Unequal attainments: ethnic educational inequalities in ten western countries

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Our research questions

- Do young native-born people from ethnic minority backgrounds – the 2nd generation - achieve the same or better educational outcomes as their peers from the majority group?
- How do these patterns vary across the educational career?
- Do some Western countries provide more favourable environments than others for the second generation?

The countries

- Belgium
- Canada
- England and Wales
- Finland
- France
- Germany
- The Netherlands
- Sweden
- Switzerland
- USA

The educational outcomes

- Test scores at the end of lower secondary
- Continuation into upper secondary
- Tracking in upper secondary
- Completion of upper secondary education
- Tertiary education

The team

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Data strategy

- Large and authoritative country datasets (rather than cross-national studies such as PISA) in order to obtain sufficiently large sample sizes in order to …
- Disaggregate ethnic minorities rather than combine ‘immigrants’ or ‘children of immigrants’ in a single category
- Harmonized coding of variables

Analytical strategy

- Estimate gross differences (comparing 2nd generation with majority-group peers)
- Then estimate net differences, running standardized but country-specific models (allowing effects of controls to vary across countries)
- No attempt to pool countries because of restrictions on data export for some countries
- But then use ‘slopes as outcomes’ method (equivalent to level 2 of a multilevel model)

What our research adds to previous research using PISA

- Larger samples with finer disaggregation of minorities
- More stages of the educational career
- Country-specific models of effects of social background, rather than (misleading) pooled analyses
- New variables for explaining origin and destination differences, especially selectivity of the parental generation

Bivariate analyses - gross origin-group differences

- Most successful groups are those of East Asian origin, who out-perform the majority group (+0.3 sd)
- Next come students of South Asian origin, who also sometimes outperform the majority group (+0.1 sd)
- European background children, especially Southern European, perform surprisingly poorly (-0.3 to -0.9 sd)
- Black children perform worse than the majority group, but not by so much (-0.2 to -0.5)
- Children of Turkish, Maghrebin, Latin and Central American background fare worst (-0.5 to -1.2 sd)

Bivariate analyses - gross destination-country differences

- Canada +.4 to -.4
- England +.5 to -.5
- France 0 to -.5
- Sweden +.3 to -.6
- USA +.6 to -.7
- Netherlands -.3 to -.7
- Finland +.1 to -.9
- Germany -.2 to -1.1
- Belgium -1.0 to -1.2
- Switzerland -0.9 to -1.9

But note important compositional differences

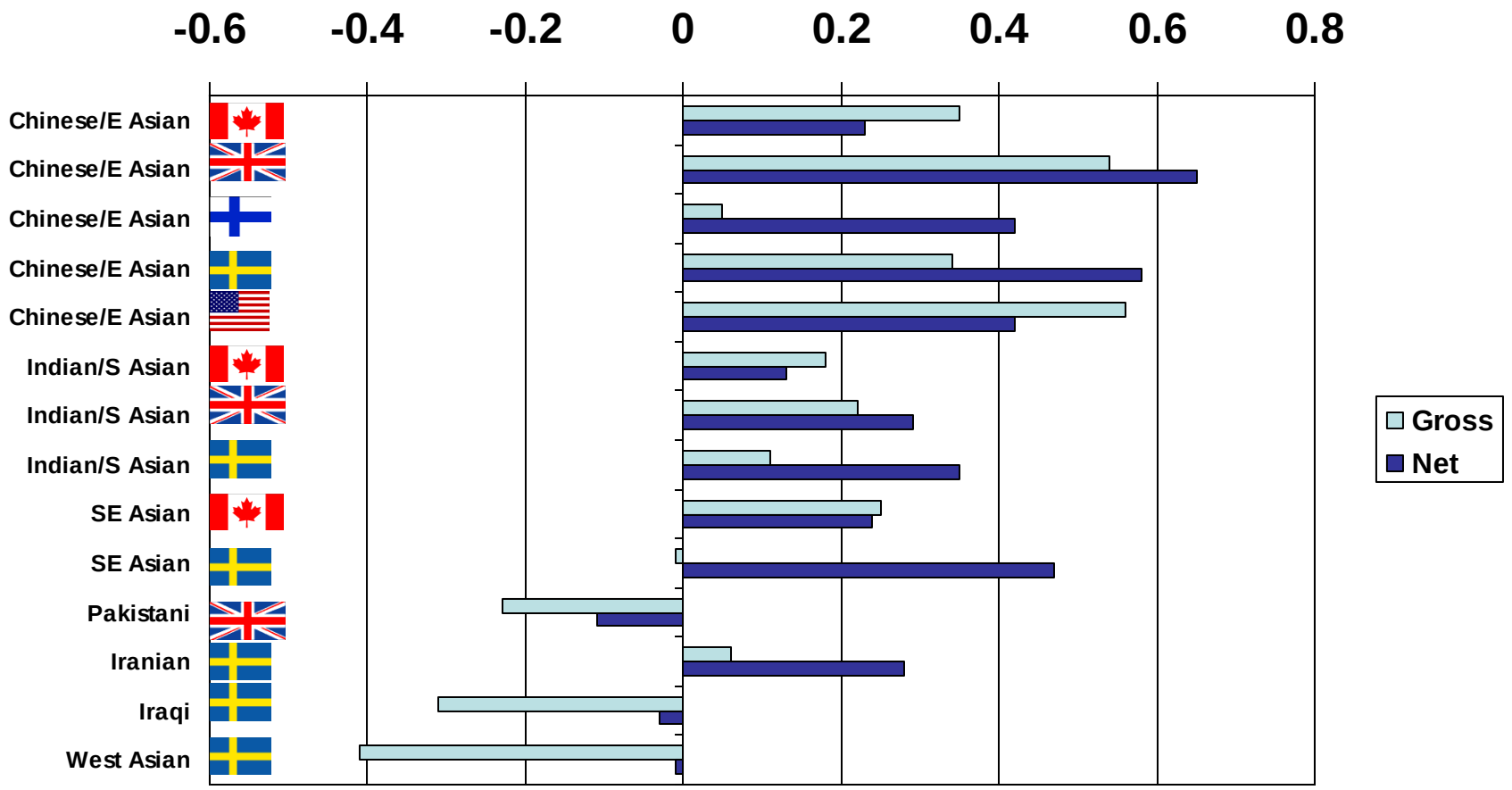
Level 1 multivariate analysis - controlling for social background

- Parental social class and education are major predictors of test scores among the majority populations, though magnitude of effect is smaller in some countries (eg Canada, Finland)
- Also a major predictor of test scores among most minority groups
- So in principle could explain some of the gross differences
- But not all minority children come from disadvantaged home backgrounds – only in the case of disadvantaged groups will background explain gross differences

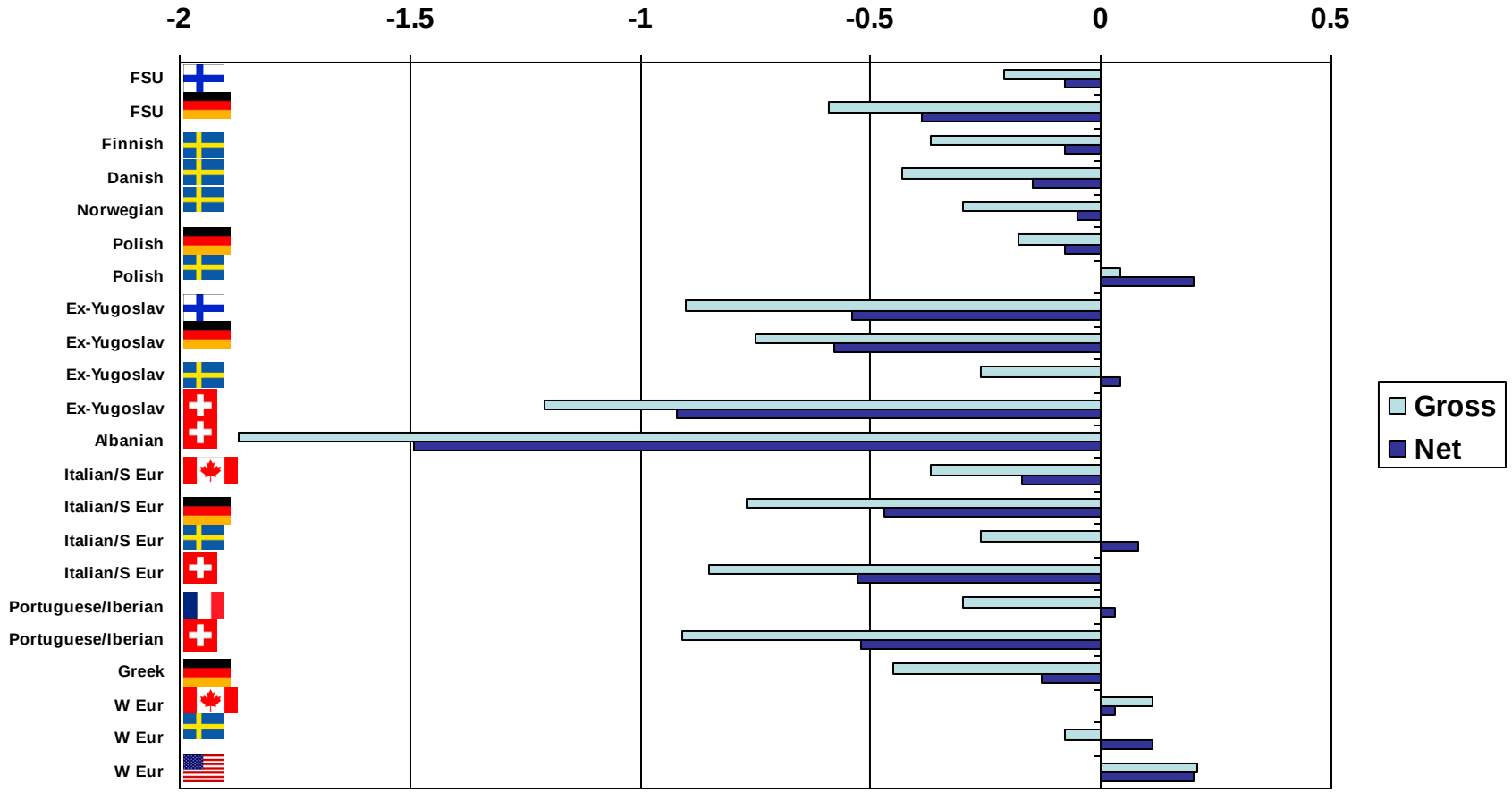
Problems with controls

- Downwards mobility on part of first generation (= the parents)
- Educational levels do not necessarily have ‘equivalence of meaning’ in Less Developed and Western countries
- But these problems will be smaller for migrant groups of European background

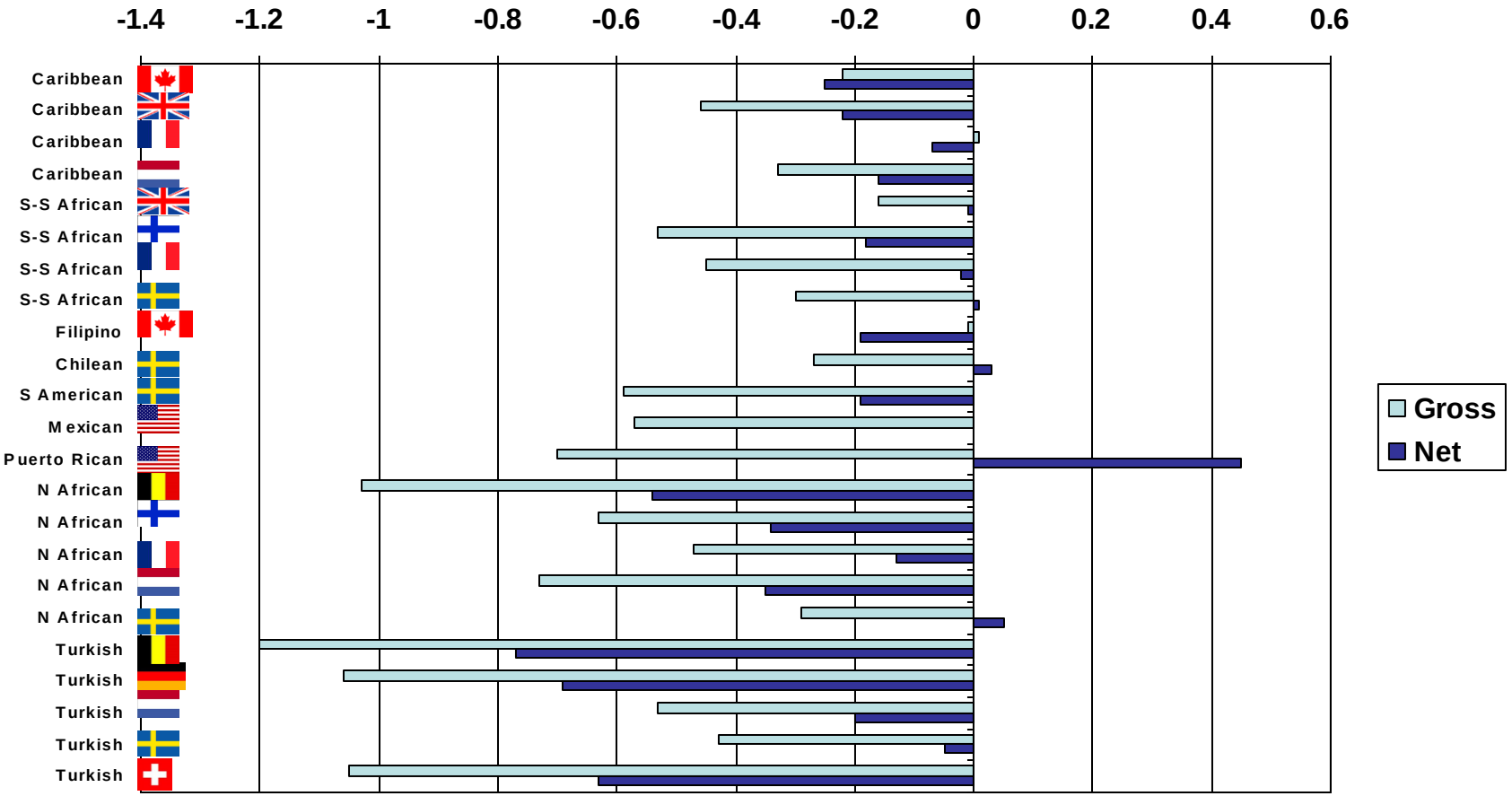
Gross/net coefficients for test scores at age 15 - Asian background – generally positive coefficients



Gross/net coefficients - European background – negative coefficients tho' reduced by controls



Gross/net coefficients -LDCs – generally negative coefficients tho' much reduced by controls



The educational career - Asians pulling further ahead (net coefficients)

	Test scores	Continuation	Academic	Completion	Tertiary
Chinese/Canada	0.23	-	-	0.02	1.19
Chinese/GB	0.65	0.79	0.86	0.50	1.26
East Asian/US	0.39	-	-	0.41	0.41
Indian/Canada	0.31	-	-	1.47	0.38
Indian/GB	0.29	0.69	0.59	0.36	1.05
SE Asian/Canada	0.24	-	-	0.71	0.08
Pakistani/GB	0.11	0.33	-0.32	-0.11	0.58
Bangladeshi/GB	0.39	0.70	0.35	0.50	0.64

Some European groups pull slightly ahead (net coefficients)

	Test scores	Continuation	Academic	Completion	Tertiary
West Eur/Canada	0.03	-	-	0.07	0.05
West European/US	-0.20	-	-	0.35	0.60
South Eur/Canada	-0.17	-	-	0.46	0.49
Portuguese/France	-0.03	0.22	0.27	0.20	0.08

Several LDC groups catch up (net coefficients)

	Test scores	Continuation	Academic	Completion	Tertiary
Black African/France	-0.27	0.03	0.22	-0.04	-0.42
Black African/GB	-0.01	0.78	0.33	-0.14	-0.03
Caribbean/Canada	-0.25	-	-	0.54	0.07
Caribbean/N'lands	-0.16	-0.33	0.27	-0.07	-0.08
Caribbean/GB	-0.22	0.20	0.10	-0.07	0.35
North African/France	-0.12	0.38	0.38	0.32	-0.01
North African/Belgium	-0.54	-	0.05	-0.28	-0.13
Moroccan/N'lands	-0.35	-0.26	0.00	-0.16	-0.33
Mexican/US	-0.49	-	-	-0.08	0.12
Latino/US	-0.41	-	-	-0.22	0.56
Turkish/Belgium	-0.77	-	-0.23	-0.36	-0.23
Turkish/N'lands	-0.20	-0.17	0.06	-0.44	-0.34

Regressions of the net coefficients

- Slopes as outcomes method (similar to level 2 of a multilevel model)
- But only 78 observations so little statistical power
- Start with bivariate regressions and then put significant predictors into a multiple regression
- Try to use genuinely explanatory variables rather than grouping of countries or origins

Explaining origin differences

Groups with backgrounds in less developed/less Westernized countries expected to fair worst – biggest adjustments needed to Western educational systems

Measured with Human Development Index (1990 scores)

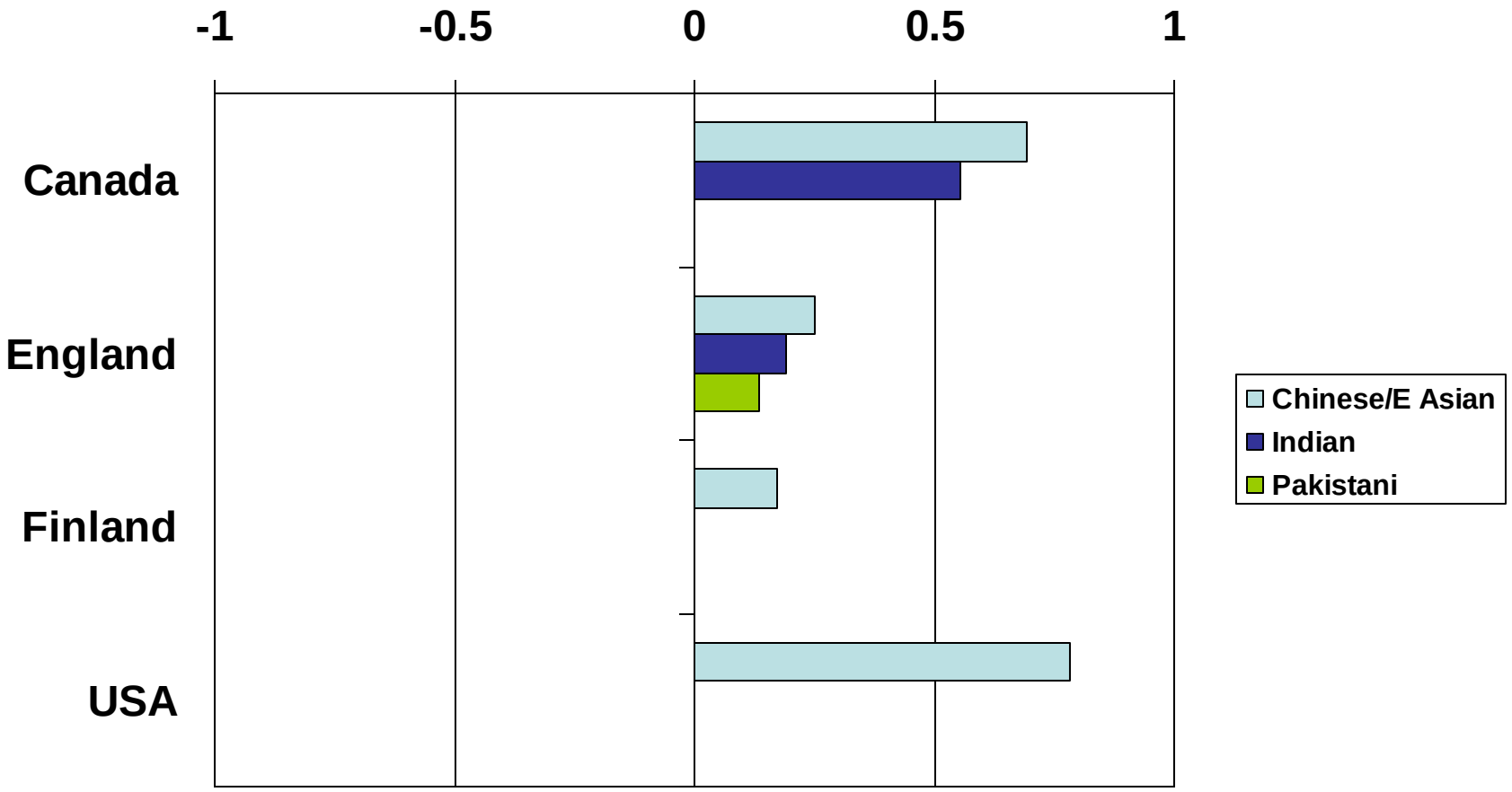
Explaining destination differences

- Classic migration countries (USA and Canada) expected to be better adjusted to provide for needs of children of immigrants than new migration countries (Germany, Finland, Sweden). Postcolonial countries (France, England) expected to be in between
- Multicultural policies expected to help minorities integrate – measured with Banting's index for 2000 (ie before Netherlands policy reversal) and MIPEX
- Tracking in lower secondary schooling expected to disadvantage minorities – measured with Boll and Werfhorst's measure of tracking

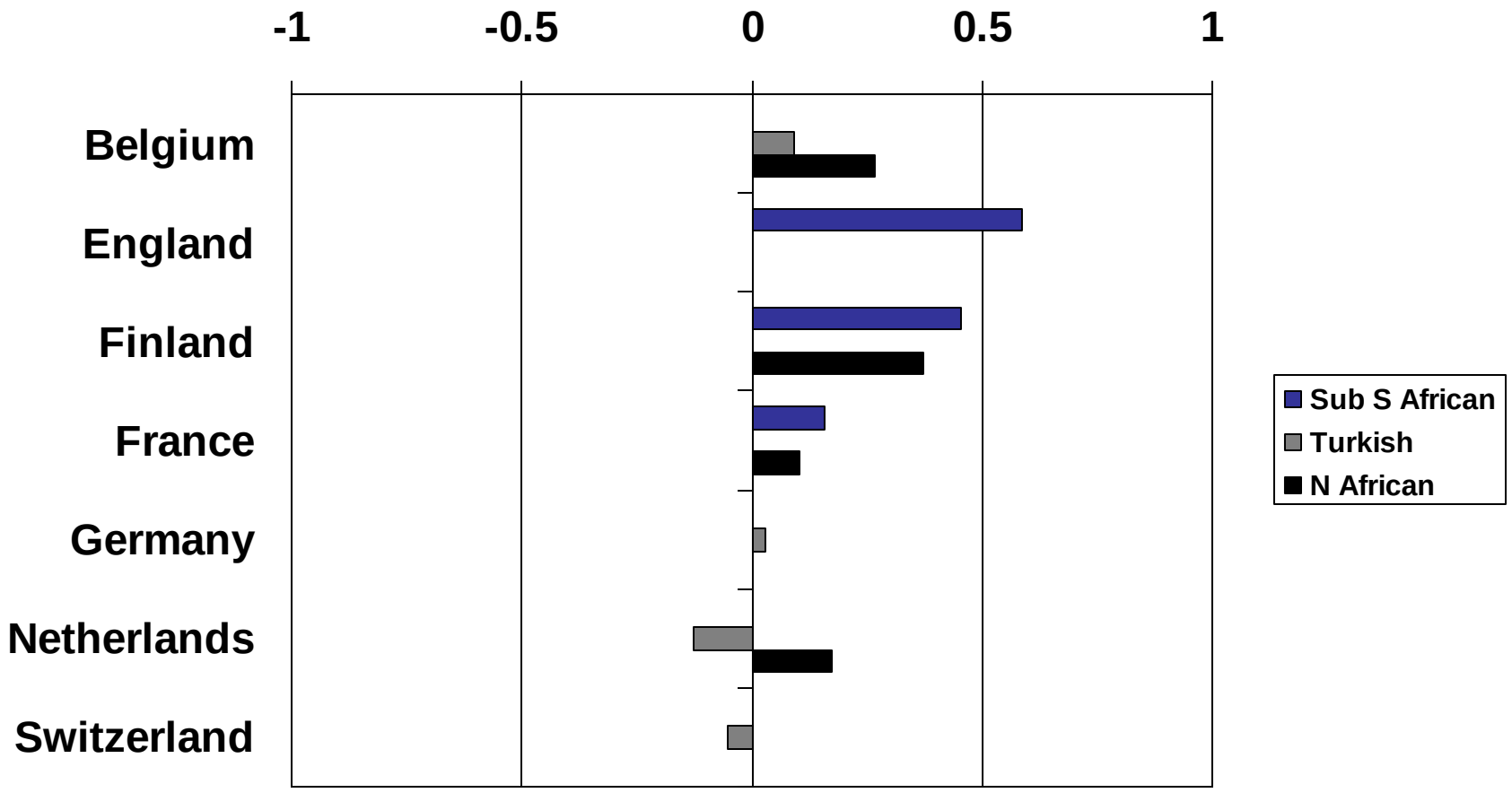
Crucial problem of selectivity

- Immigration rules for the first generation (eg Canadian point system) may mean that minorities in some countries are more positively or negatively selected than those in other countries (not a general origin or destination effect but a ‘community’ effect)
- Selectivity measured by comparing minorities’ fathers’ education with that of male non-migrants in origin countries
- Note that this is distinct from comparisons of majority/minority differences in the destination country – two groups could have similar backgrounds to the majority group in the destination, but opposing patterns of selectivity (eg Africans and Russians in Finland)

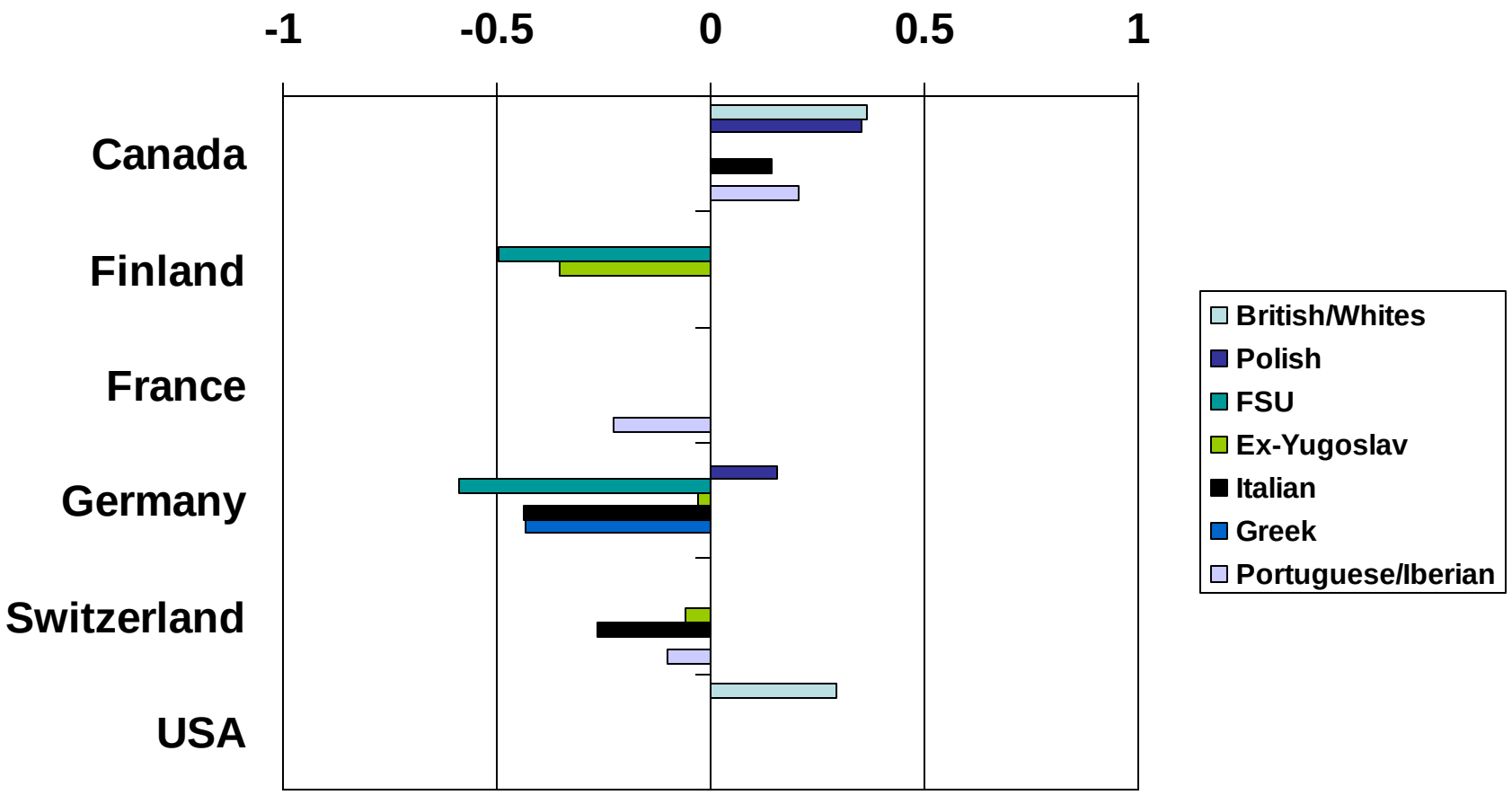
Asian-origin groups are positively selected (measured by NDI)



Groups from LDCs are positively or neutrally selected



Some European-origin groups are negatively selected



Regressions of test score net coefficients

	Bivariate regressions	Multivariate
Origin characteristics		
Human development index (1990)	-0.40	
Community characteristics		
Selectivity	0.30 **	0.15*
Same language	0.14	
Destination characteristics		
Multiculturalism (2000 score)	0.10***	0.08+
MIPEX INDEX	0.14*	0.11
Tracked system of schooling	-0.21***	-0.20***
N		80

Regressions of academic vs vocational net coefficients

	Bivariate regressions	Multivariate
Origin characteristics		
Human development index (1990)	-0.97***	-0.57
Community characteristics		
Selectivity	0.84 ****	0.68***
Same language	-0.17	
Destination characteristics		
Multiculturalism (2000 score)	0.09+	0.05*
MIPEX INDEX	0.14***	0.08
Tracked system of schooling	-0.16***	-0.11***
N		60

Regressions of tertiary net coefficients

	Bivariate regressions	Multivariate
Origin characteristics		
Human development index (1990)	-0.53+	-0.15
Community characteristics		
Selectivity	0.69 *	0.61
Same language	0.02	
Destination characteristics		
Multiculturalism (2000 score)	0.09+	0.06
MIPEX INDEX	0.03	
Tracked system of schooling	-0.22*	-0.15
N		51

Conclusions

- selectivity a significant predictor – especially for choice of the academic track
- Tracking consistently has negative effects
- Need to understand mechanisms accounting for negative effect of tracking
- Multicultural policies tend to be associated with better outcomes for minorities

Our interpretation

- More open educational systems, such as the US, Canadian and British ones, give more scope for positively-selected groups to ‘aim high’
- Tracked systems like the Belgian, Dutch, German and Swiss ones, give less scope for the 2nd generation to make ambitious choices
- But even in the US and Britain, minorities do not do so well when they are being chosen rather than choosing – under-representation at elite universities, over-representation at non-elite institutions

Our book

- *Unequal Attainments: Ethnic Educational Inequalities in Ten Western Countries* (ed Anthony Heath and Yael Brinbaum) Proceedings of the British Academy 196 (Oxford, OUP, 2014)