Eliciting Individual Preferences for Immigrants in the Dominican Republic

Raul Jimenez
Department of Economics–University of Rome Tor Vergata

WIDER Development Conference
Migration and mobility - new frontiers for research and policy
October 5th, 2017
Accra, Ghana

1. Motivation

- Increasing focus on south-south migration.
- Developing countries play a relevant role:
  - Over 35% of the stock of immigrants are in developing countries
  - Over the last decade, the immigration flows among emerging economies have growth at a faster pace than those from emerging to advance economies.
- This trend is likely to grow further, exposing poor countries to a population influx for which they are unprepared, risking political and social turbulence.
- Increasing negative public opinion toward immigrants (similar to those observed in advanced economies)

2. Literature

- If literature suggests that immigration increases net social welfare, why such a negative view?
- Hypothesis:
  - Economic Factors (e.g. labor market competition; fiscal weight)
  - Non-Economic Factors (e.g. norm adherence, religious beliefs, language, ethnicity)
- Broadly two types of literature:
  - Studies on natives' attitudes on immigration based on public opinion surveys.
  - Studies on natives' attitudes on immigrants based on conjoint analysis.

3. Question & Contribution

- Which immigrant profile is supported for admission into the country?
  - Probably the first application of choice experiments (CE) for immigration in a developing country:
    - Do previous findings hold for developing countries? (i.e. Do Dominicans perceive foreigners the same way that Americans?)
  - A greater number of immigrant' attributes are evaluated.
  - The model allows for heterogeneous preferences among respondents, as well as, for the examination of its drivers.
  - Two types of CE are implemented to examine the effects of different decision settings (i.e. '*forced choice*', and '*with neither option*')

3. Methodology – Choice Experiments

- Characteristics of CE:
  - Two types of choice situations (CS): Forced Choice; and Neither Option
  - 3 immigrant profiles per CS and 3 CS per respondent. Only one candidate can be choose by CS.
  - Each "profile or candidate" has 10 attributes
  - CS were unlabeled, and order of attributes within each CS were randomly sorted
  - Efficient design based on a MNL. I generated a design with 600 profiles grouped into three profiles per choice set and three choice sets per respondent.

Example of Choice Situation

Attributes	Candidate A	Candidate B	Candidate C
Work experience	More than 5 y	Between 1-2 y	Less than 1 y
Gender	Women	Women	Women
Reasons for application	Search of employment	Family reunification	Family reunification
Profession	No profession	No profession	Nurse
Language	Fluent Spanish	Does not speak Spanish	Broken Spanish
Education	No formal education	Complete bachelor	Technical education
Migratory status	Tourist visa	Illegal	In country of origin
Religion	Non-determine	Catholic	Protestant
Country	USA	Haiti	Italy
Age	26-35 y	46-55 y	36-45 y

Or None of them (D)

3. Methodology

- *RUM:*

$$U_{i,s,j} = X'_{s,j}\alpha_i + \varepsilon_{i,s,j}$$

$$\alpha_{i,k} = \alpha_0 + W_i\beta_k + u_{ik} \quad , \text{ for the } k \text{ attribute}$$

- *Assumed decision rule:*

$$Y_{i,j} = \begin{cases} 1, & U_{i,j} > U_{i,g} \ \ for\ all\ j \neq g \\ 0, & otherwise \end{cases}$$

- *Implies a probability such that:*

$$P\left(Y_{isj} = 1 \middle| \alpha\right) = P\left[U_{isj} > U_{isg}\right]$$

$$= P\left[\varepsilon_{isj} - \varepsilon_{isg} < (X'_{sj} - X'_{sg})\alpha\right]$$

- Assuming ε is EV-I:

$$P\left(Y_{isj} = 1 \middle| \alpha_i\right) = \int_u \frac{\exp\left(X'_{s,j}\alpha_i\right)}{\sum_j \exp\left(X'_{s,j}\alpha_i\right)} f(u)\, du$$

4. Data

Random sample of 2,479 respondents in 7 cities of the Dominican Republic.

Variables	Forced Choice		With Neither Option		Mean test
	Mean	SE	Mean	SE	Diff.
Per capita household income, US$	185	2.28	182	2.00	2.85
Gender (female=1)	0.71	0.00	0.69	0.00	0.02
Age	48.6	0.1	48.5	0.1	0.1
Schooling	8.33	0.04	8.42	0.04	-0.09
Employment status	0.59	0.00	0.60	0.00	-0.01
Household size	3.67	0.01	3.71	0.01	-0.04
1 if profile is admitted	0.33	0.00	0.25	0.00	0.083***
1 if father born in DR	1.00	0.00	0.99	0.00	0.00
# Respondents	1,230		1,249		2,479

Note: ***, **, * denote significance at 1, 5, 10 percent level.

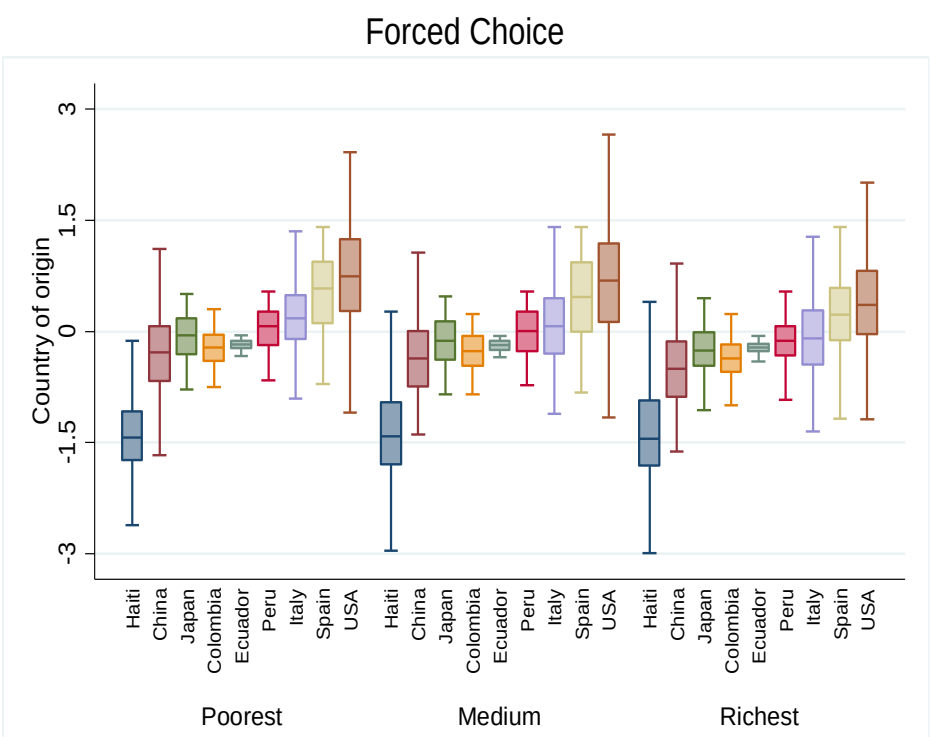
5. Results 1: Estimated Parameters

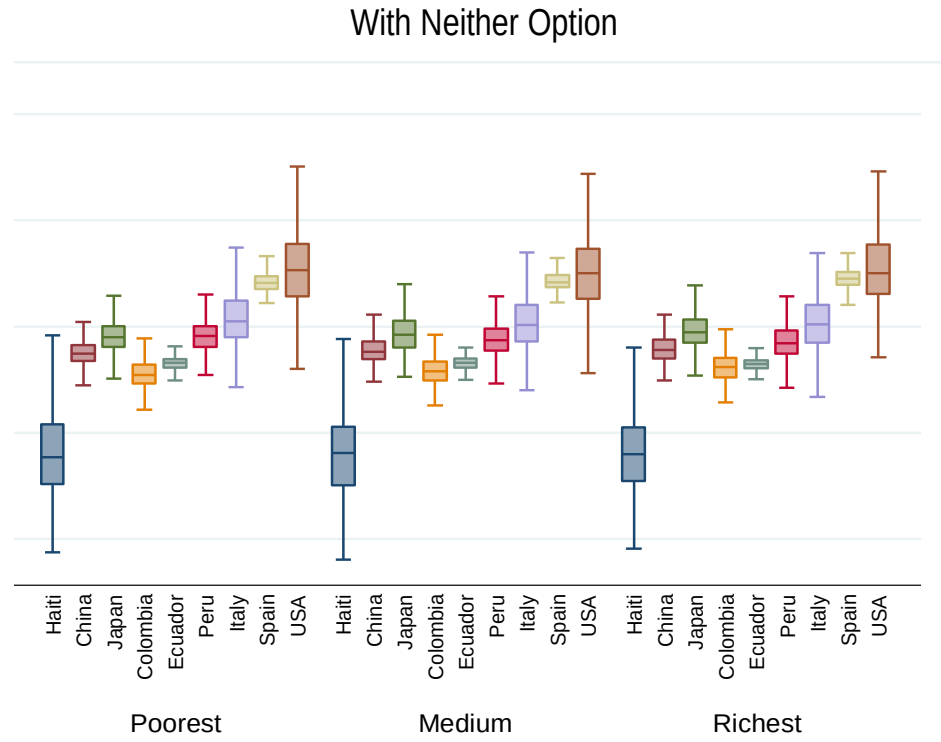
		Forced Choice			With neither option		
		$\alpha's$	p-SD	$\beta's(educ)$	$\alpha's$	p-SD	$\beta's(educ)$
Education level		.147**	***	0.00202	.153**	***	-0.001
Gender		0.06795			0.064		
Age range		-.053**			-.090***		
Labor experience		0.037			.079**		
Language		-.136***			-.215***		
Country of origin	China	0.292	***	-.081**	-0.463	***	0.016
	Spain	1.403***		-.117***	0.442		0.024
	Haiti	-1.030***	***	-0.028	-1.756***	***	0.019
	Japan	0.405		-.066*	-0.328	***	0.028
	Ecuador	-0.073		-0.014	-0.472		-0.004
	Colombia	0.145		-0.051	-.902*		0.033
	Peru	0.532		-0.066	0.083		-0.030
	Italia	.820**	***	-.092***	0.163	***	-0.010
	USA	1.521***	***	-.110***	.809**	***	-0.002
Religion: Protestant		-.447***		0.001	-0.143	***	-0.020
Non-determine		-.609***	**	0.024	-.346**	***	-0.013
Reason of applic. (seek a job)		-.216*		0.011	-0.227	**	0.015
Profession	Without profession	-0.293	***	-0.014	-.410*	***	-0.019
	Nurse	.932***		-0.031	.826***		-0.022
	Professor	.871***	**	0.002	1.055***		0.013
	Scientific	1.289***	**	-0.038	1.245***		-0.019
	Medical doctor	1.304***	**	0.007	1.958***		-0.031
	Entrepreneur	.923***	***	0.006	1.190***	***	-0.006
Legal status: In RD w/ tourist visa		-0.157		0.012	-0.291	*	0.029
In RD illegally		-0.217	***	-0.010	-0.171	***	-0.003
McFadden Pseudo R-squared			0.149			0.239	

Note: ***, **, * denote significance at 1, 5, 10 percent level.

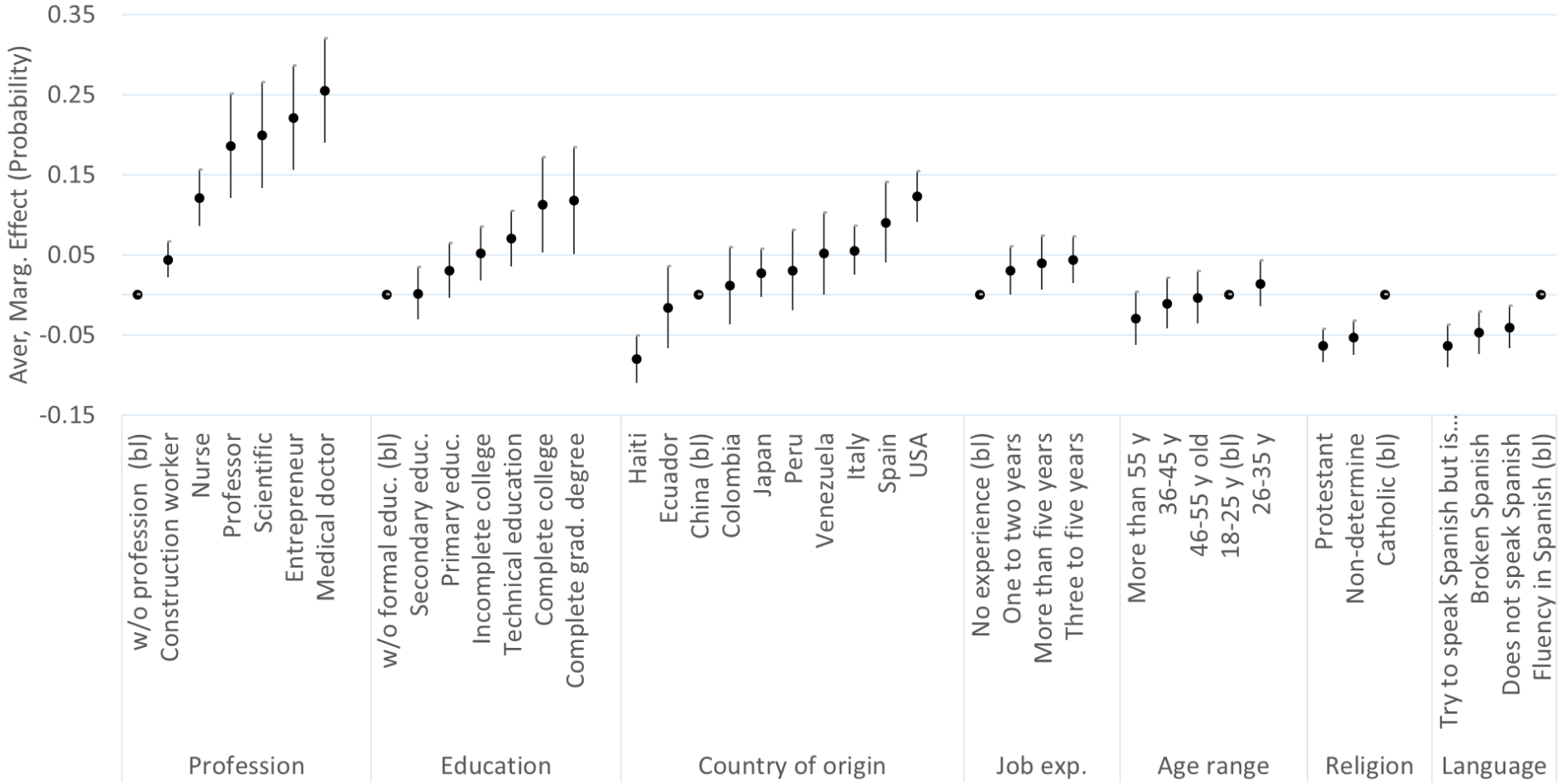
Heterogeneity in Preferences that Doesn't Depend on Income of the Residents

Distribution of Coefficients for Country of Origin by Income Levels of the Respondents



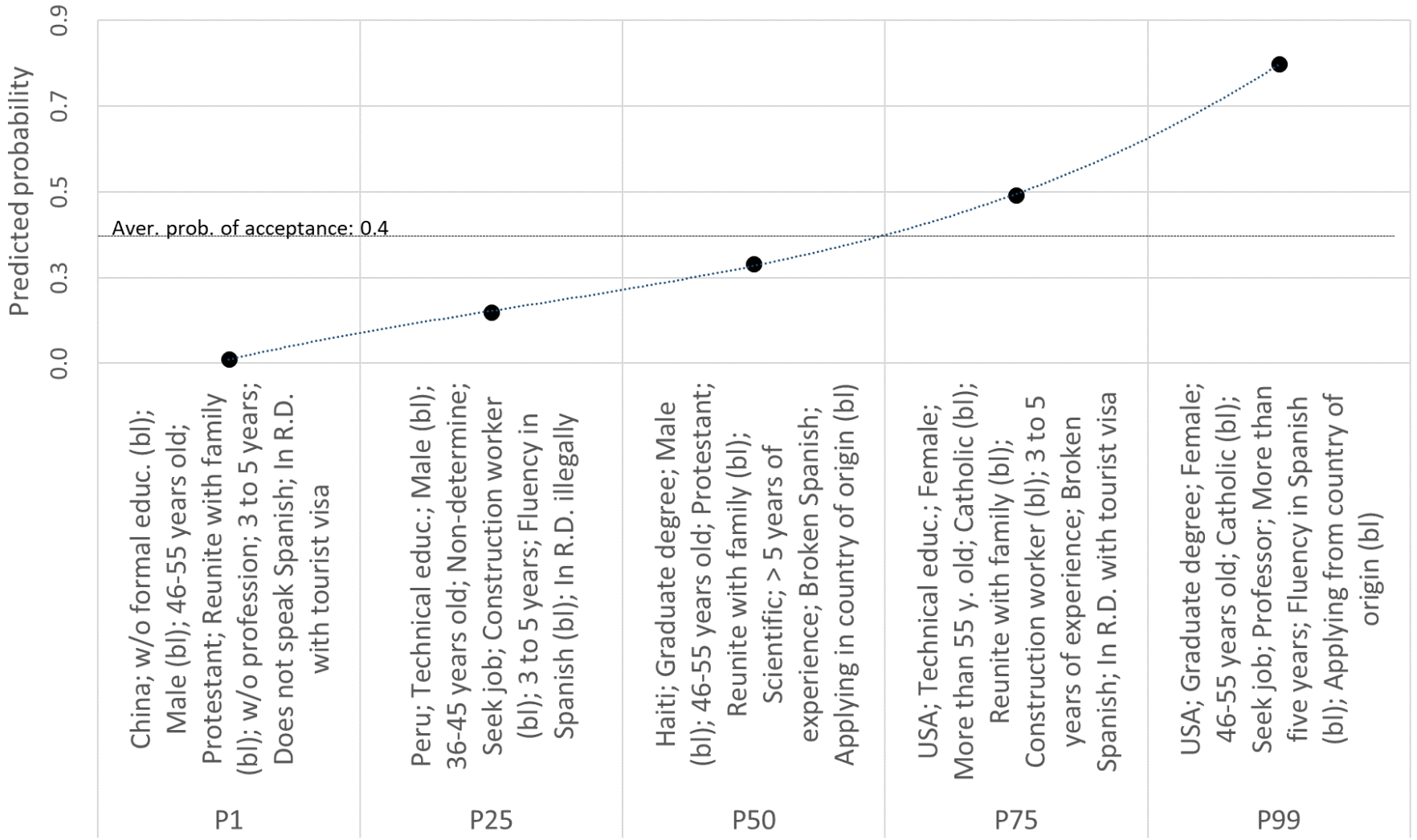


Preferred Immigrant Attributes by Dominicans



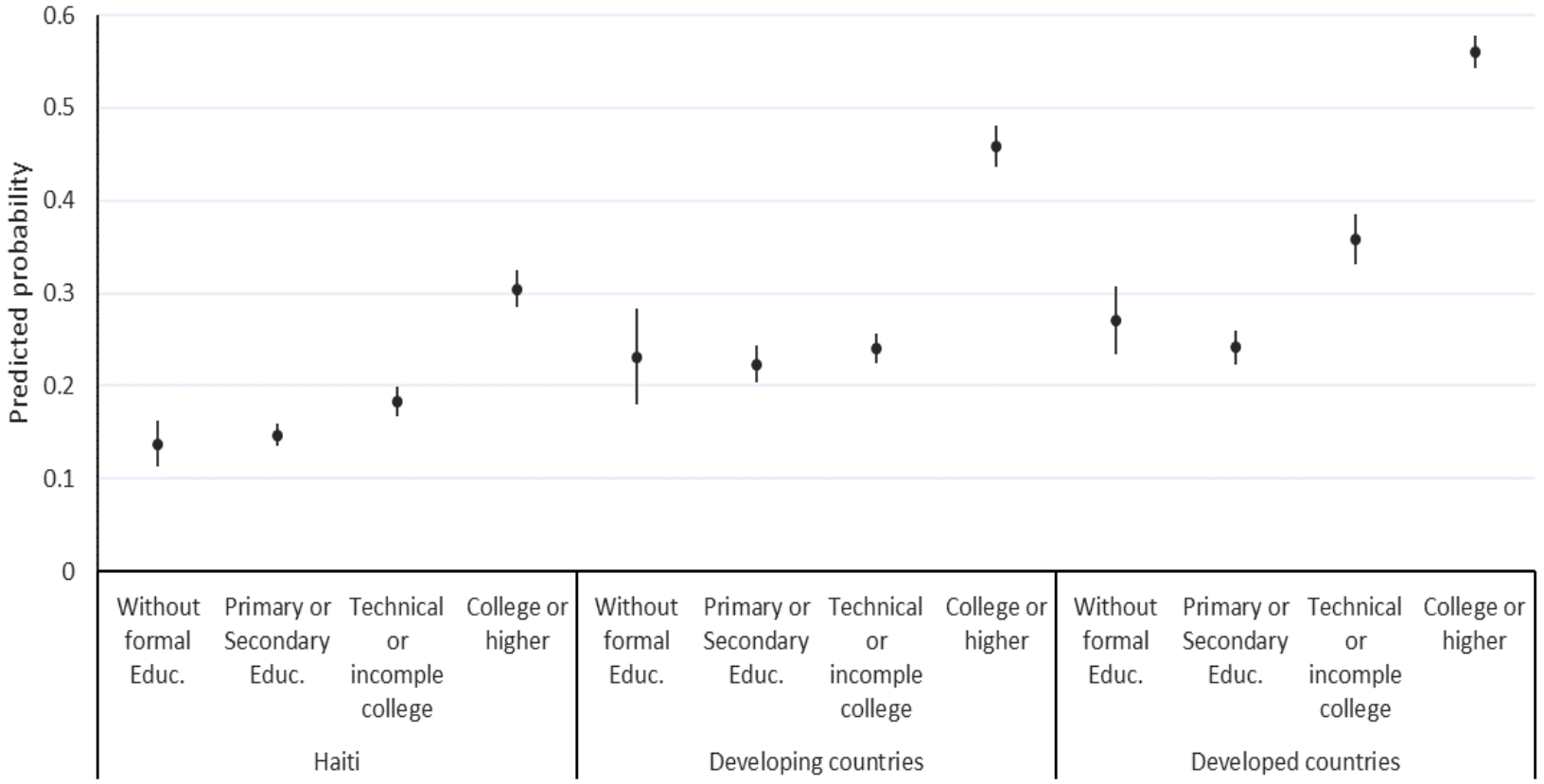
Note: Excludes gender, immigrant legal status, and reason for applying to the country.

Immigrant Profiles: Who Meet the Cut?

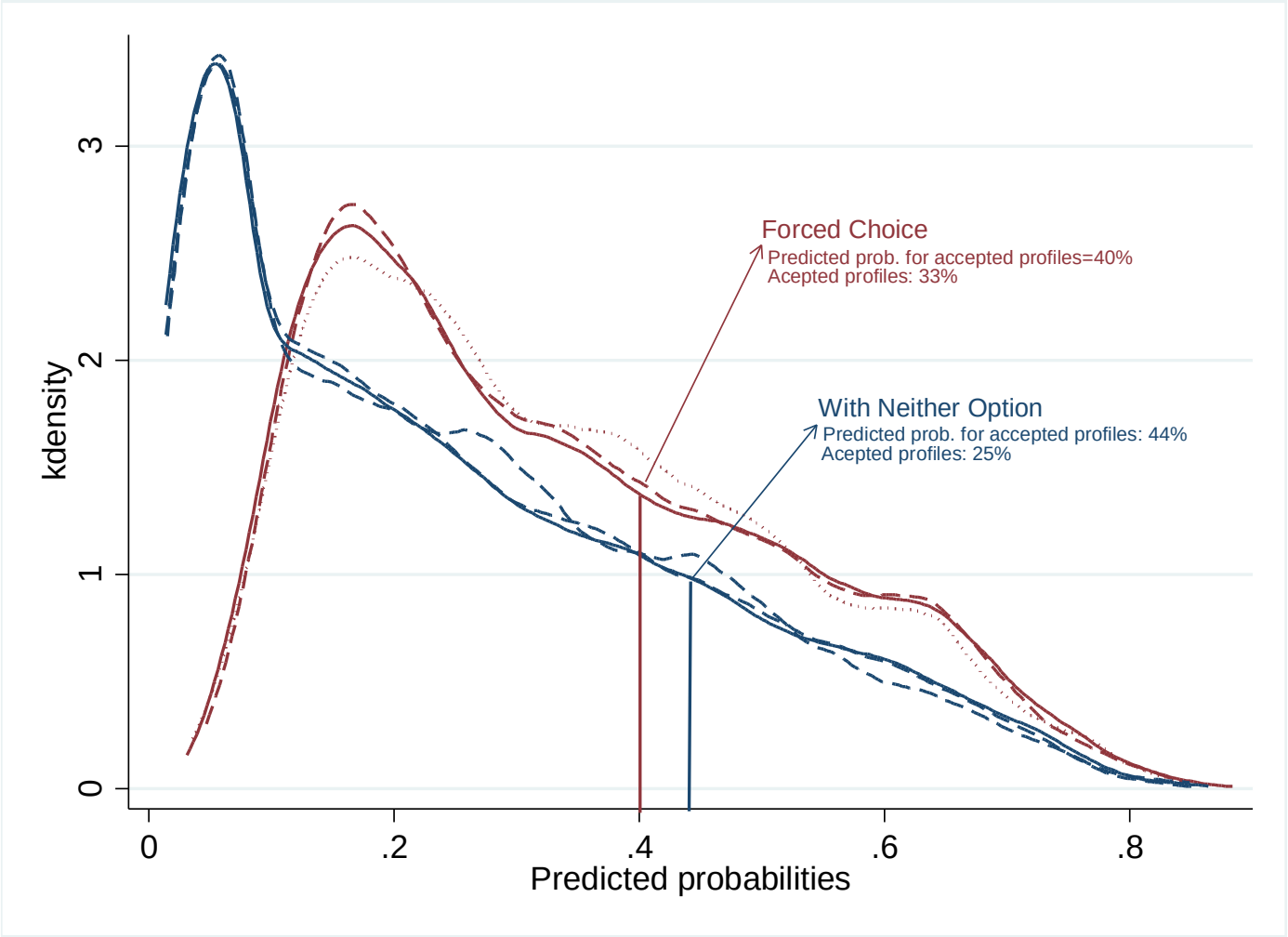


Differences Persist Across Educational Levels

Probability of Admission by Educ. Level and Country of Origin of the Immigrant



Distribution of Probability of Admission



Note: Kernel density estimates of individual probability of admission to the country.

Conclusions

- Some results are aligned with previous literature. E.g. Education, occupation, language, and country of origin affect the support for admission.
- Other results don't:
  - Immigrant status seems not to be determinant.
  - Premium/penalty for some countries seems to persist.
- Preferences are heterogenous and accounting for it improves the performance of the model. However, it seems not to be explained by observable factors, suggesting that most of the heterogeneity is idiosyncratic.
- The choice setting (with/without outside option) matters. Further, the CE with neither option increases the fit of the model.