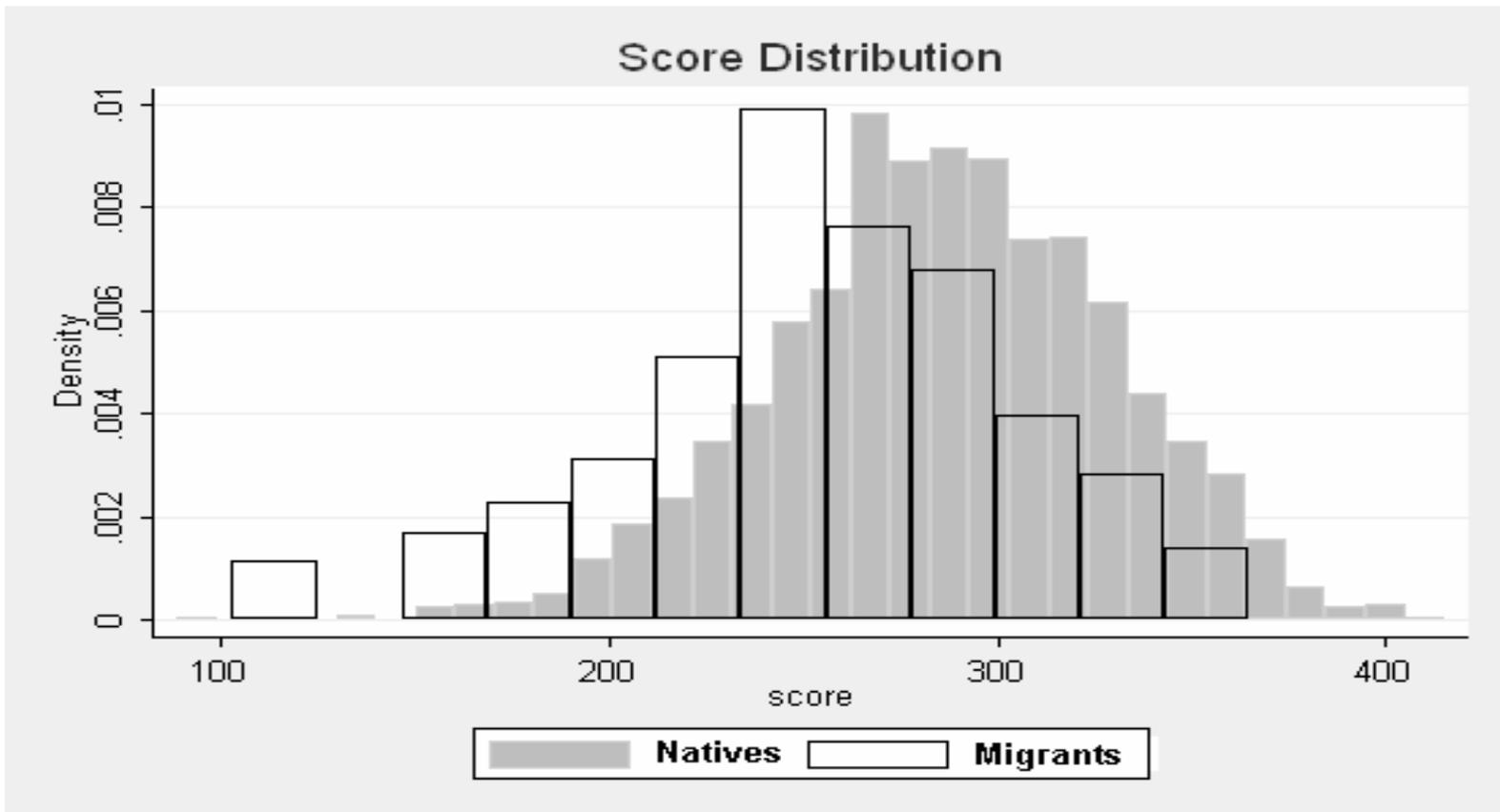
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Means Score		
	Natives	Migrants
Germany	286.2252	254.6374
Italy	253.2474	250.8681
Netherlands	286.1992	252.5336
United Kingdom	269.2923	235.3251
Belgium	289.0815	250.8460
New Zealand	280.8219	274.175
Usa	275.8252	196.7784
Canada	260.4918	239.8033

Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

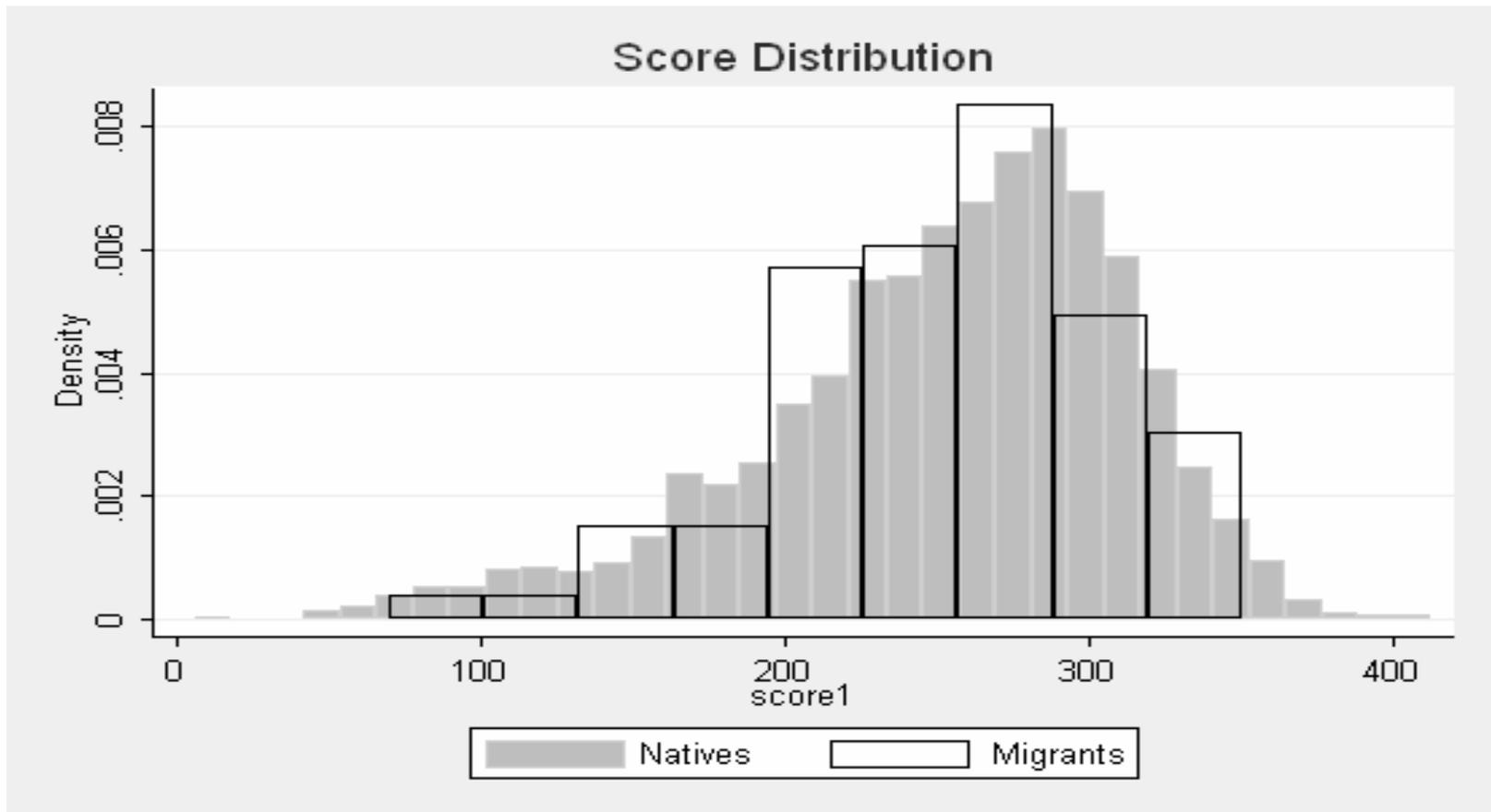
IALS (average) Score Distribution: Natives vs Migrants Germany



Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

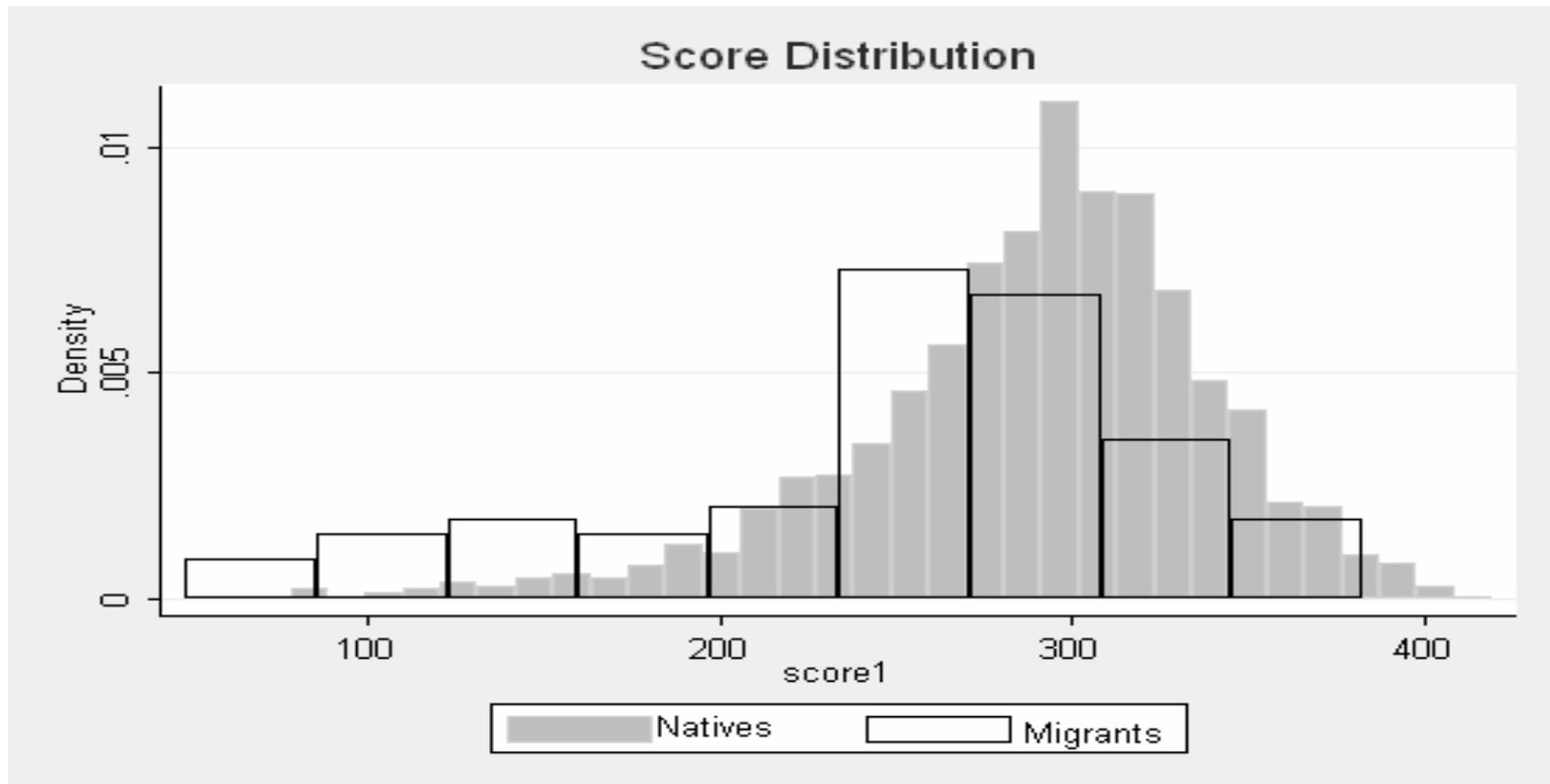
IALS (average) Score Distribution: Natives vs Migrants Italy



Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

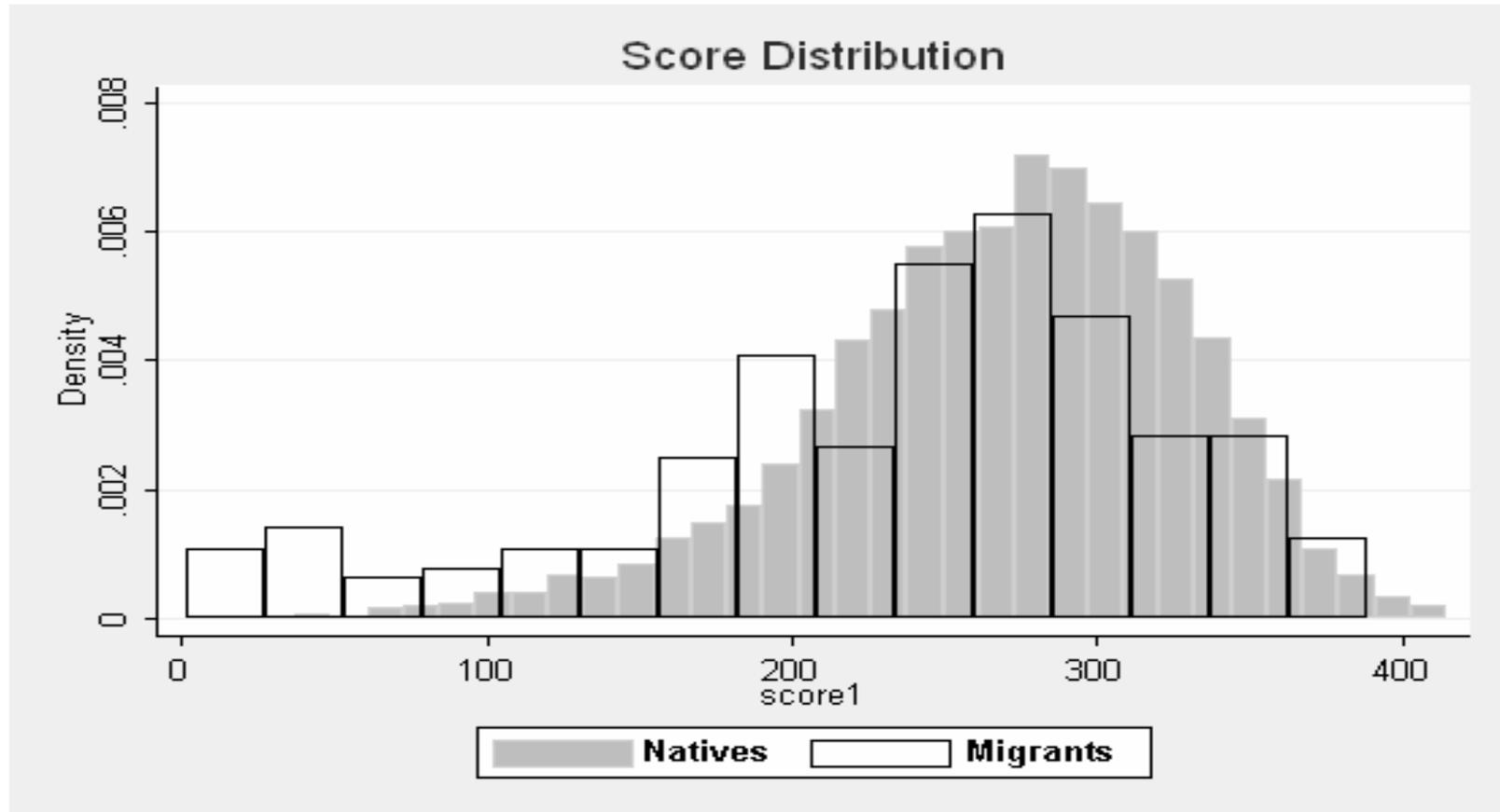
IALS (average) Score Distribution: Natives vs Migrants Belgium



Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

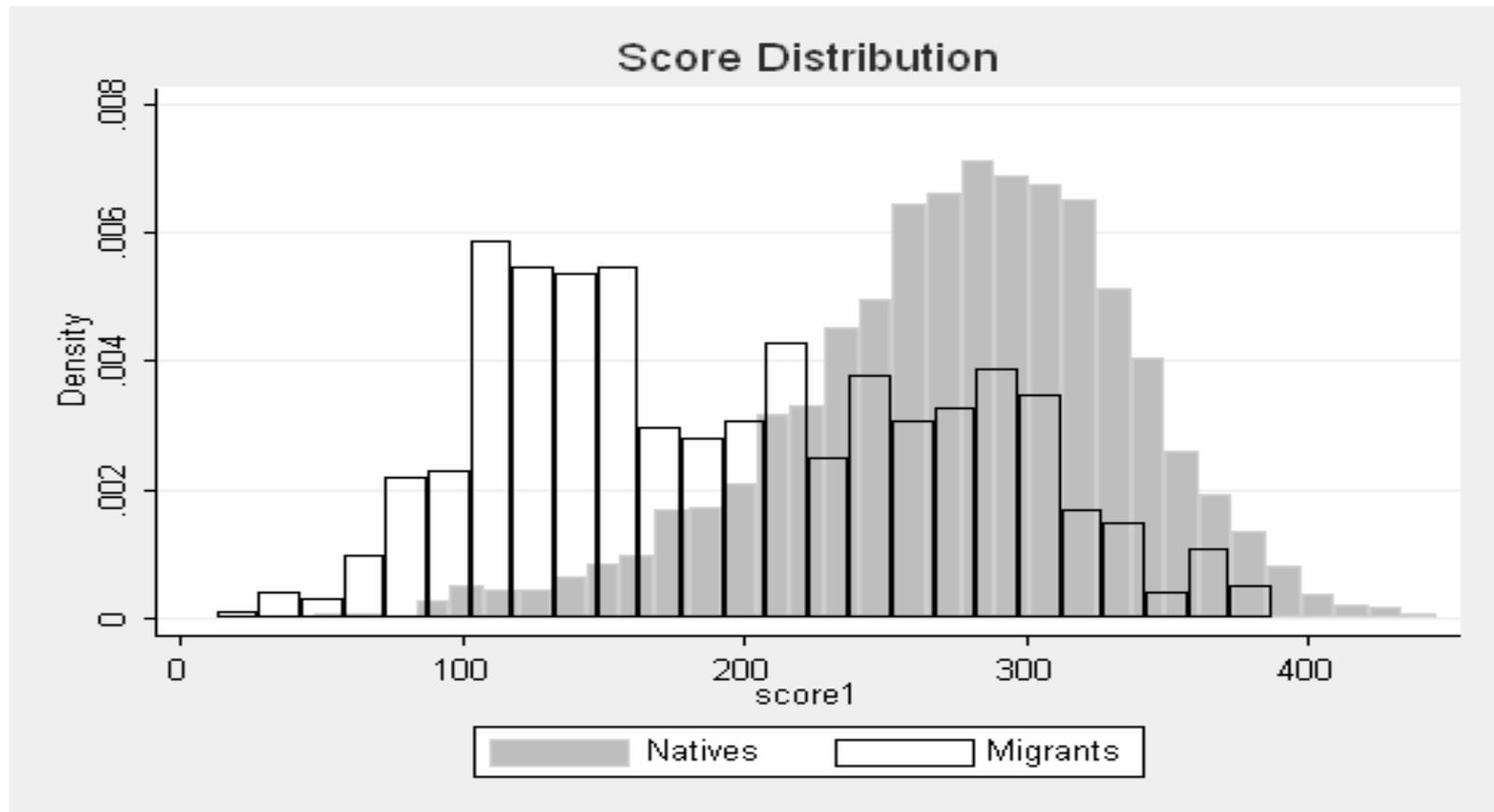
Score Distribution: Natives vs Migrants UK



Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

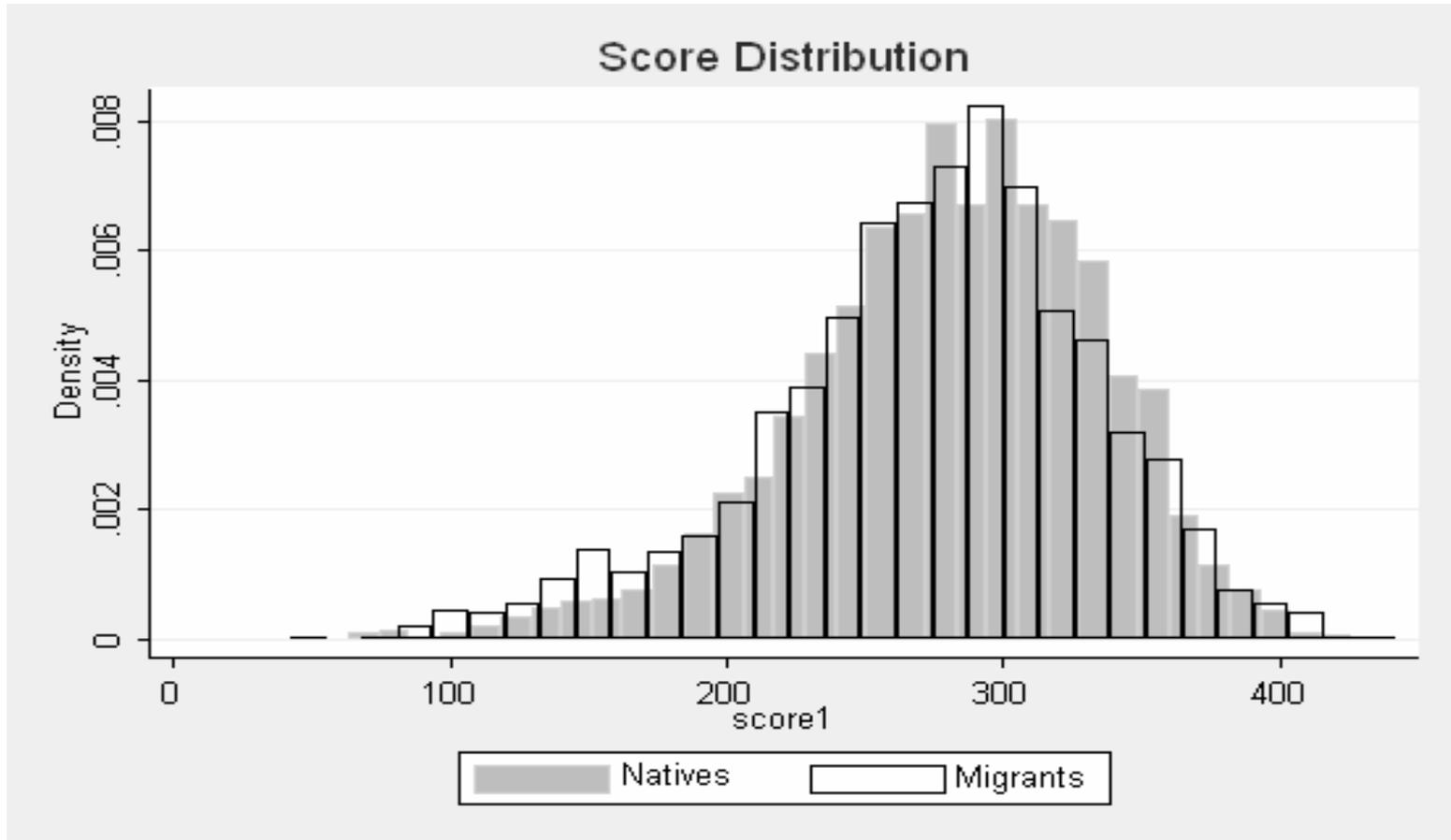
Score Distribution: Natives vs Migrants Usa



Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

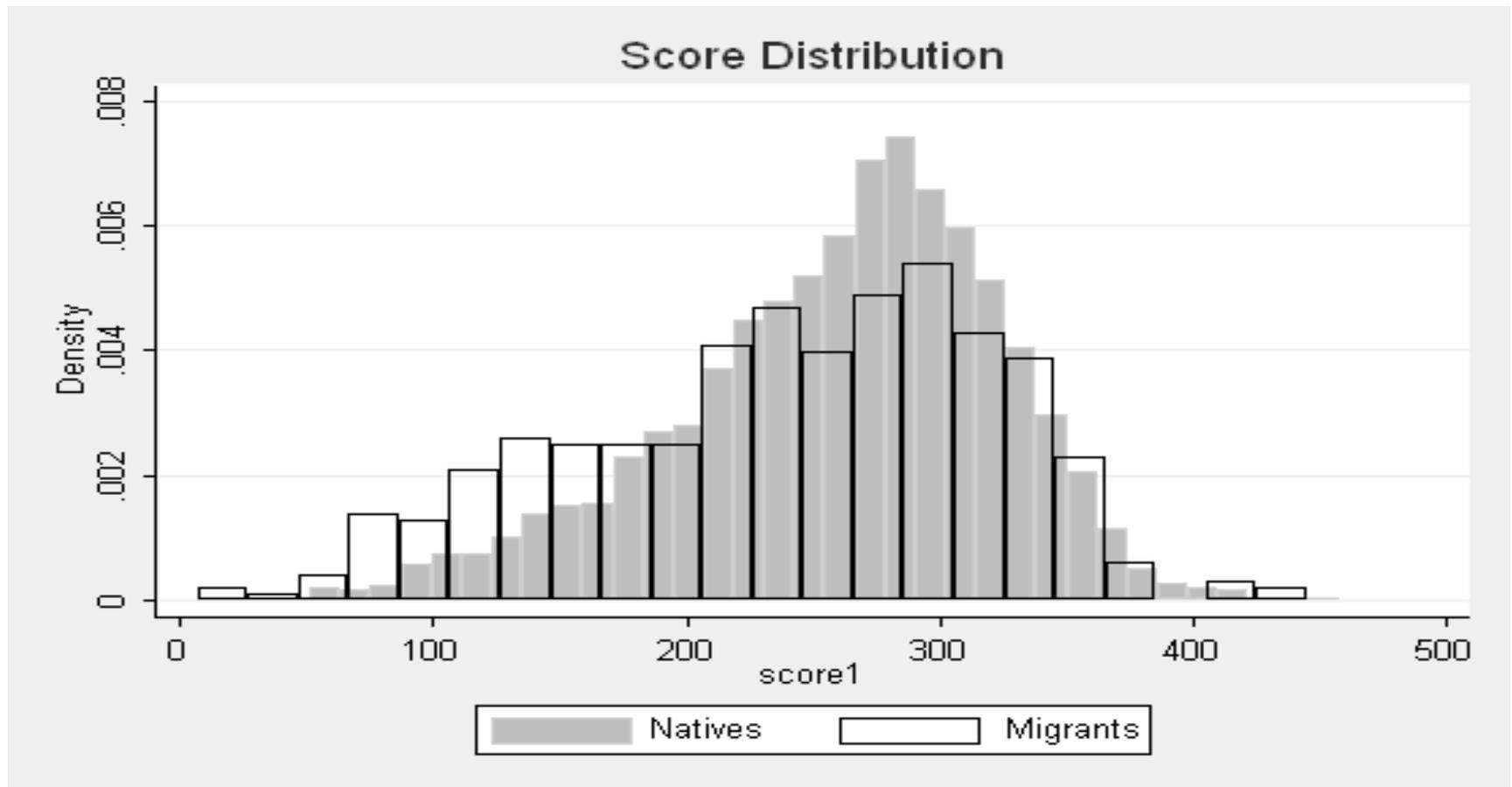
Score Distribution: Natives vs Migrants New Zealand



Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

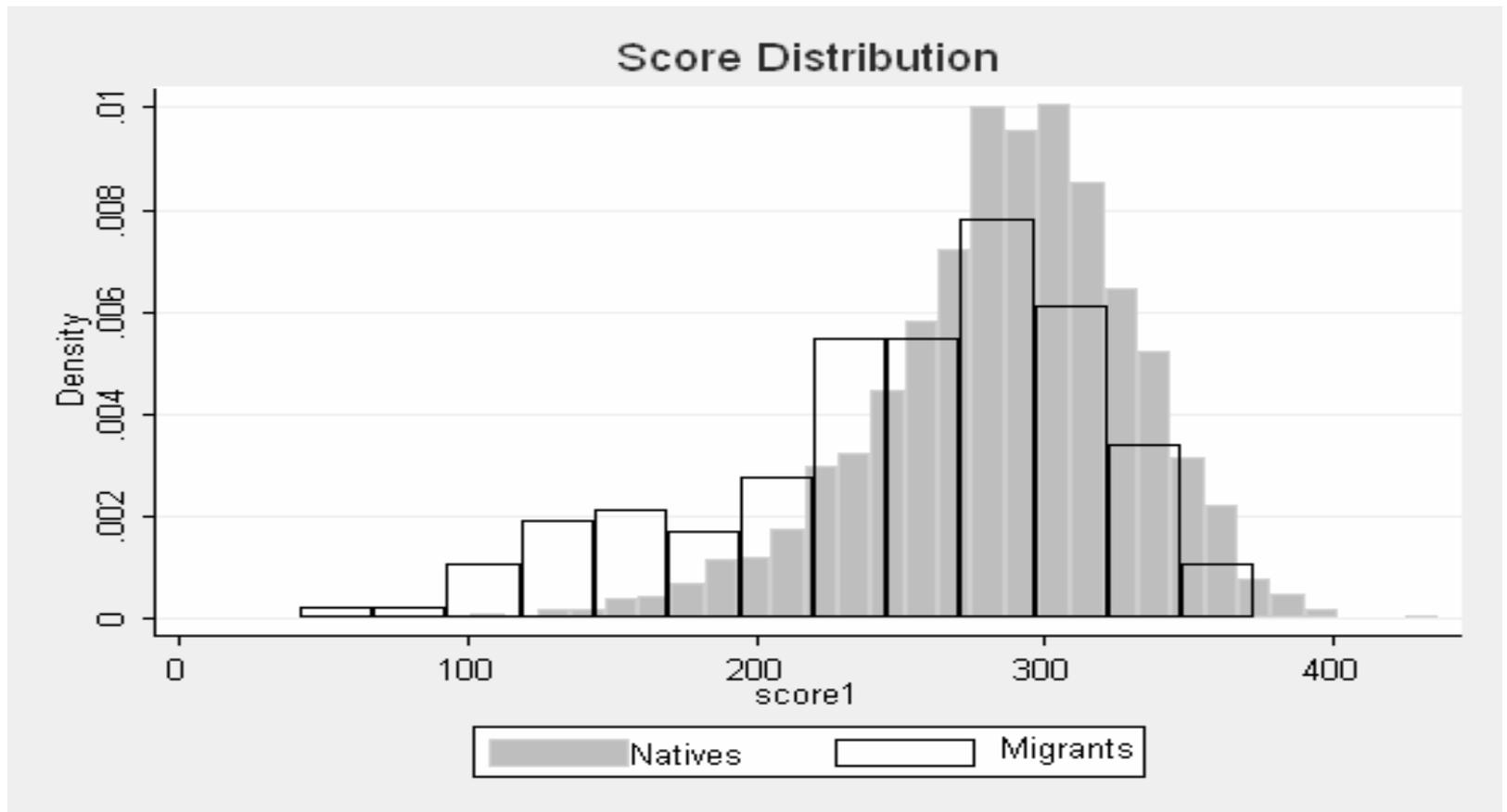
Score Distribution: Natives vs Migrants Canada



Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

Score Distribution: Natives vs Migrants Netherlands



Notes: Average of scores in prose, document and quantitative tests

Source: IALS dataset

Overall

Immigrants are at least as skilled as natives (accounting for quality) when:

- The education of the native population is low (e.g., Greece, Italy, Spain, Ireland)
- The immigration policy relies on a points system (Australia, Canada, New Zealand)

Elsewhere (including the US) natives are more skilled than migrants

Assimilation

- Acquisition of language proficiency is very important: almost half of wage growth after arrival attributable to gains from becoming bilingual
- Better less ethnic segregation in the country of destination then
- Greasing the wheels effects in low-mobility countries also speak in favour of “spreading out” migrants.

Brain Drain

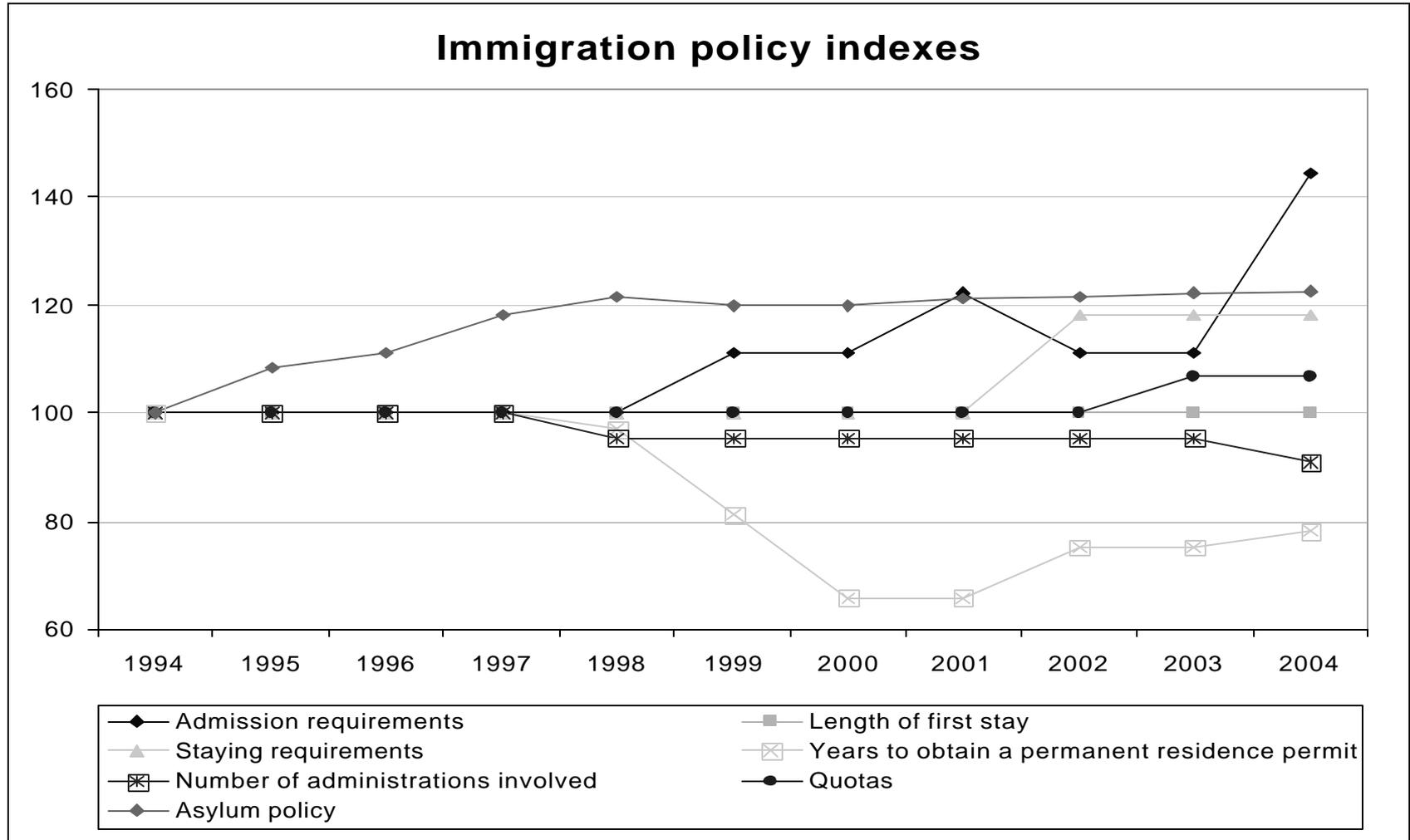
	Migration rate (secondary education) 1990	Migration rate (secondary education) 2000	? migration rate (secondary) 1990-2000	Migration rate (tertiary education) 1990	Migration rate (tertiary education) 2000	? migration rate (tertiary) 1990-2000
Central America	10.4	15.6	5.2	12.9	16.1	3.2
The Caribbean	17.6	17.8	0.2	41.4	40.9	-0.5
South America	2.5	3	0.5	4.7	5.7	1
Eastern Europe	0.4	1.4	1	2.3	4.5	2.2
Northern Africa	1.8	1.5	-0.3	6.8	6.2	-0.6
Central Africa	1	1.3	0.3	9.8	13.3	3.5
Western Africa	1.1	2.8	1.7	20.7	26.7	6
Eastern Africa	1	1.6	0.6	15.5	18.4	2.9
Southern Africa	0.5	0.5	0	6.9	5.3	-1.6
Western Asia	4.7	2.9	-1.8	6.9	5.8	-1.1
South-Central Asia	0.4	0.5	0.1	4	5.1	1.1
South-Eastern Asia	1.9	2.1	0.2	10.3	9.8	-0.5
Eastern Asia	0.3	0.3	0	4.1	4.3	0.2
Unweighted average	3.35	3.95	0.59	11.25	12.47	1.22
Std deviation	5.09	5.75	1.59	10.43	10.93	2.23

Source: Docquier -Marfouk

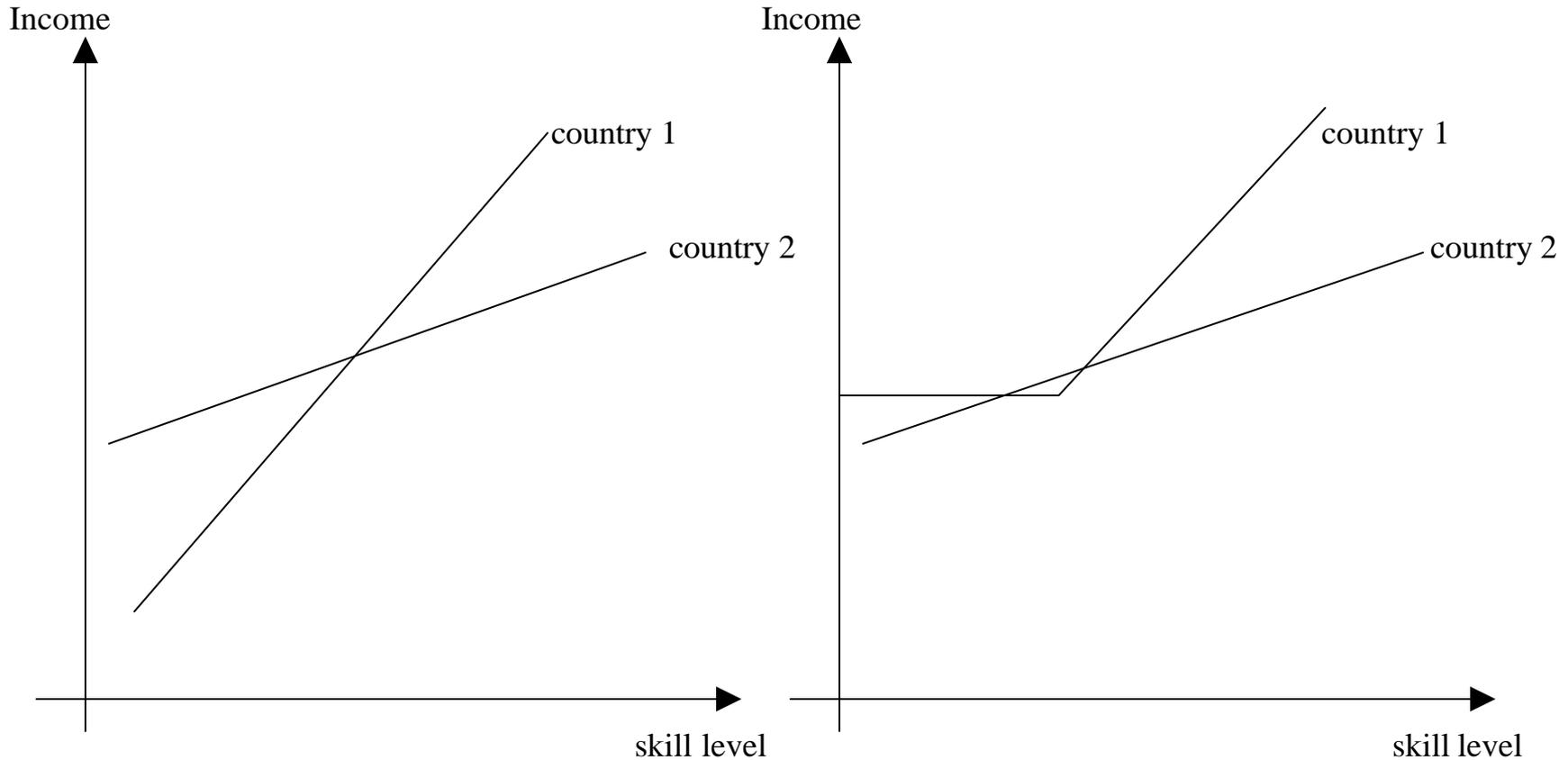
Migration policy developments

- Tightening of migration policies towards the unskilled: index of strictness from 1990 to 2004 in EU countries
- While race to attract highly skilled migrants
- Explicit point systems in a increasing number of countries (Canada since 67, Australia since 84, New Zealand since 91, Switzerland since 96)

The tightening of migration restrictions



Safety nets may reduce the skill content of migration

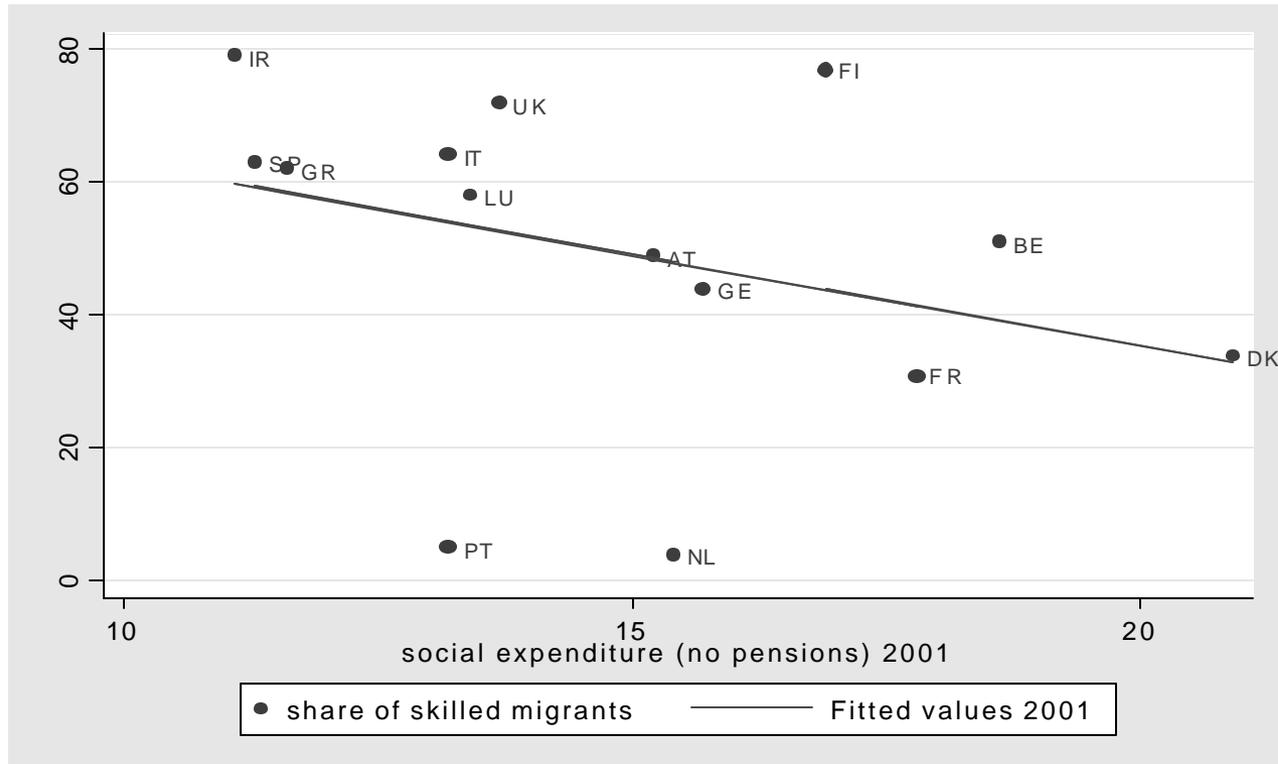


skilled migrants go to country 1
unskilled migrants go to country 2

safety net in country 1:
also the unskilled go to country 1

But a very weak correlation

(size of the welfare state and skilled migration)

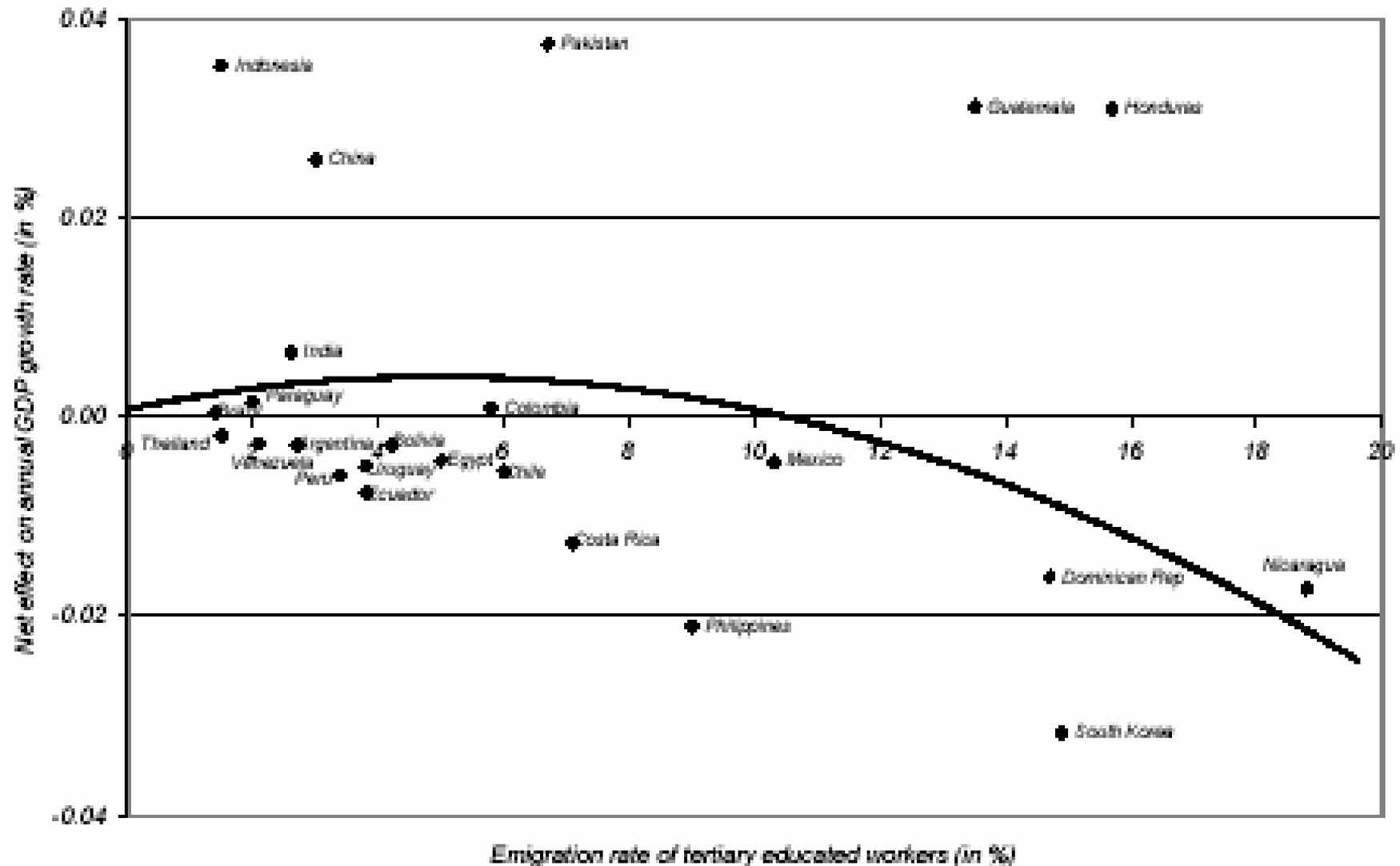


Estimates (DeGiorgi and Pellizzari) that 1 std deviation increase in generosity of Welfare payments (~3,000 € per year) increases probability to move by 3%, but no effect on skill composition

Institutional developments in recipients

- Some attempts to close the welfare door to migrants in the rich countries. Problems in the enforcement of these policies
- Doubtful that they would affect significantly the skill composition of migration
- They are just bound to reduce overall migration to rigid countries (UB-SA as insurance against risks of migration) and postpone the assimilation of migrants.

Evidence on brain drain effects on LDC growth



Source: Docquier – Rapoport (2004)

Likely feedback effects?

- Increase in the expected returns from schooling may induce more investment in human capital in the country of origin
- Migrants can transfer back home human capital together with their remittances or contribute to local business/trade networks
- Return migration involves mainly “success stories rather than failures” (Borjas).

Final (policy) remarks

- There may be no politically feasible alternative to selective migration policies. And zero legal migration does not mean zero migration, but illegal migration, difficult to assimilate.
- Possible to support feedback effects in sending countries invest in their education (e.g., Progresa), supporting temporary migration arrangements. Taxing private head-hunters?