




In the format provided by the authors and unedited.

Attitudes of urban residents towards environmental migration in Kenya and Vietnam

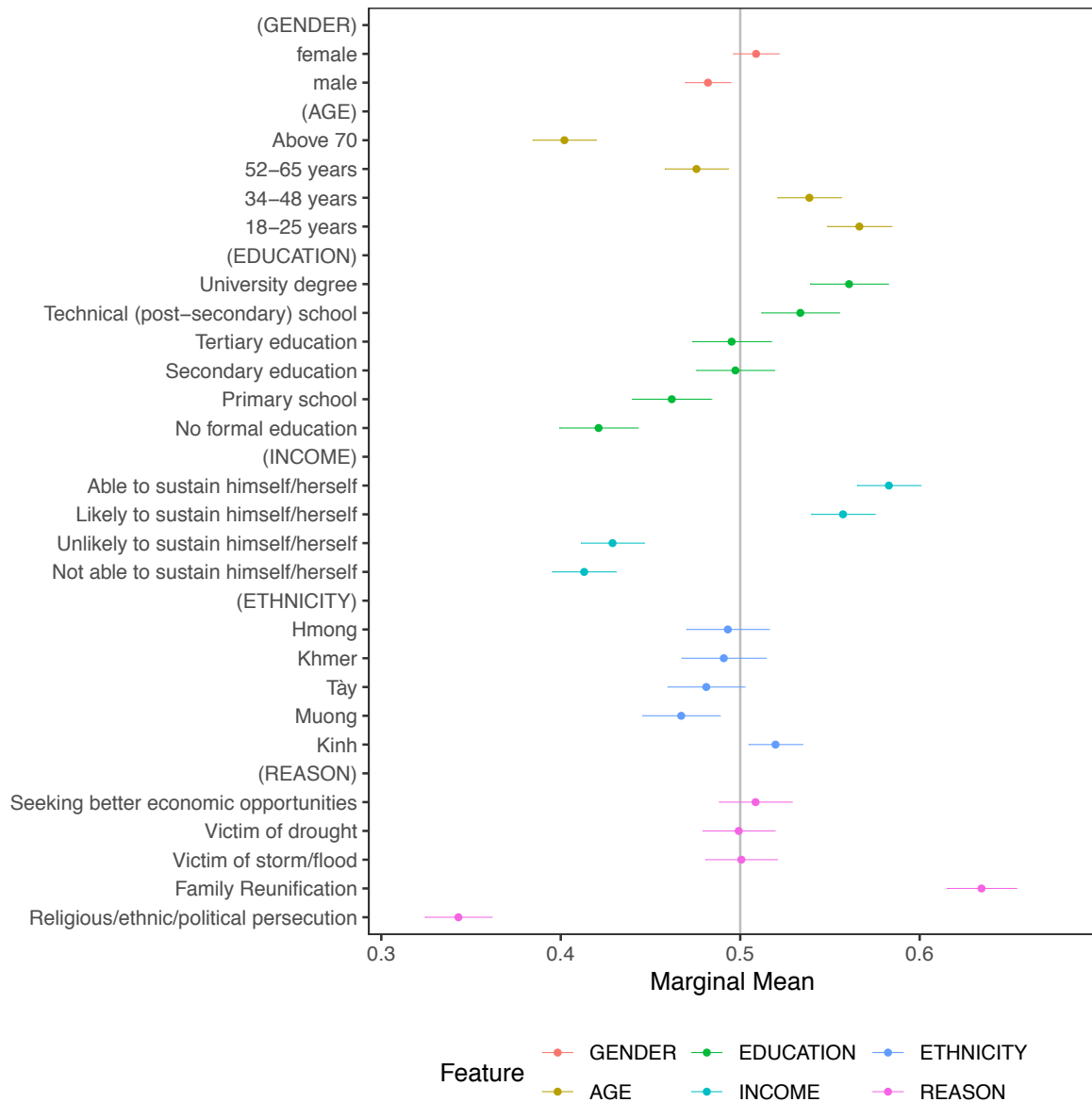
Gabriele Spilker ¹✉, Quynh Nguyen², Vally Koubi ^{3,4} and Tobias Böhmelt ⁵

¹University of Salzburg, Salzburg, Austria. ²Australian National University, Canberra, Australia. ³ETH Zürich, Zürich, Switzerland. ⁴University of Bern, Bern, Switzerland. ⁵University of Essex, Colchester, UK. ✉e-mail: gabriele.spilker@sbg.ac.at

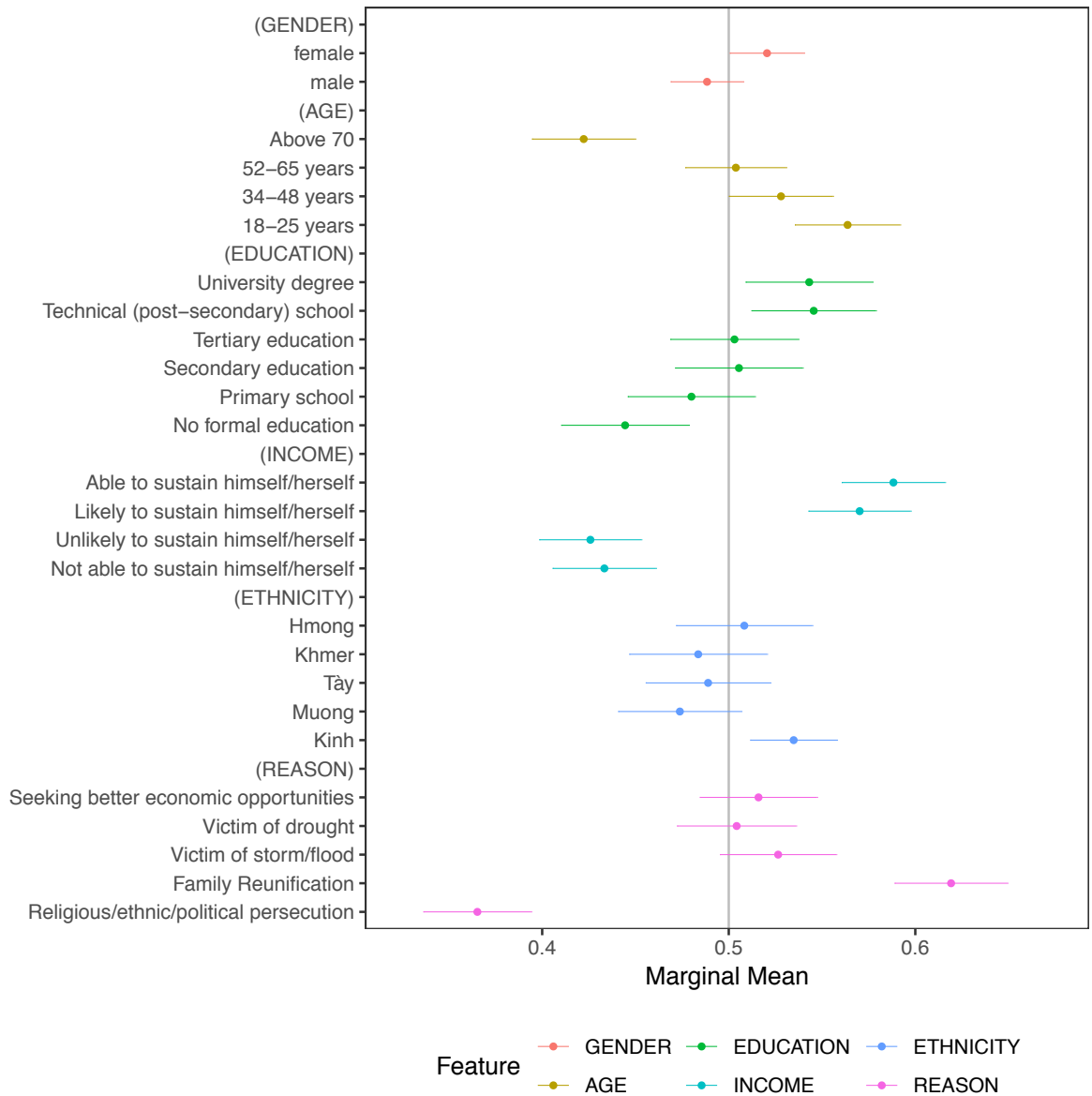
Supplementary information (SI) for: Attitudes of urban residents toward environmental migration in Kenya and Vietnam

Gabriele Spilker¹, Quynh Nguyen², Vally Koubi³, Tobias Böhmelt⁴

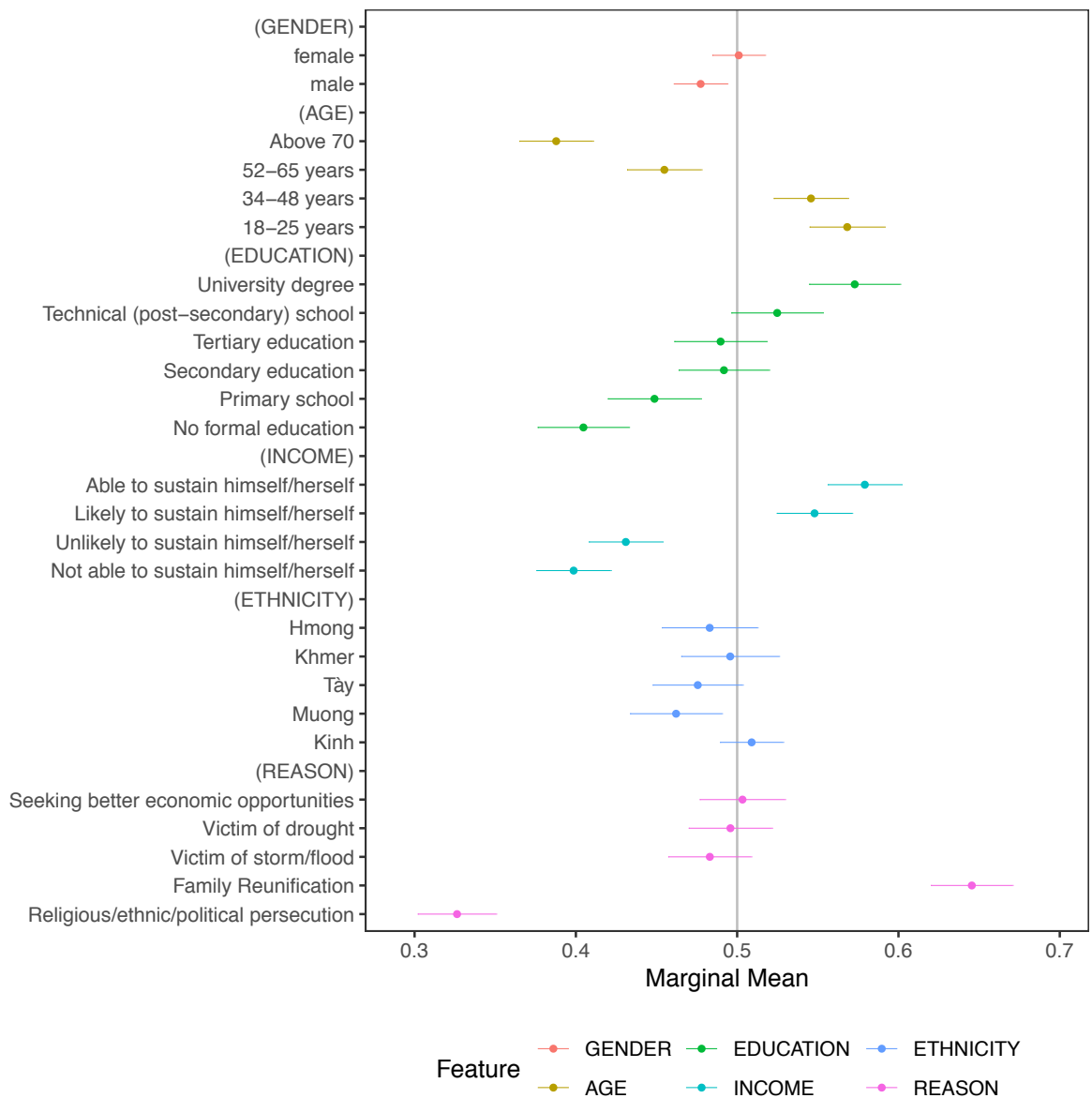
¹University of Salzburg; ²Australian National University; ³ETH Zürich and University of Bern;
⁴University of Essex



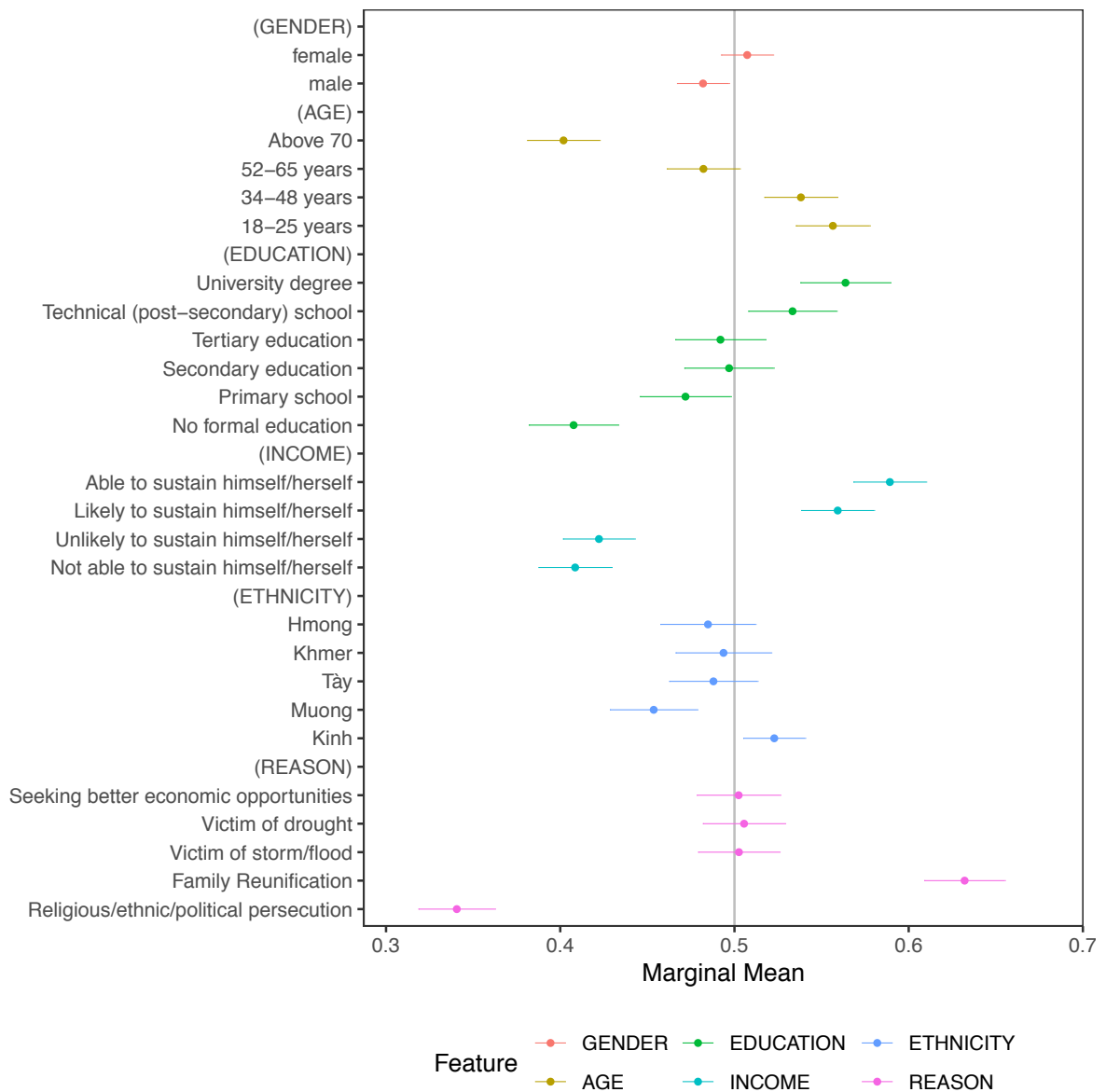
SI Figure 1. Marginal means – Vietnam (general). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



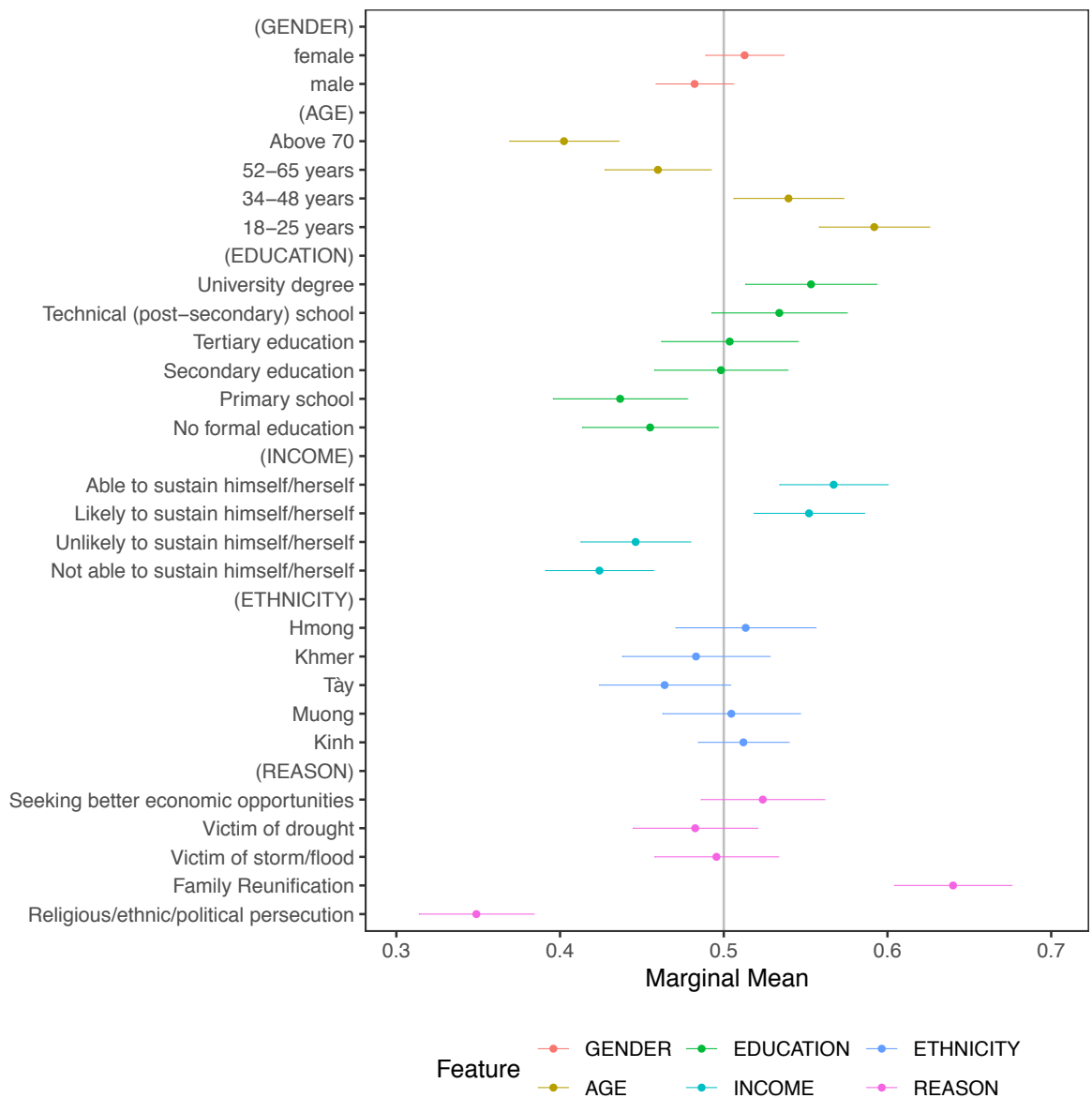
SI Figure 2. Marginal means – Low-educated urbanites in Vietnam. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



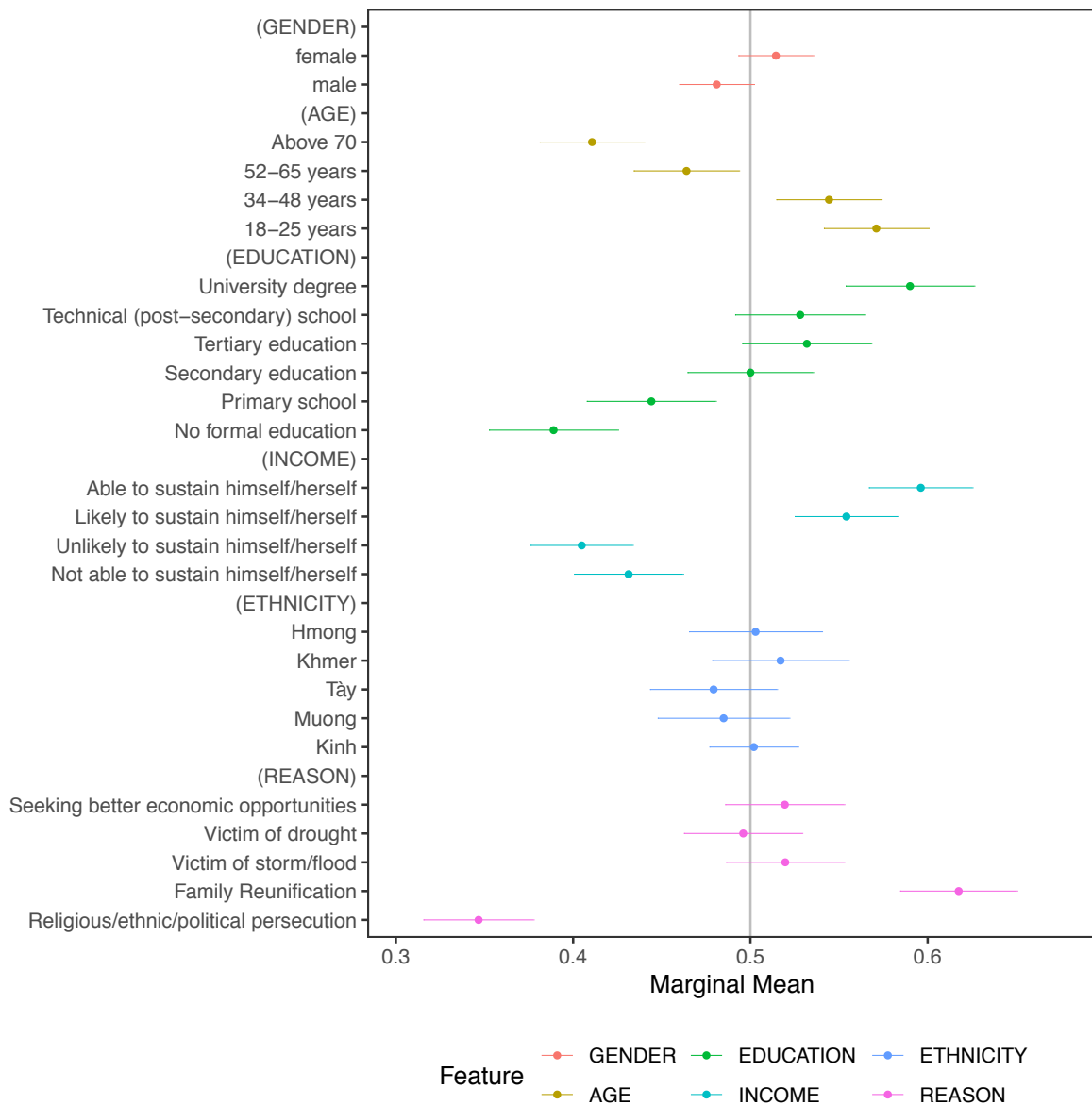
SI Figure 3. Marginal means – High-educated urbanites in Vietnam. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



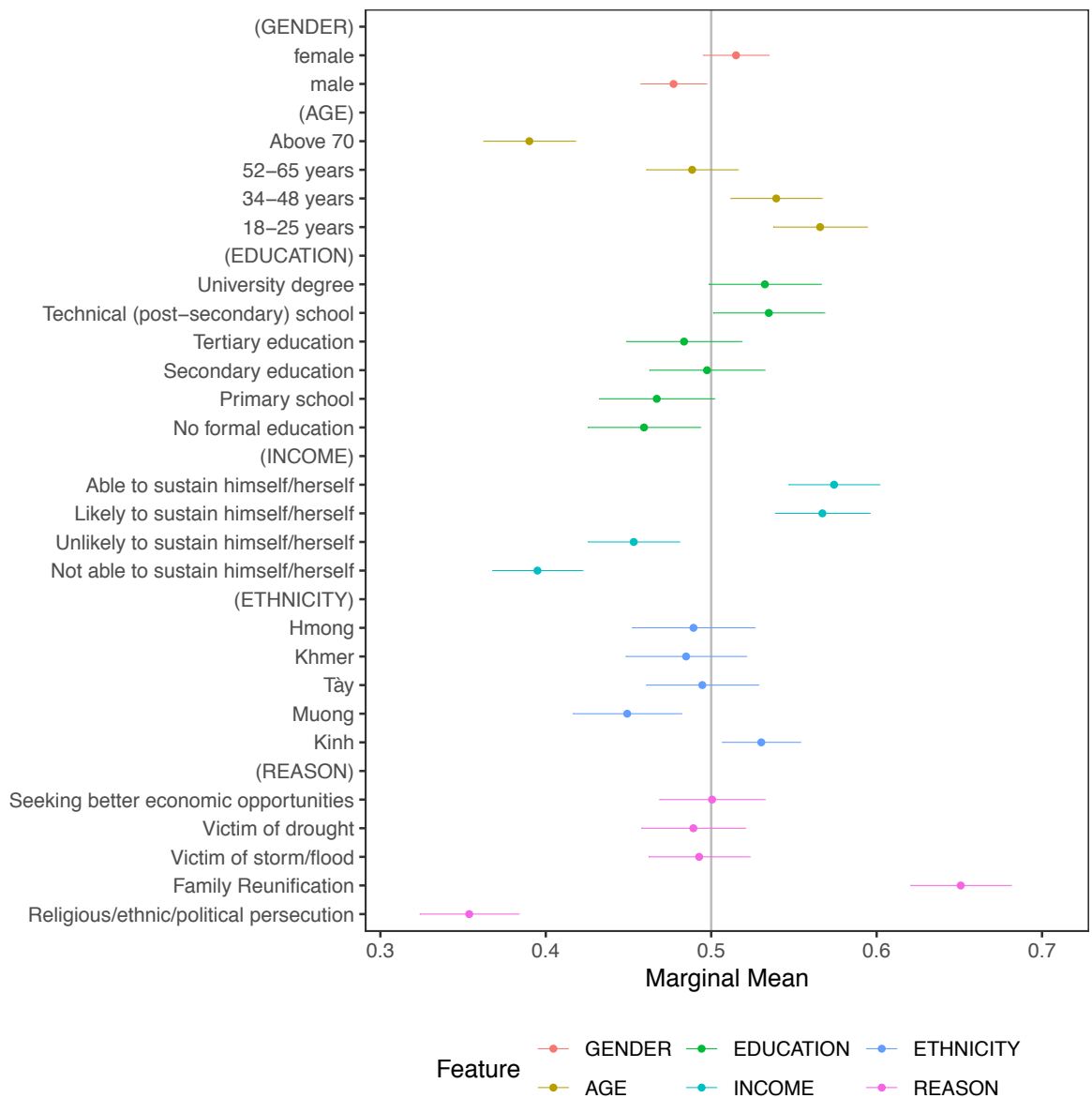
SI Figure 4. Marginal means – Low-income urbanites in Vietnam. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



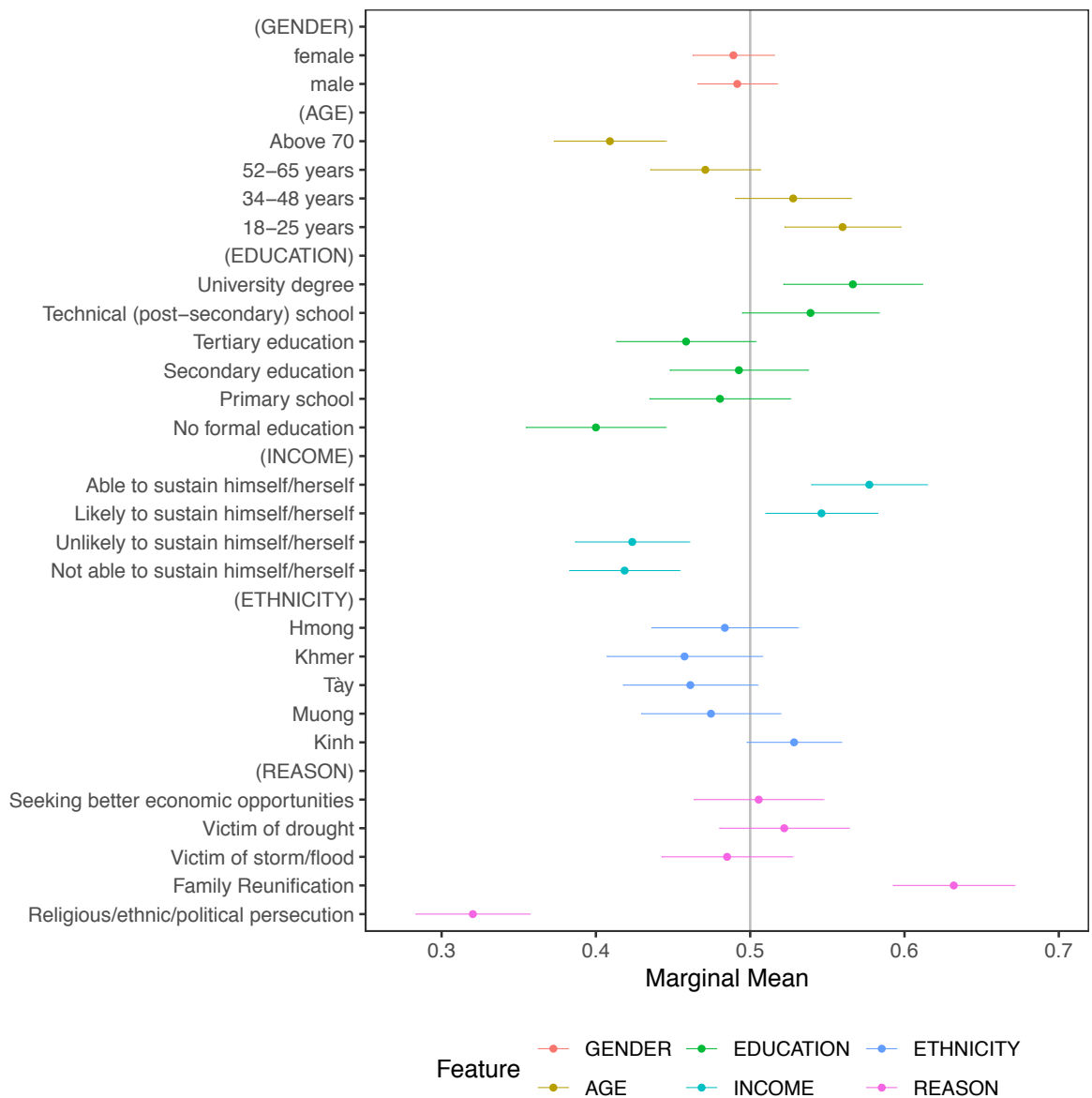
SI Figure 5. Marginal means – High-income urbanites in Vietnam. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



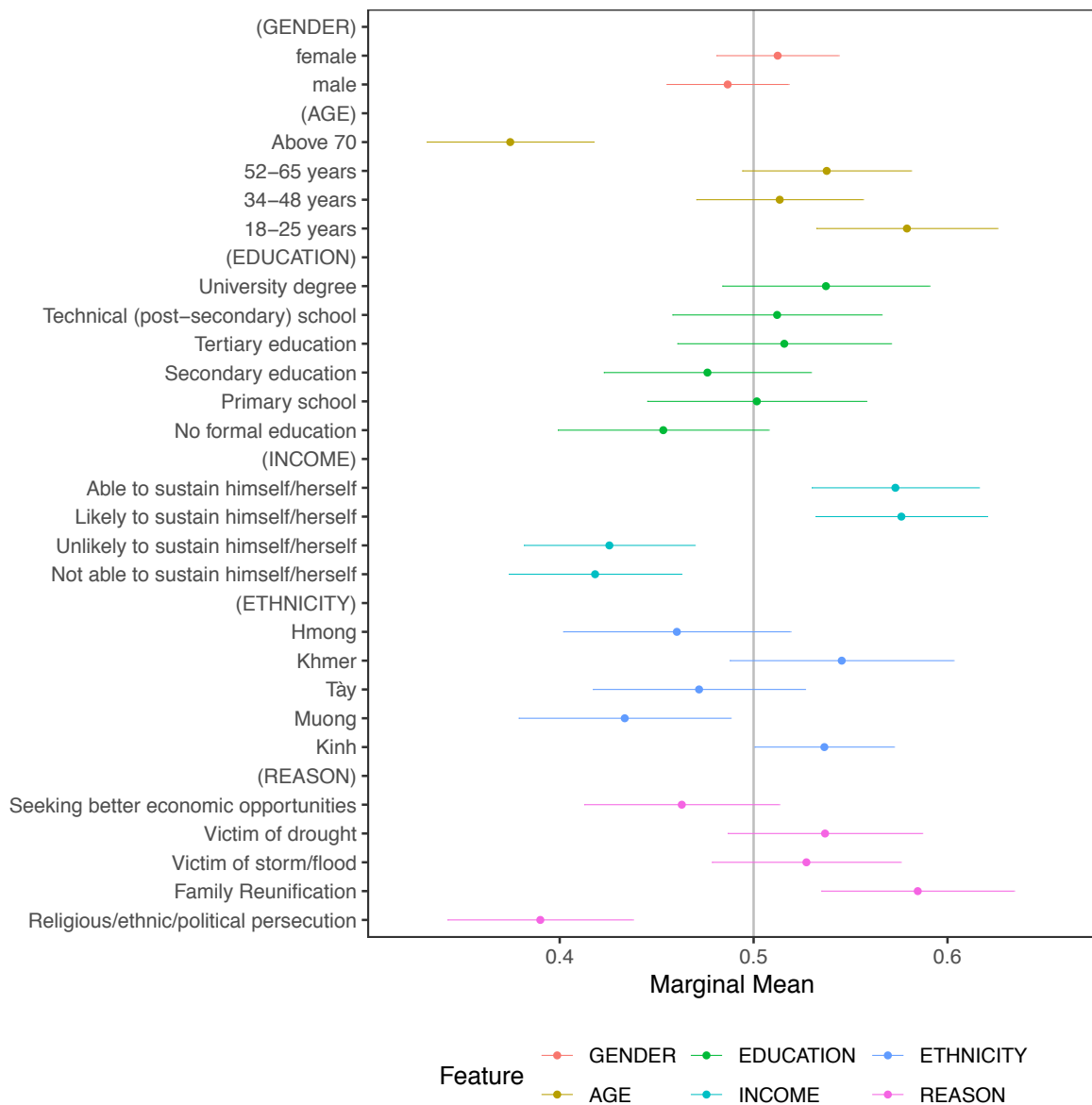
SI Figure 6. Marginal means – Results below 30 years of age (Vietnam). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



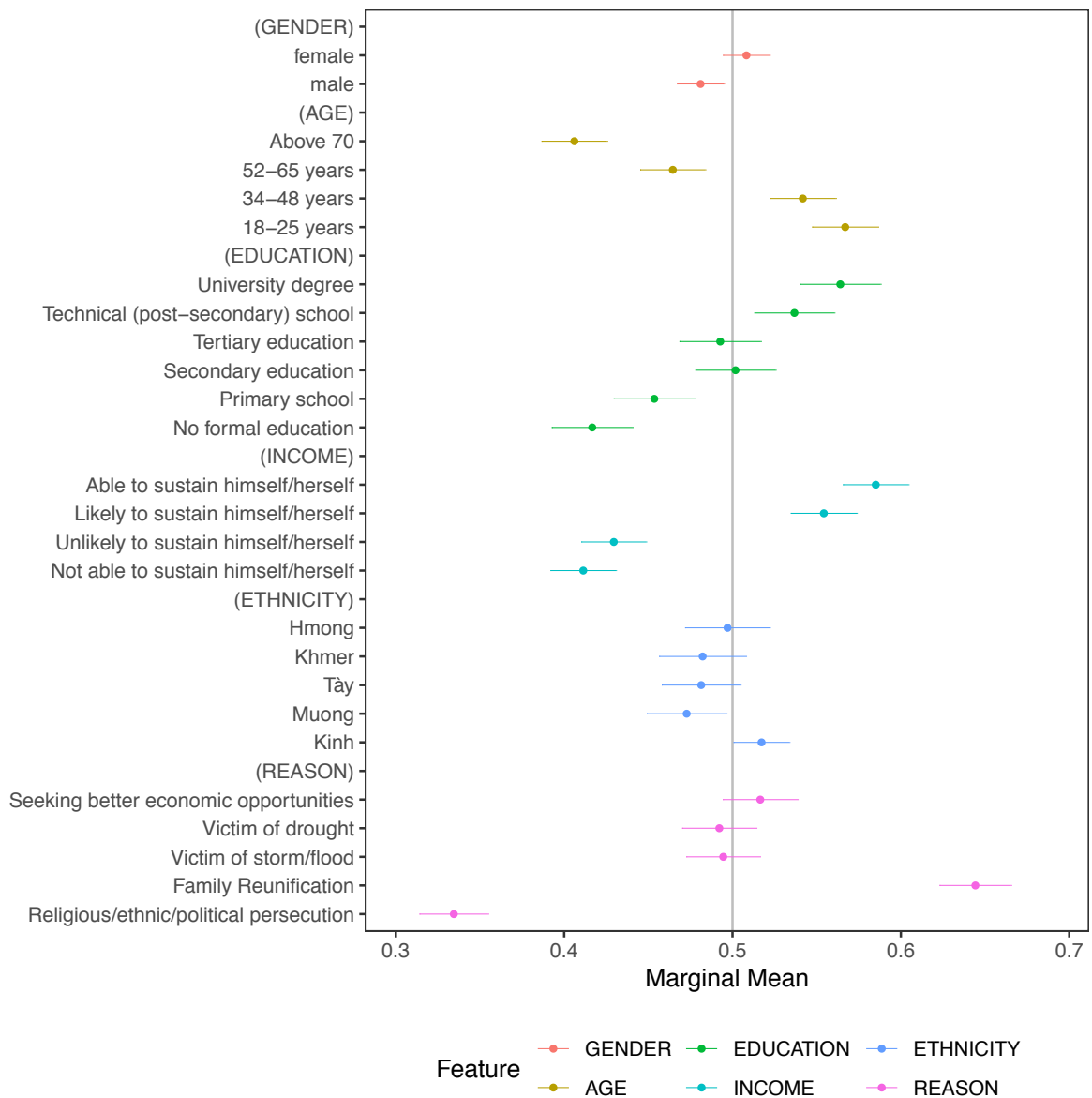
SI Figure 7. Marginal means – Results between 30 and 50 years of age (Vietnam). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



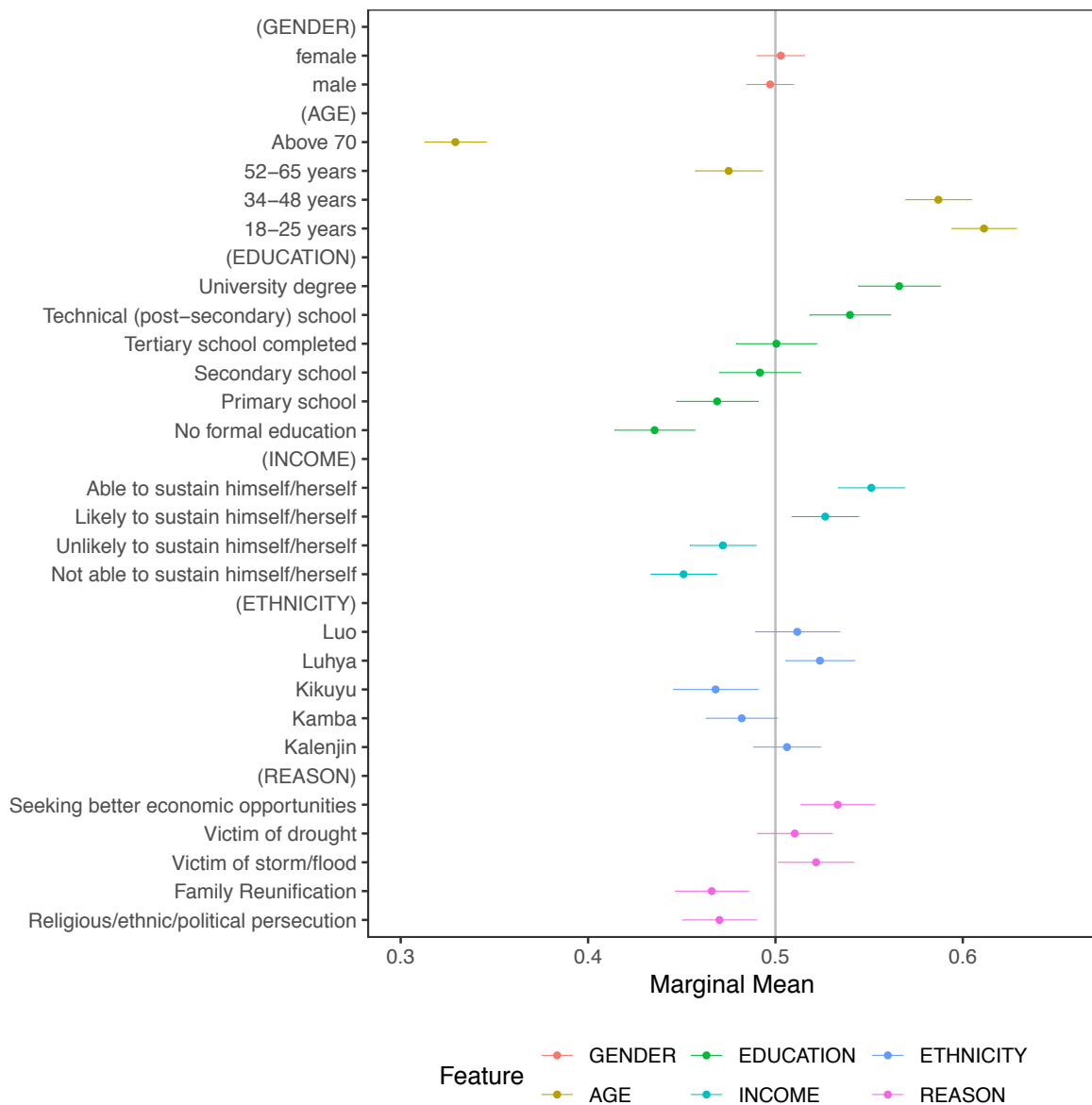
SI Figure 8. Marginal means – Results above 50 years of age (Vietnam). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



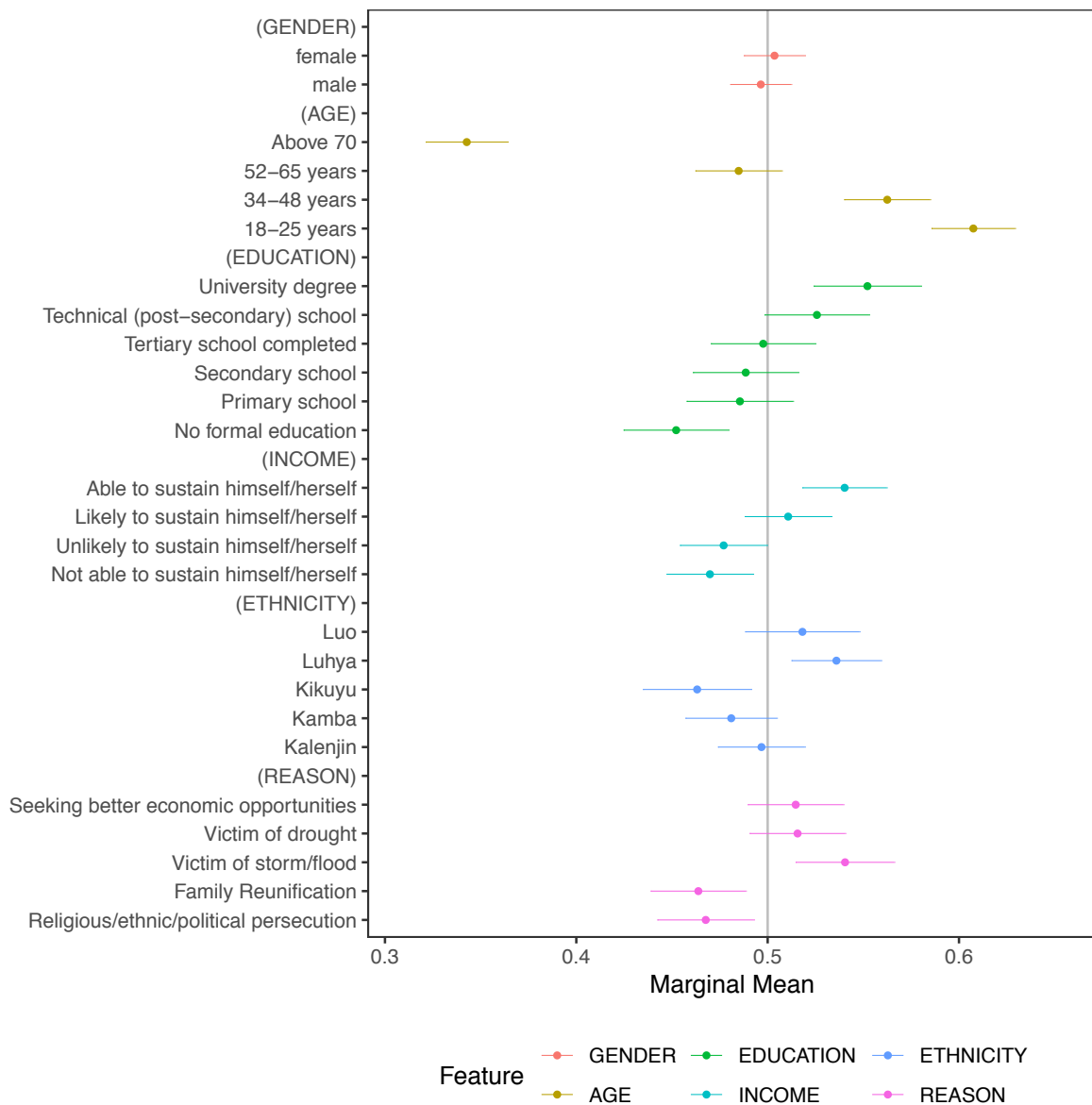
SI Figure 9. Marginal means – Climate-change deniers (Vietnam). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



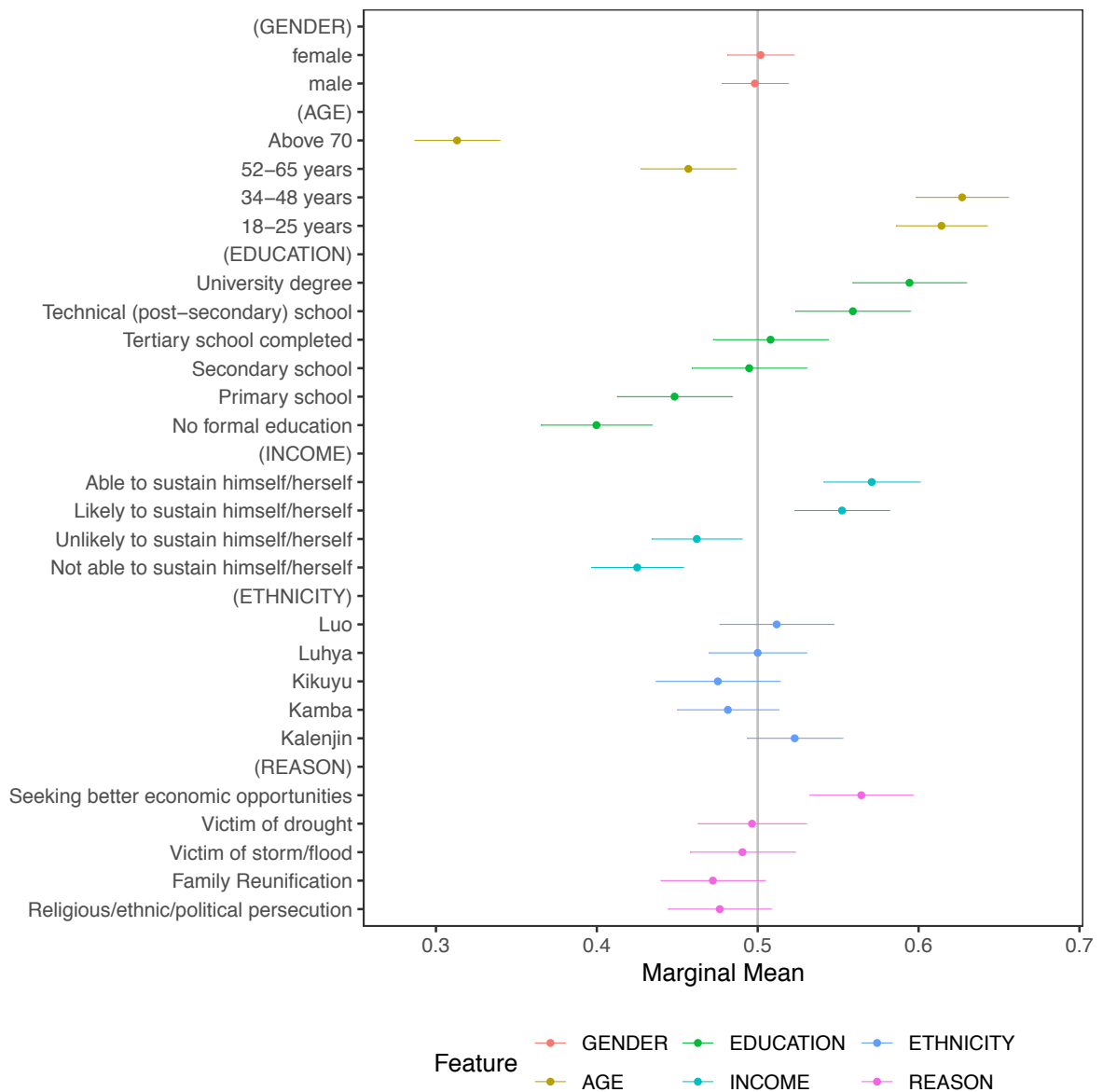
SI Figure 10. Marginal means – Climate-change believers (Vietnam). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



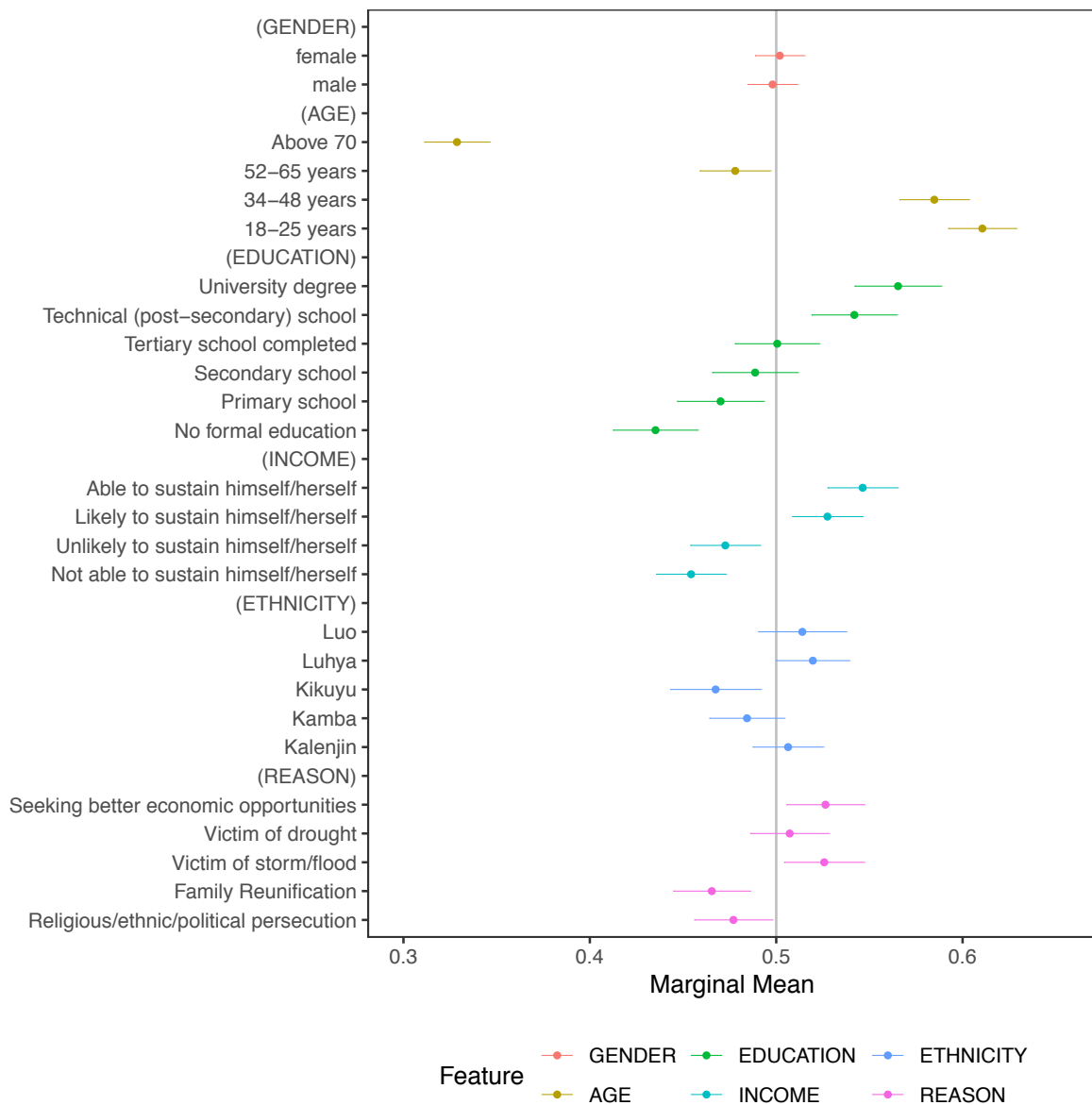
SI Figure 11. Marginal means – Kenya (general). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



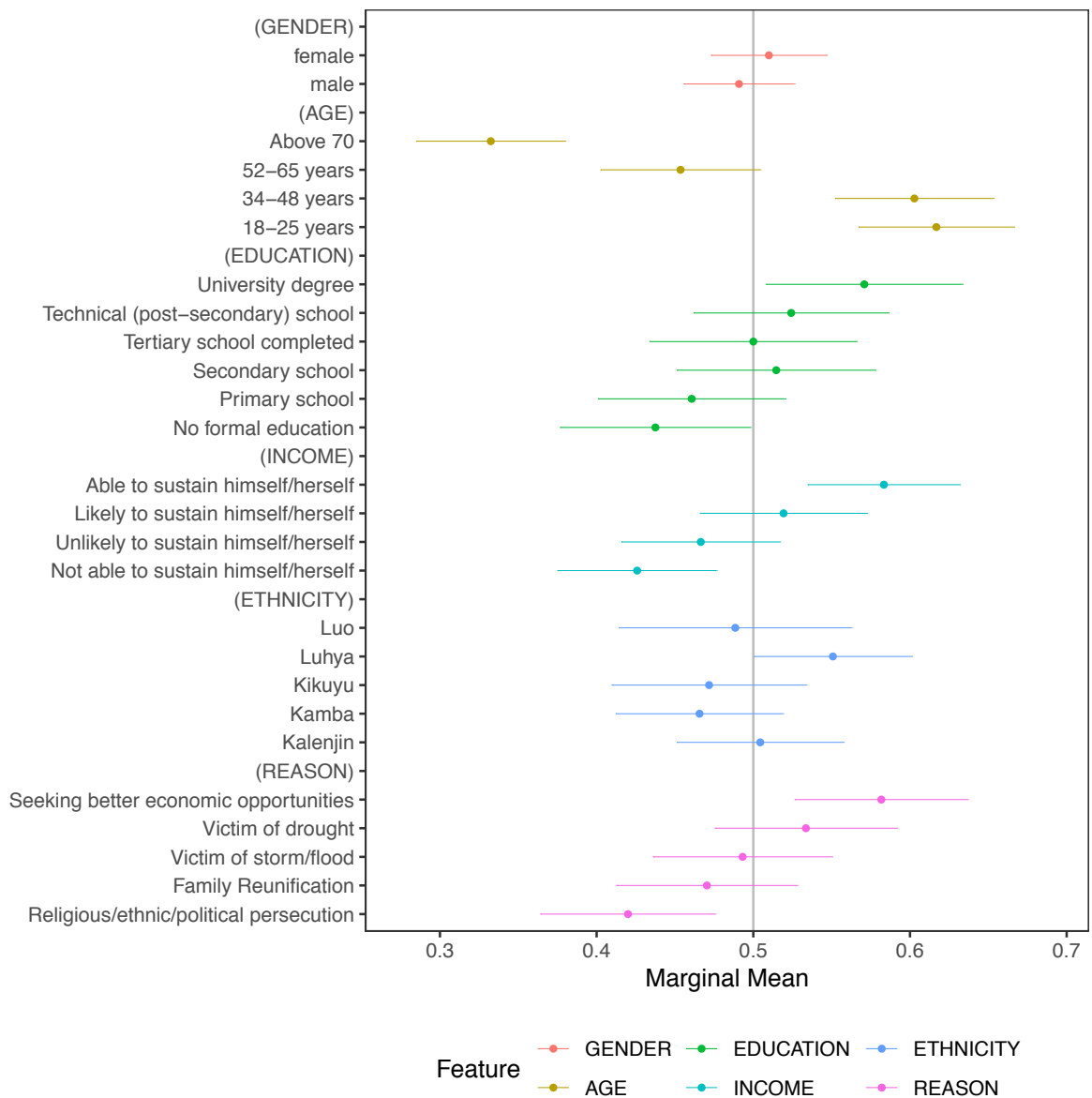
SI Figure 12. Marginal means – Low-educated urbanites in Kenya. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



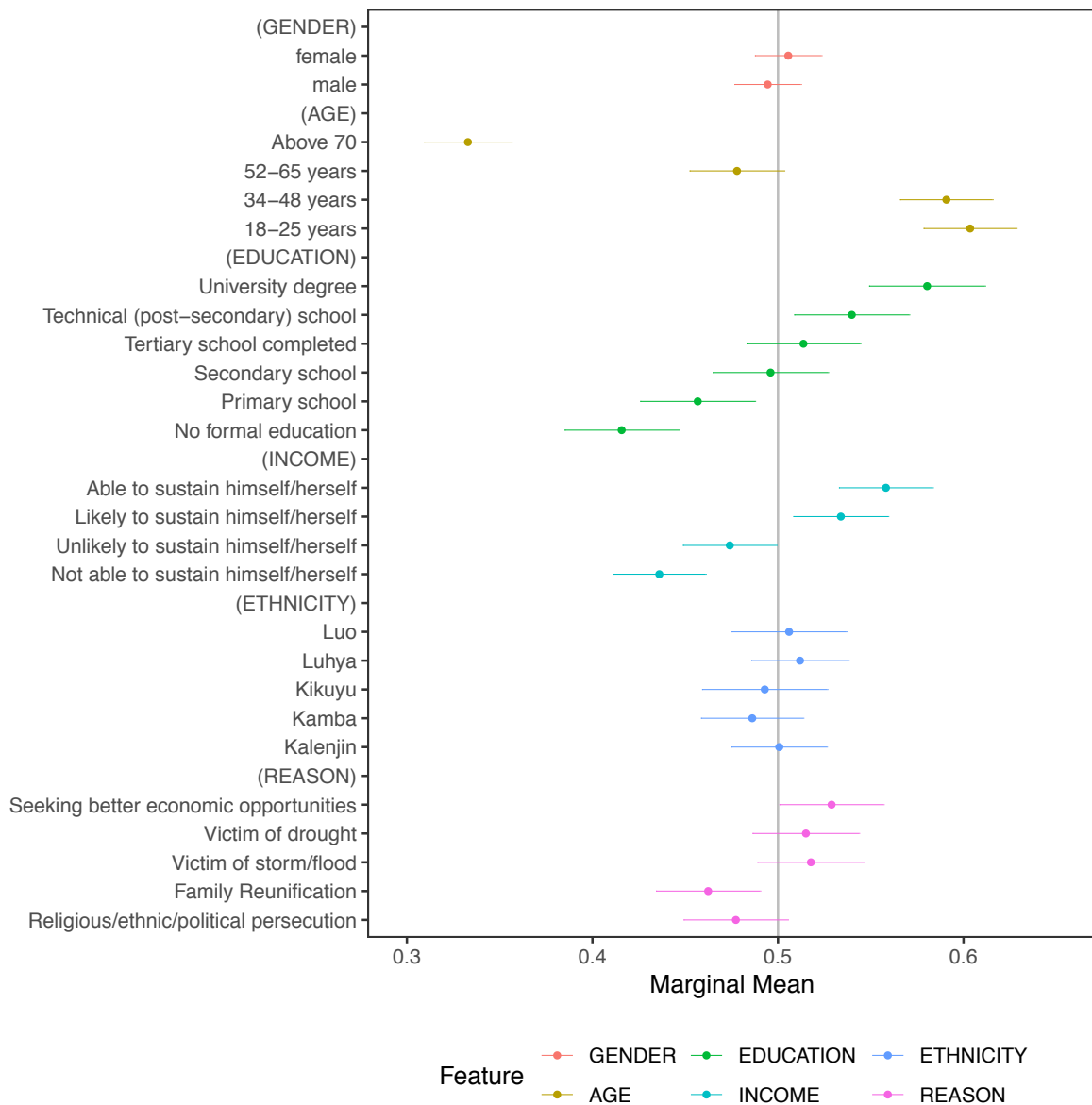
SI Figure 13. Marginal means – High-educated urbanites in Kenya. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



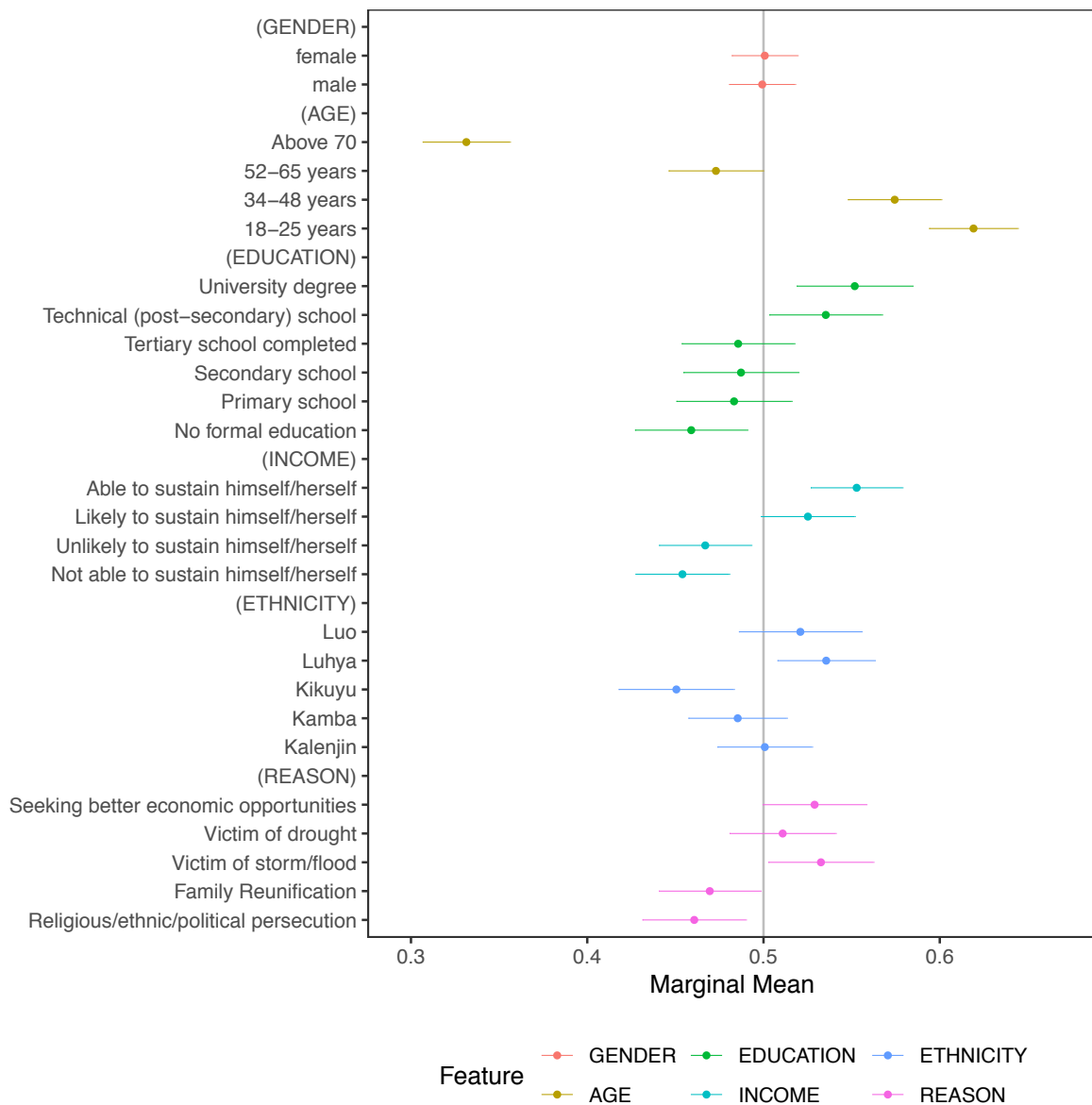
SI Figure 14. Marginal means – Low-income urbanites in Kenya. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



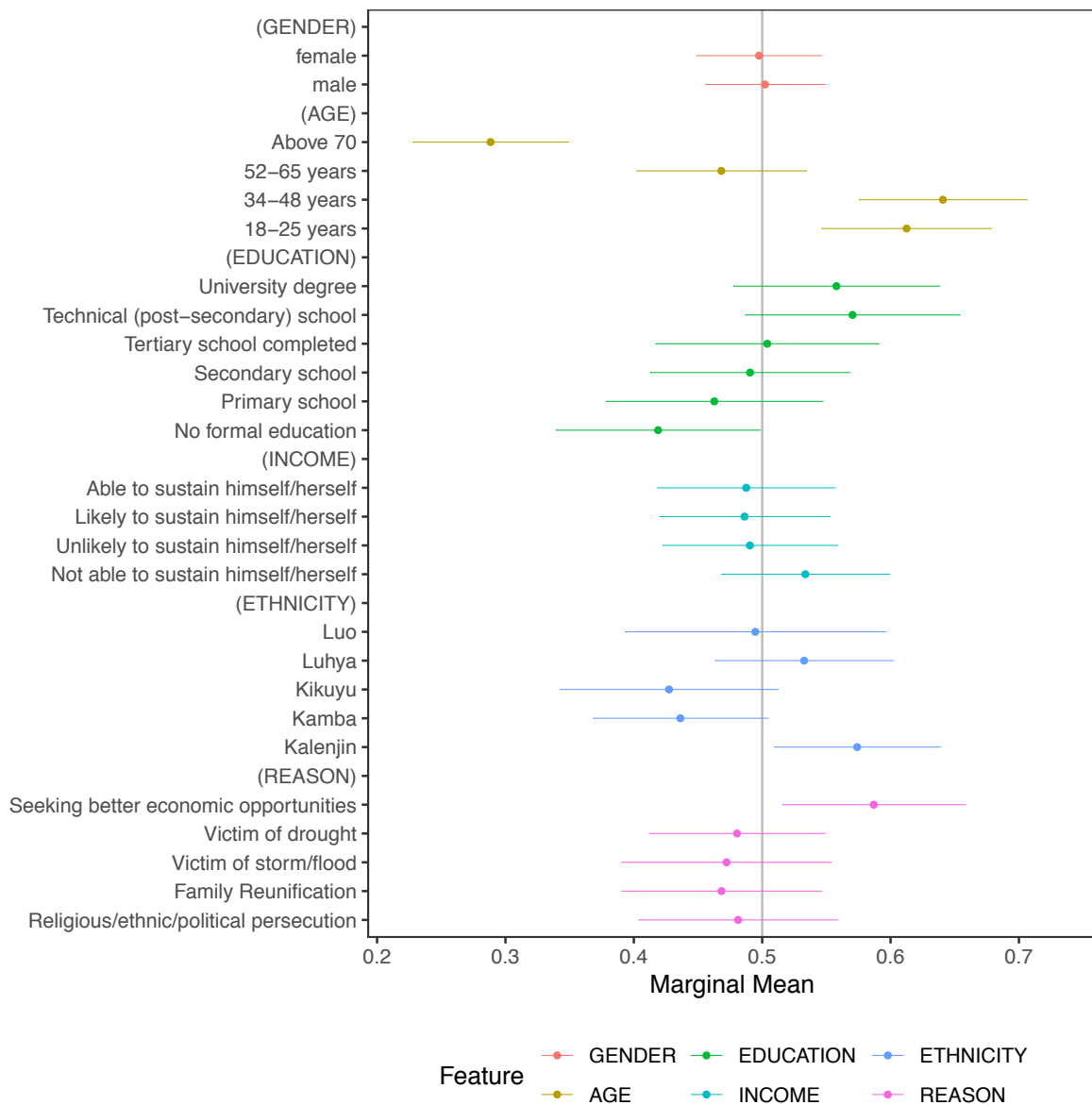
SI Figure 15. Marginal means – High-income urbanites in Kenya. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



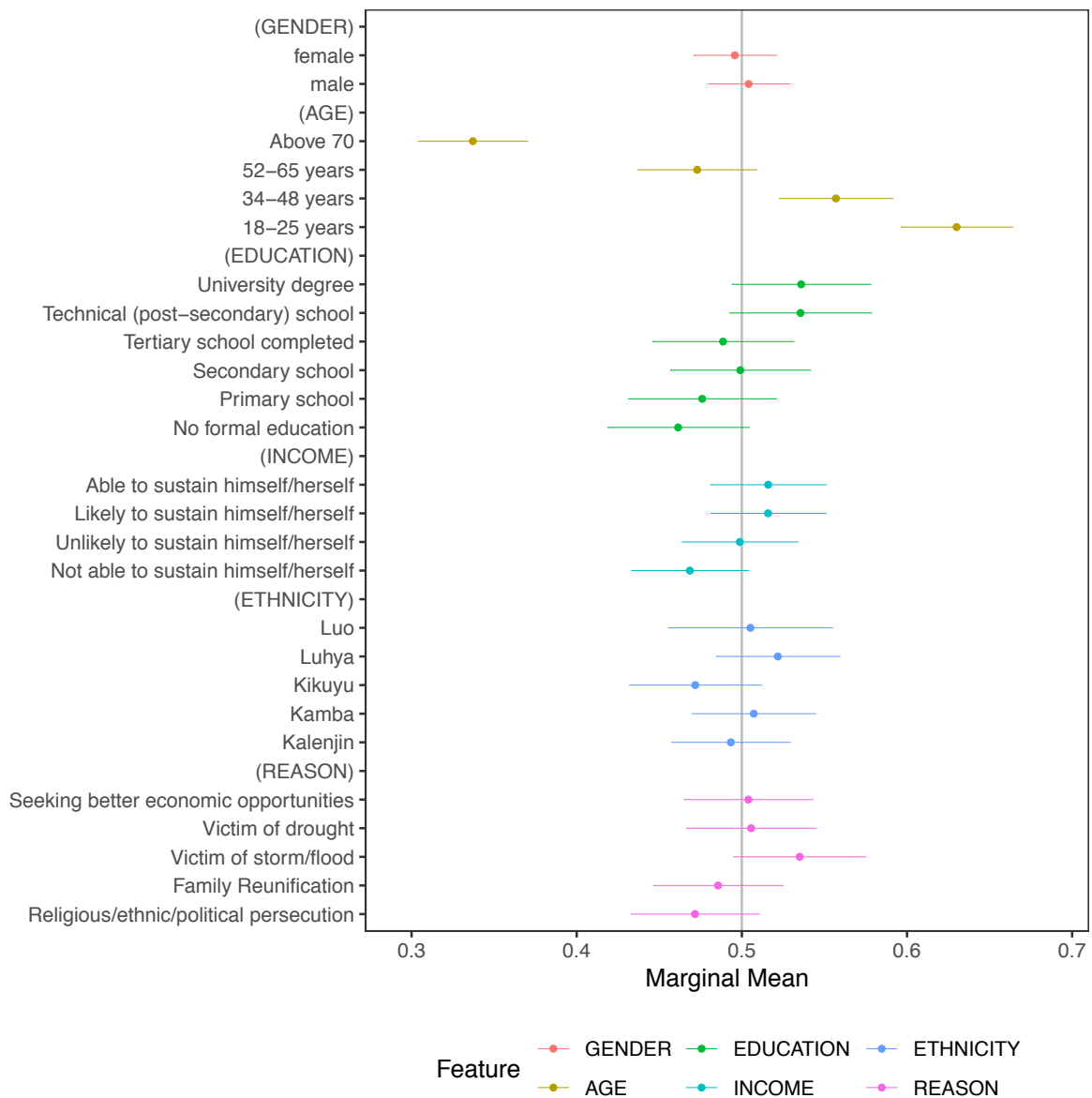
SI Figure 16. Marginal means – Results below 30 years of age (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



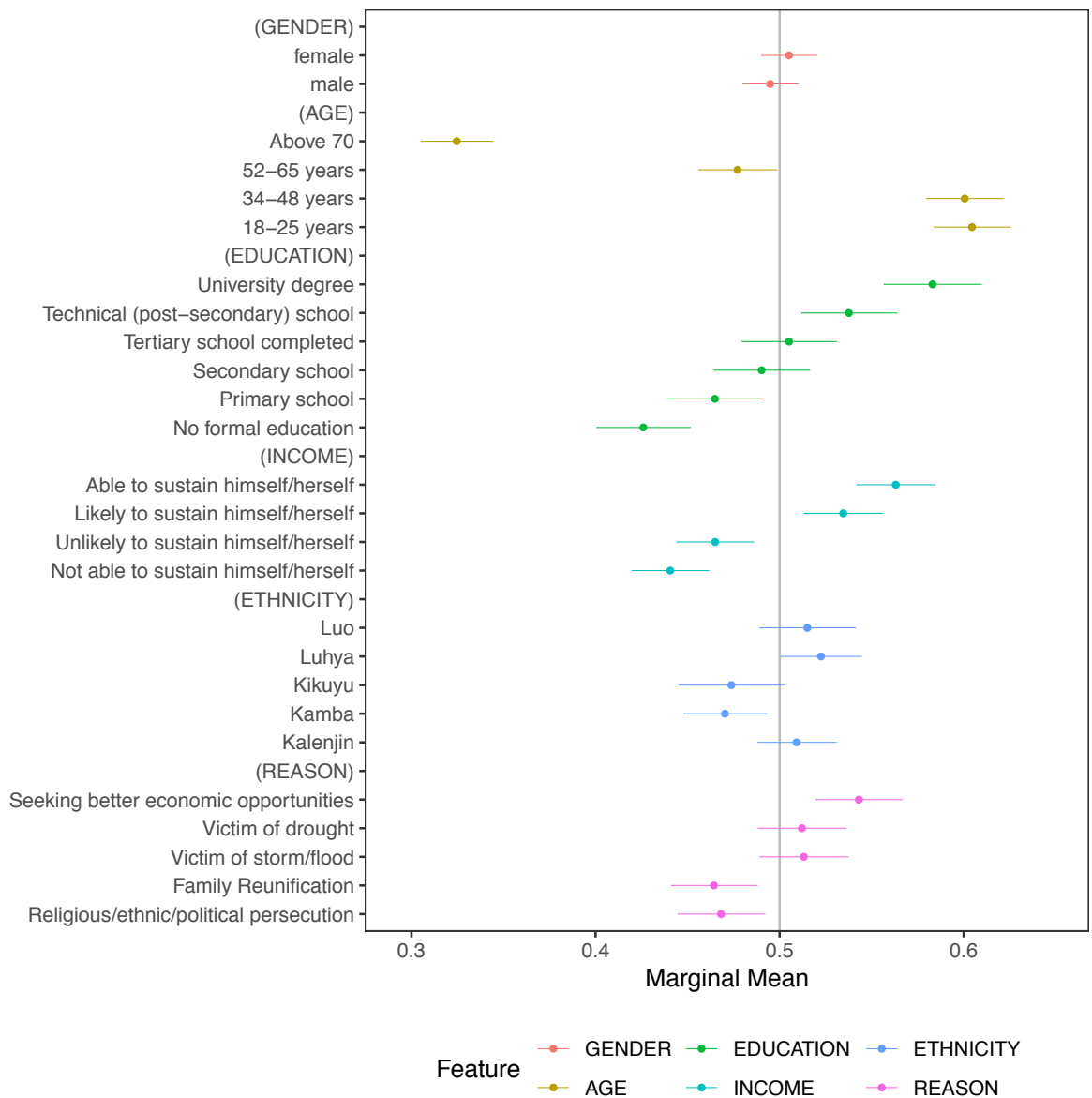
SI Figure 17. Marginal means – Results between 30 and 50 years of age (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



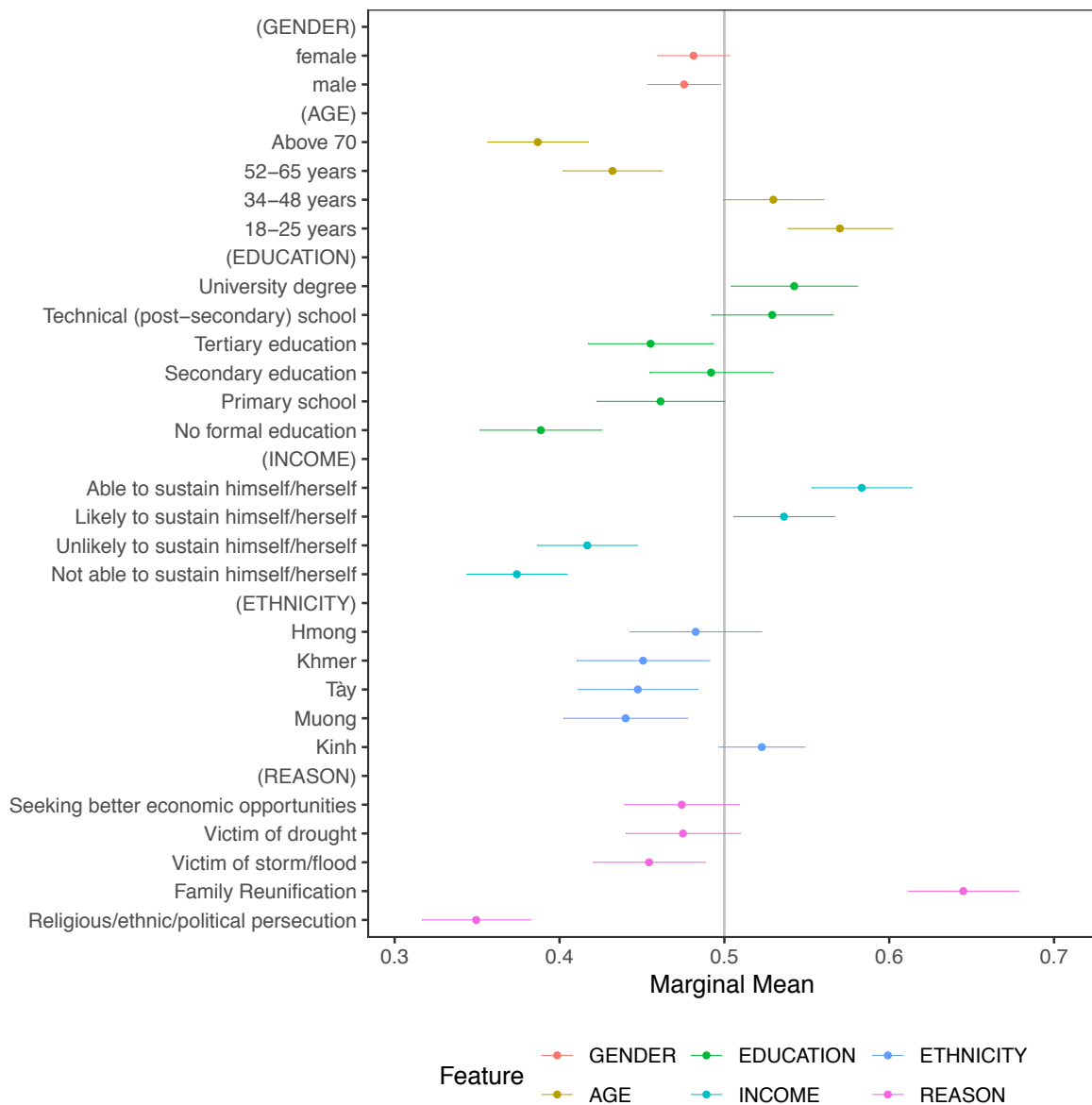
SI Figure 18. Marginal means – Results above 50 years of age (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



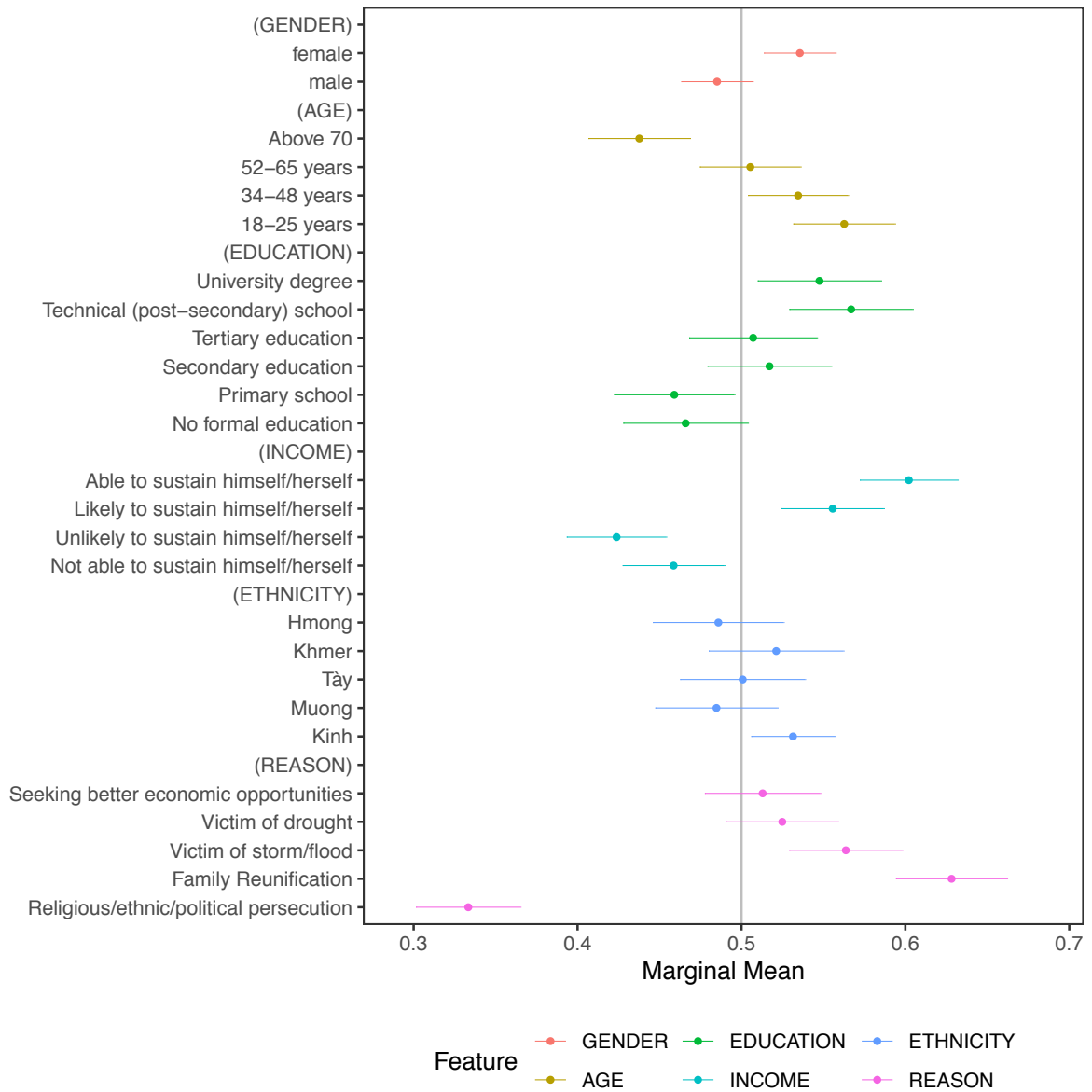
SI Figure 19. Marginal means – Climate-change deniers (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



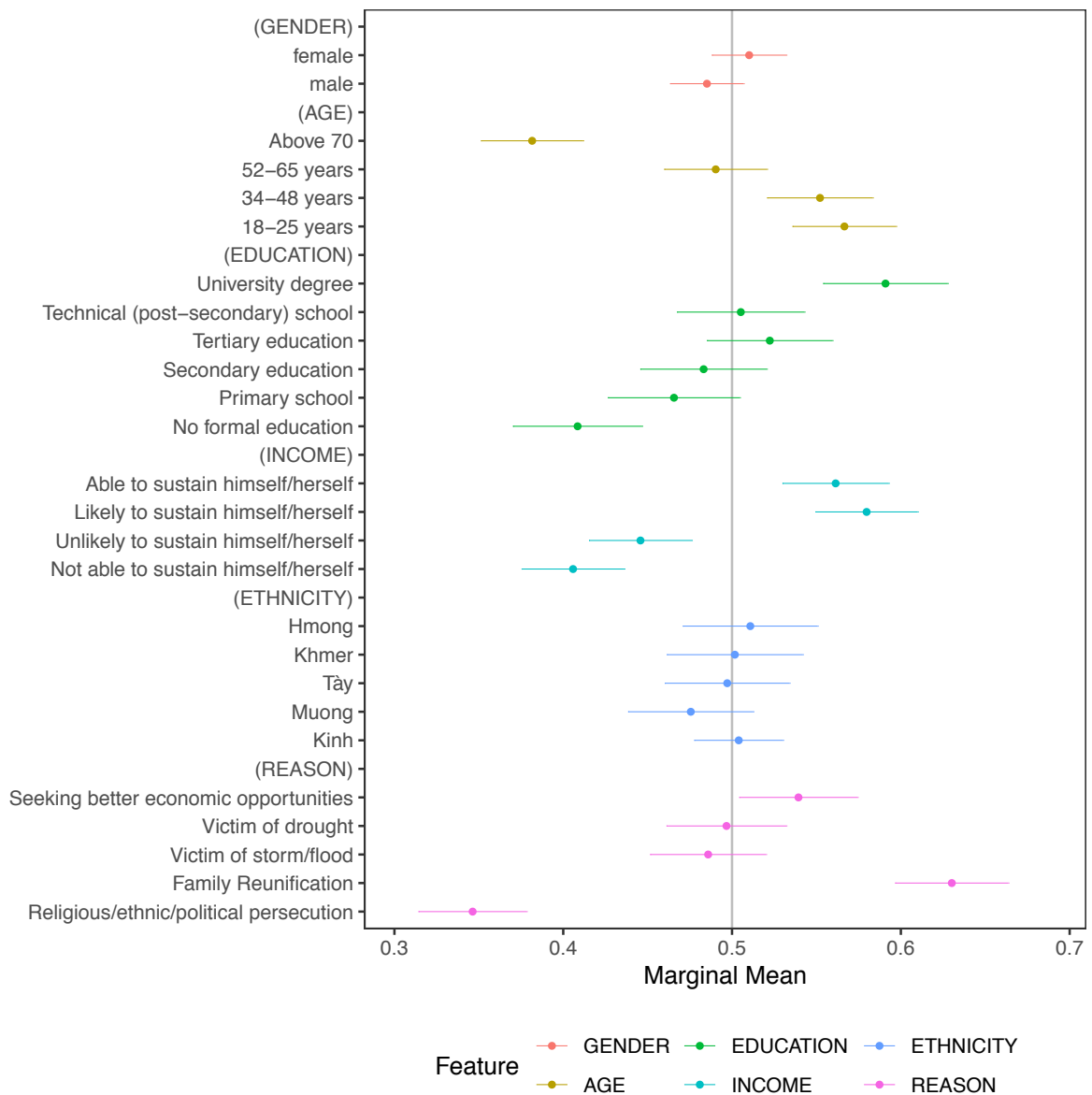
SI Figure 20. Marginal means – Climate-change believers (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



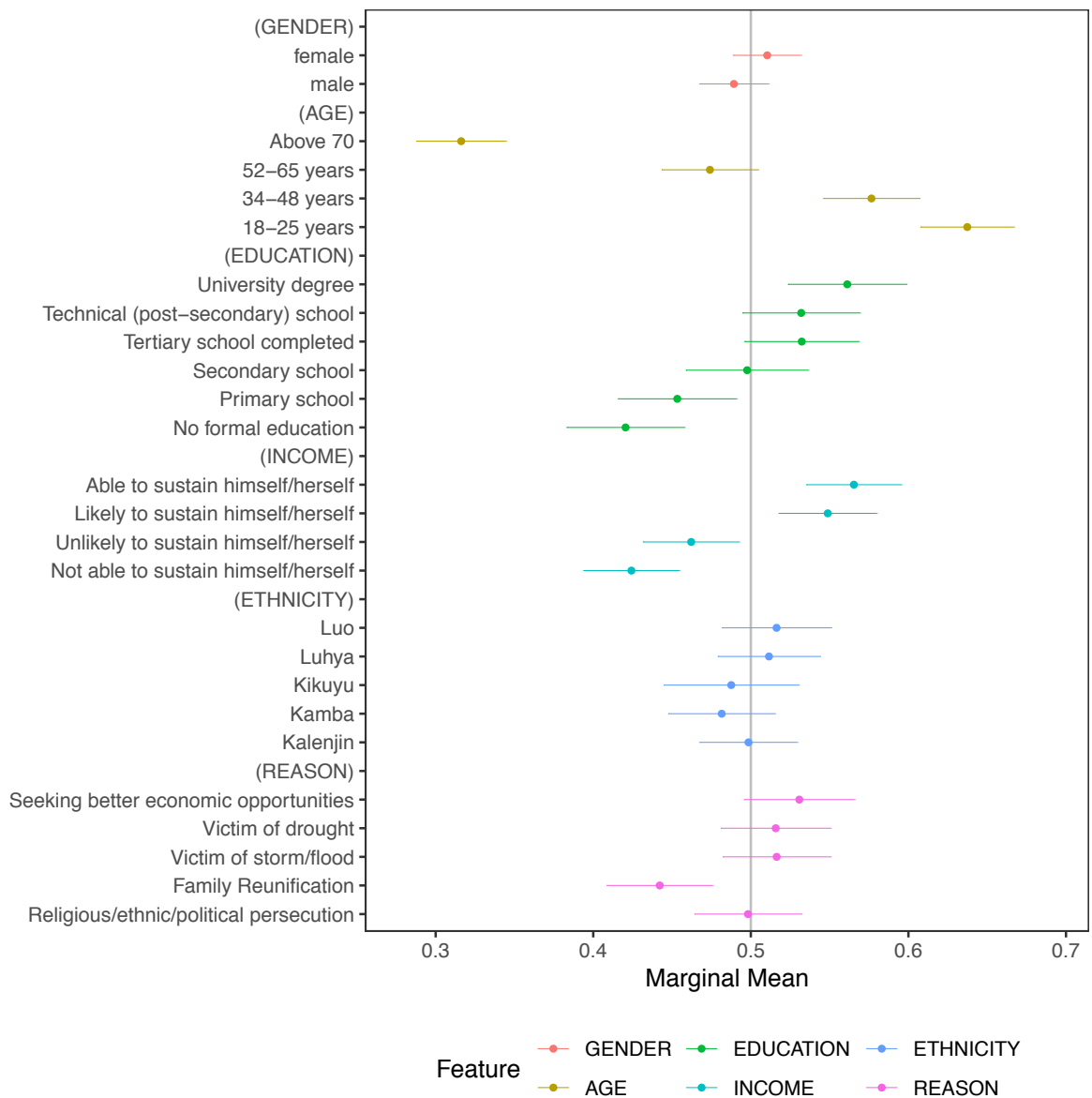
SI Figure 21. Marginal means – Results for Hanoi. The graph shows marginal means attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



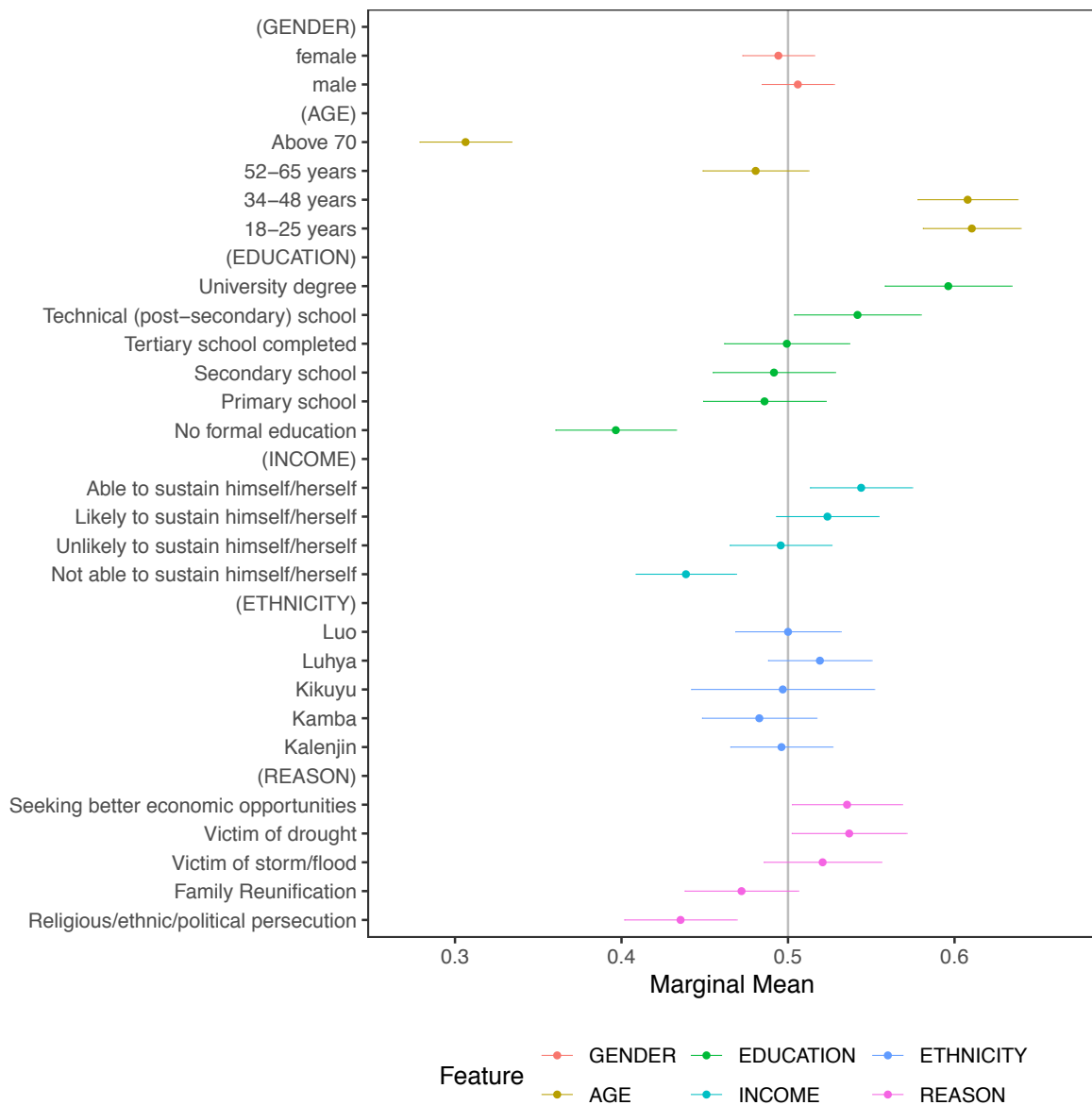
SI Figure 22. Marginal means – Results for Thu Dau Mot. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



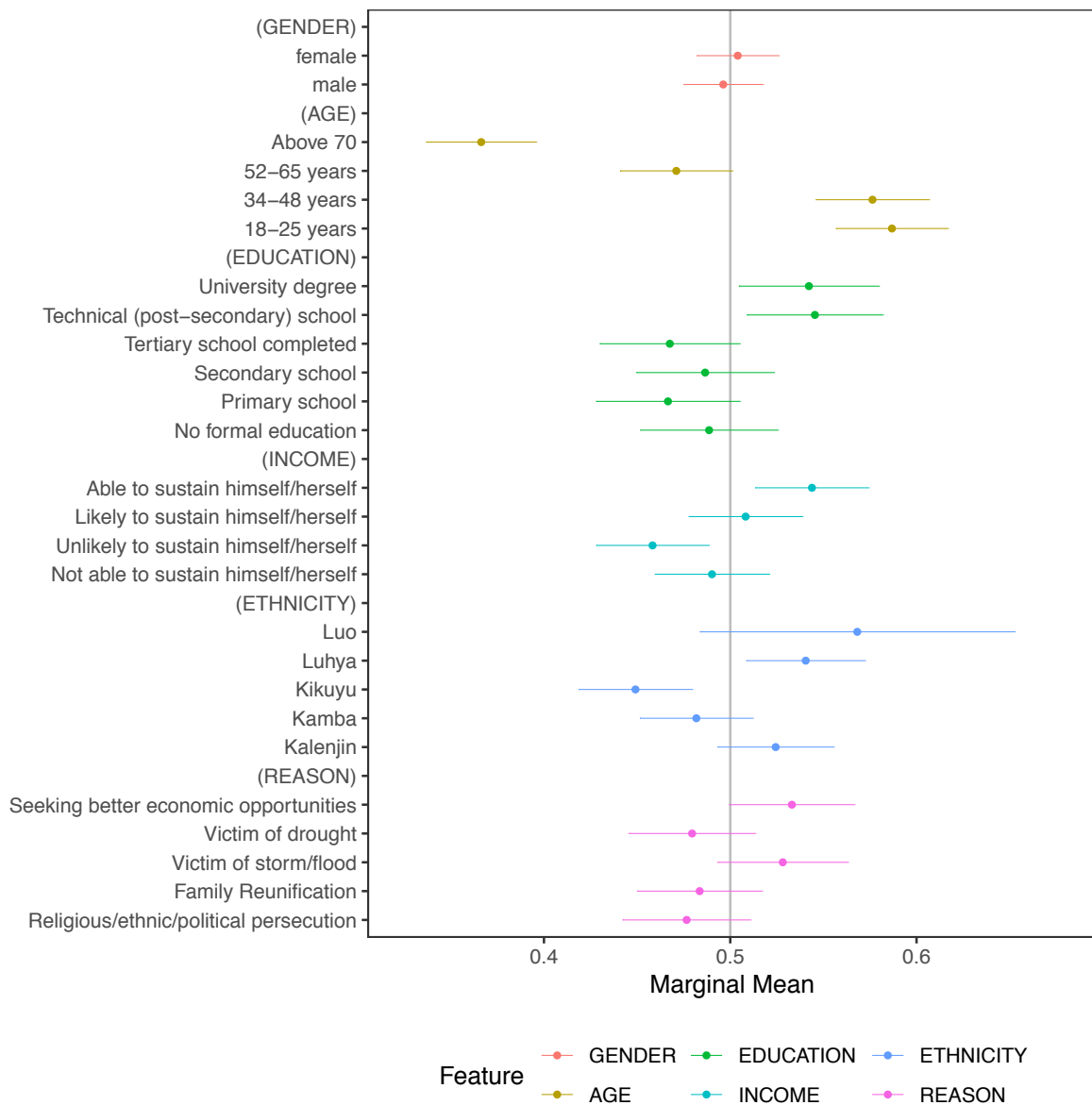
SI Figure 23. Marginal means – Results for Ho Chi Minh City. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



SI Figure 24. Marginal means – Results for Nairobi. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



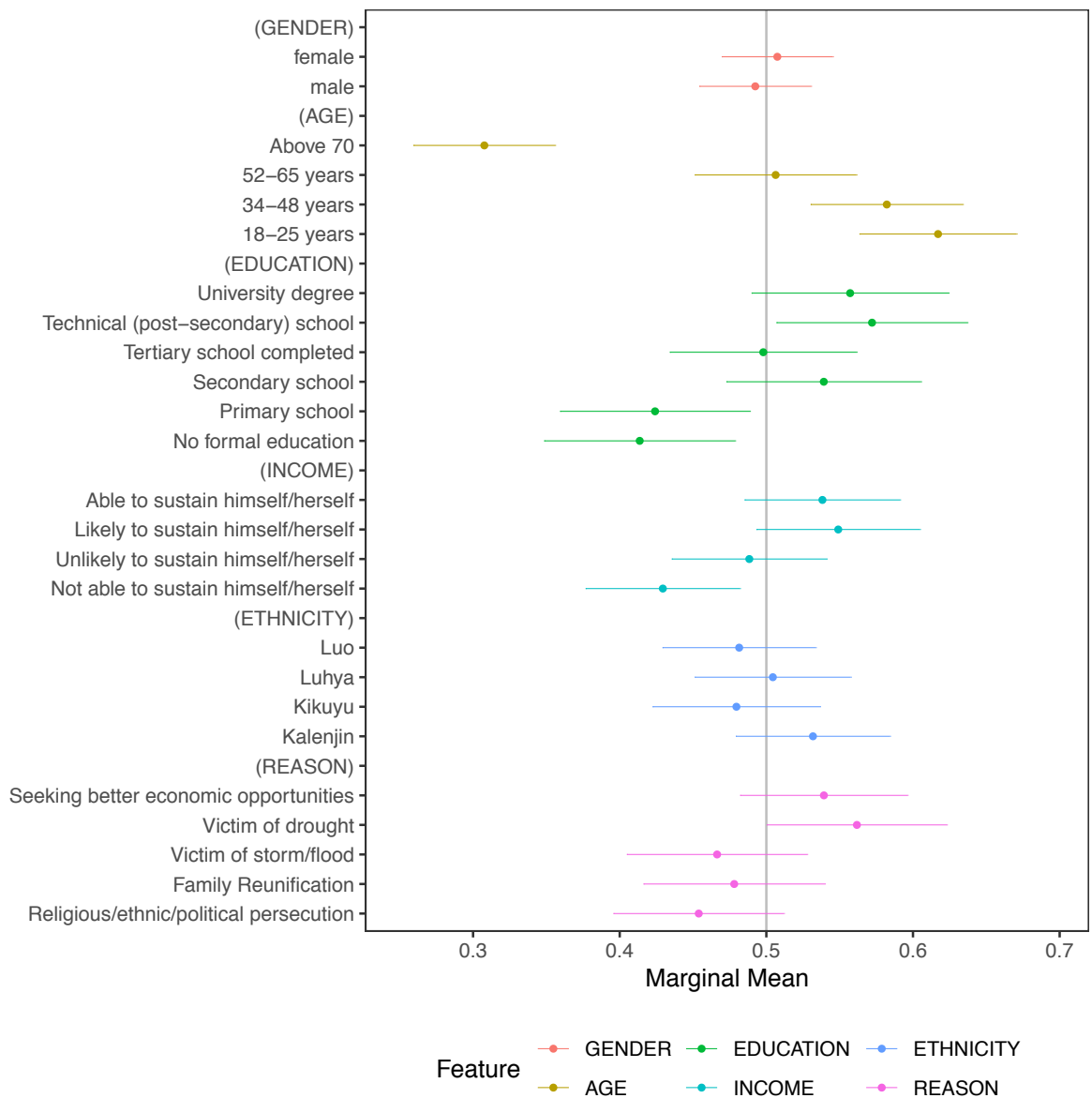
SI Figure 25. Marginal means – Results for Mombasa. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



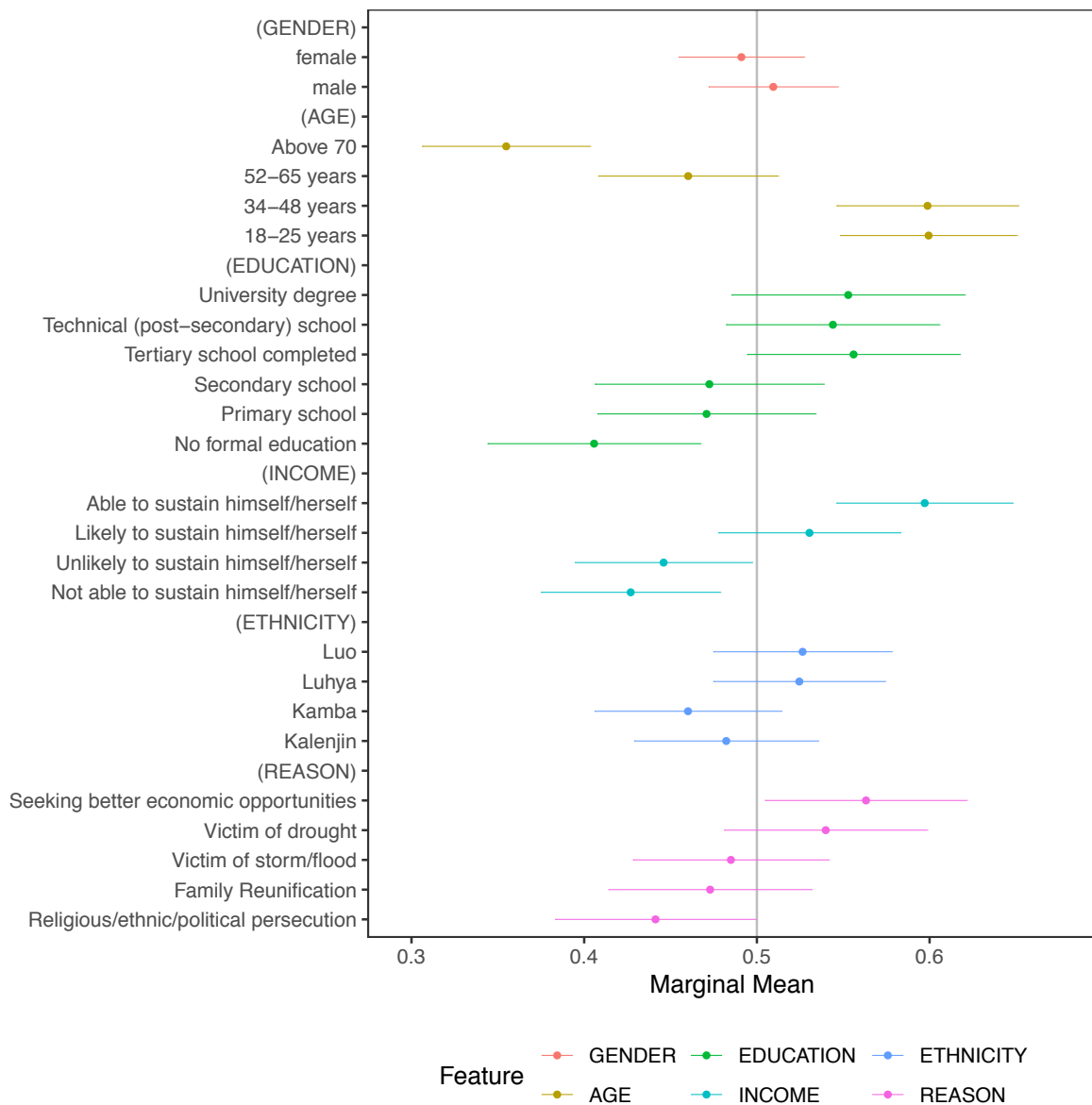
SI Figure 26. Marginal means – Results for Kisumu. The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.

To probe whether respondents with different ethnic profiles evaluate the ethnicity of hypothetical migrant profiles differently, the following four graphs provide the results for four out of the five ethnic groups presented in the conjoint analysis (Luo, Luhya, Kikuyu, Kamba.) Since we have too few respondents with Kalenjin ethnicity, we cannot, unfortunately, calculate the results for this ethnic group separately. Similarly, we cannot differentiate by ethnicity for Vietnam since our respondents predominantly come from the major ethnic group “Kinh.”

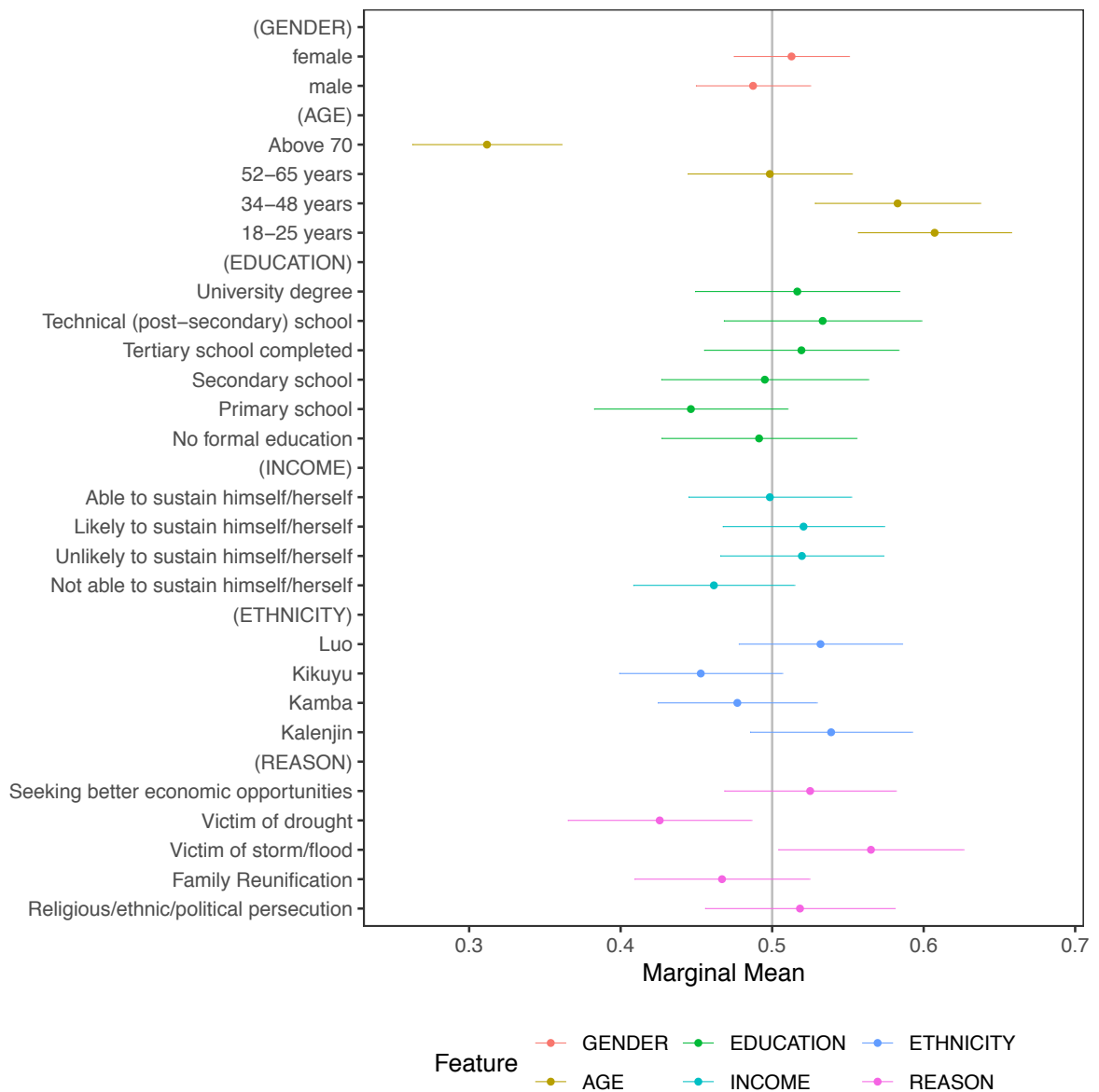
Similar to our results in the main paper, these graphs also do not show substantial differences in how respondents evaluate the ethnic profile of potential migrants and overall ethnicity has a rather small effect compared to other migrant attributes. The only ethnic sub-group for which we see some minor but significant differences are the “Luo.” Respondents from this ethnicity tend to evaluate potential migrants from the “Luhya” ethnicity as more favorably compared to the other ethnicities while they evaluate potential migrants from the “Kikuyo” ethnicity as less favorably.



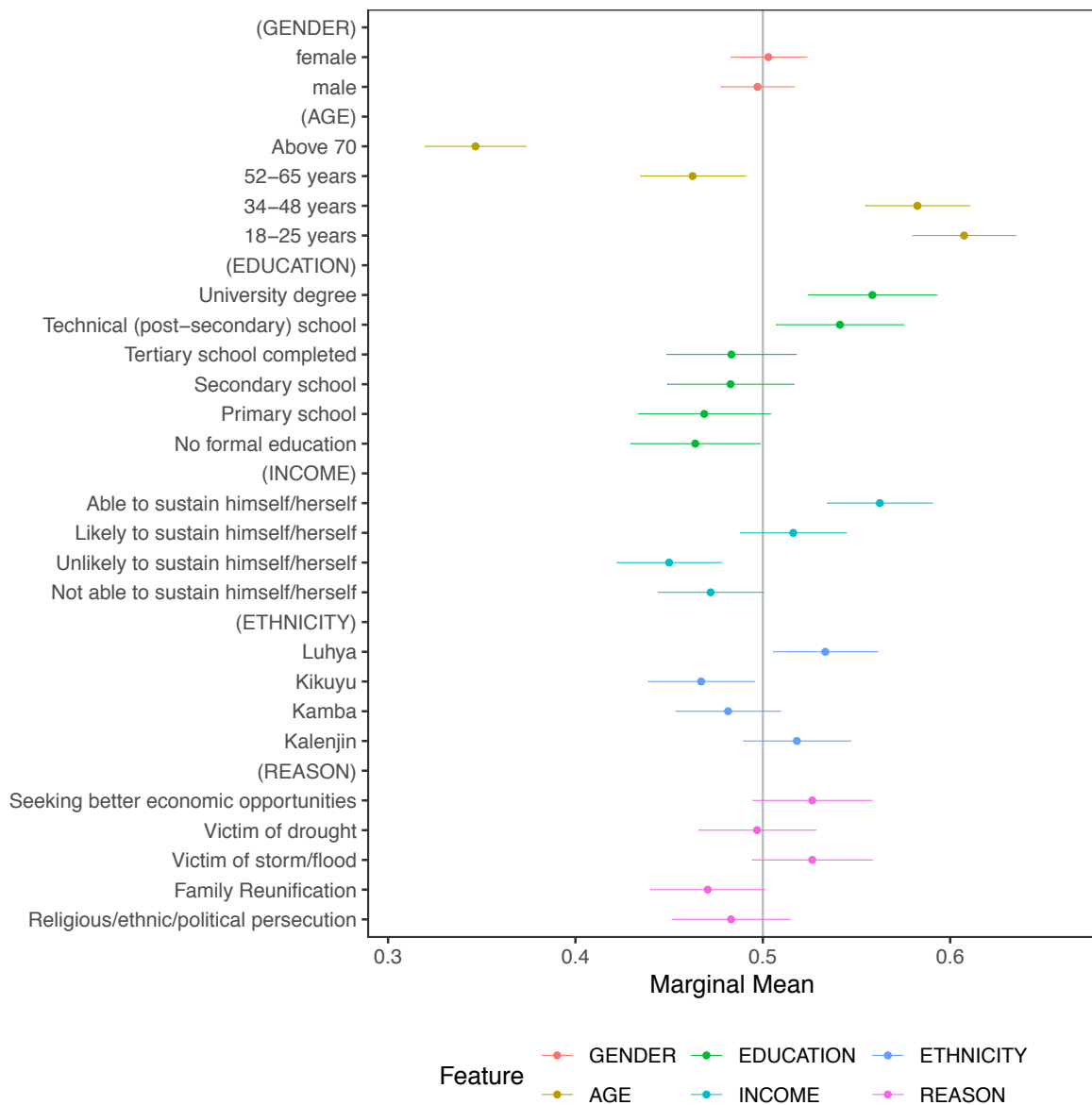
SI Figure 27. Marginal means – Respondent belongs to Kamba Ethnicity (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



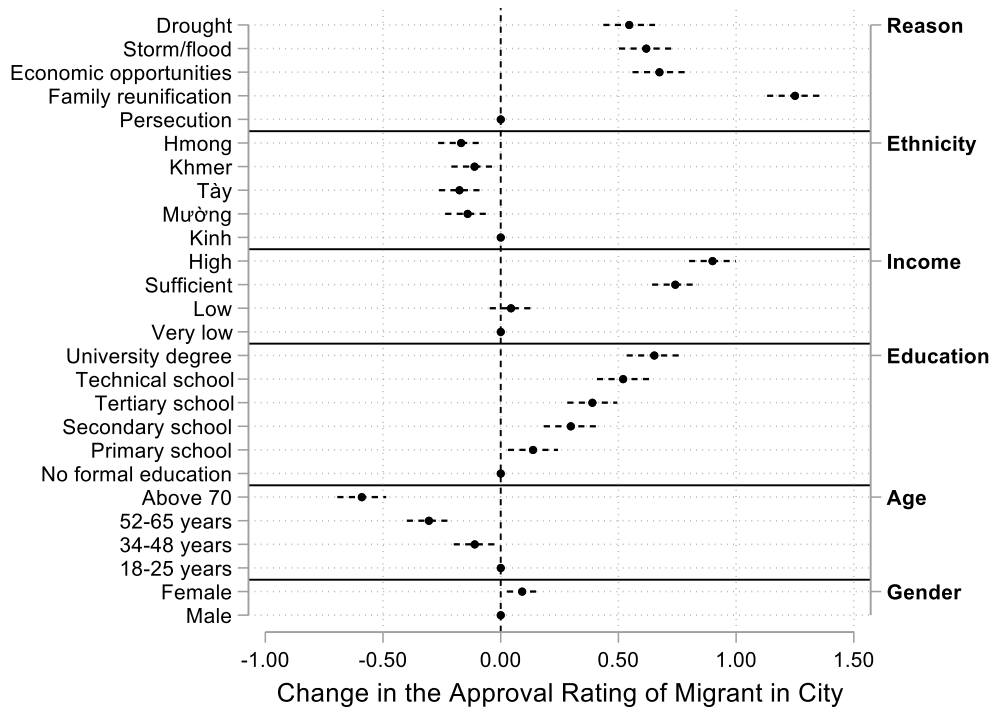
SI Figure 28. Marginal means – Respondent belongs to Kikuyu Ethnicity (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



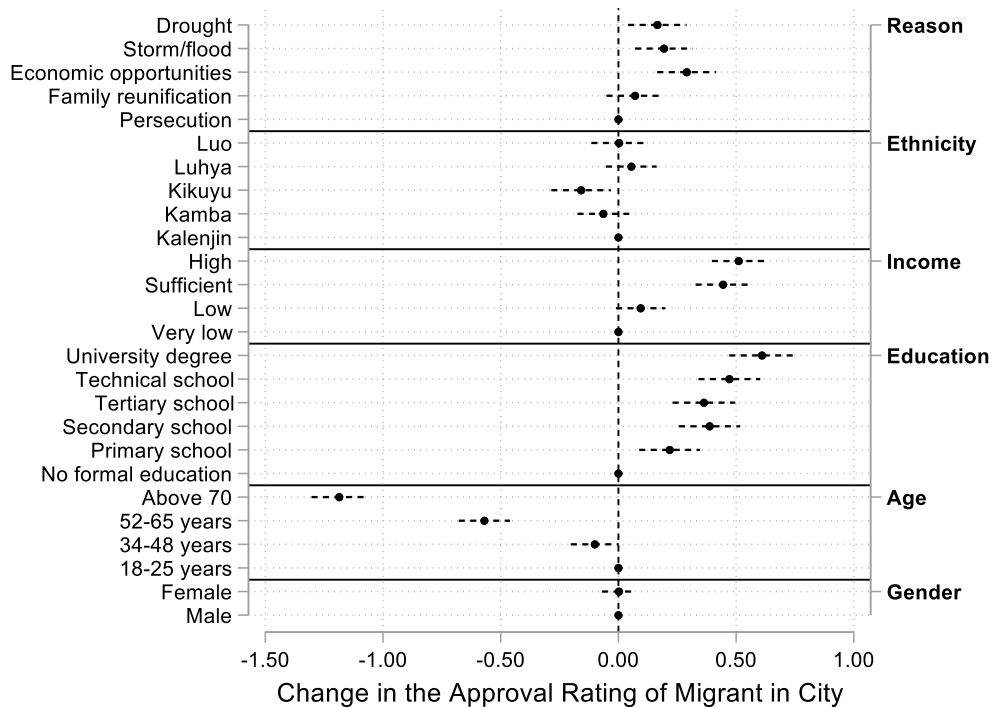
SI Figure 29. Marginal means – Respondent belongs to Luhya Ethnicity (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



SI Figure 30. Marginal means – Respondent belongs to Luo Ethnicity (Kenya). The graph shows marginal means per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed at the bottom. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. Marginal mean of 0.5 marked with black vertical line.



SI Figure 31. Conjoint Rating Results – Vietnam. The graph shows average marginal component effects (AMCEs; dots) per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Results based on model regressing ordinal scaled rating variable (sympathy toward potential migrant on 1-7 scale with higher values standing for more sympathy) on different attribute levels. Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed on the right vertical axis. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. AMCE of 0 marked with dotted vertical line.



SI Figure 32. Conjoint Rating Results – Kenya. The graph shows average marginal component effects (AMCEs; dots) per attribute level (e.g., female) relative to the respective baseline category (e.g., male). Results based on model regressing ordinal scaled rating variable (sympathy toward potential migrant on 1-7 scale with higher values standing for more sympathy) on different attribute levels. Individual attributes are listed on the left vertical axis, while attributes’ clusters are listed on the right vertical axis. A positive effect indicates that the respective attribute level increases the likelihood of acceptance of a migrant, while a negative effect indicates a reduced acceptance probability. Horizontal bars signify 95 percent confidence intervals. Standard errors are clustered by respondents. AMCE of 0 marked with dotted vertical line.

SI Table 1. Comparison of marginal means in Vietnamese sample

	Low-educated urbanites		High-educated urbanites
Drought	Not stat. different		Not stat. different
Storm/flood	Not stat. different		Not stat. different
Economic opportunities	Not stat. different		Not stat. different
Family reunification	Not stat. different		Not stat. different
Persecution	Not stat. different		Not stat. different
	Low-income urbanites		High-income urbanites
Drought	Not stat. different		Not stat. different
Storm/flood	Not stat. different		Not stat. different
Economic opportunities	Not stat. different		Not stat. different
Family reunification	Not stat. different		Not stat. different
Persecution	Not stat. different		Not stat. different
	Hanoi	Thu Dau Mot	Ho Chi Minh City
Drought	Not stat. diff.	Not stat. diff.	Not stat. diff.
Storm/flood	Differs from Thu Dau Mot (lower marginal mean), but not Ho Chi Minh City	Differs from Hanoi (higher marginal mean) and Ho Chi Minh City (higher marginal mean)	Differs from Thu Dau Mot, but not Hanoi
Economic opportunities	Not stat. diff.	Not stat. diff.	Not stat. diff.
Family reunification	Not stat. diff.	Not stat. diff.	Not stat. diff.
Persecution	Not stat. diff.	Not stat. diff.	Not stat. diff.
	<30	30-50	>50
Drought	Not stat. diff.	Not stat. different	Not stat. different
Storm/flood	Not stat. diff.	Not stat. different	Not stat. different
Economic opportunities	Not stat. diff.	Not stat. different	Not stat. different
Family reunification	Not stat. diff.	Not stat. different	Not stat. different
Persecution	Not stat. diff.	Not stat. different	Not stat. different
	Climate-change deniers		Climate-change believers
Drought	Not stat. different		Not stat. different
Storm/flood	Not stat. different		Not stat. different
Economic opportunities	Not stat. different		Not stat. different
Family reunification	Not stat. different		Not stat. different
Persecution	Not stat. different		Not stat. different

We assess whether the differences in sub-groups are statistically significantly different from each other or not. If statistically significant differences do exist, we also provide information on the direction of the effect difference.

SI Table 2. Comparison of marginal means in Kenyan sample

	Low-educated urbanites		High-educated urbanites
Drought	Not stat. different		Not stat. different
Storm/flood	Differs with higher marginal mean		Differs with lower marginal mean
Economic opportunities	Not stat. different		Not stat. different
Family reunification	Not stat. different		Not stat. different
Persecution	Not stat. different		Not stat. different
	Low-income urbanites		High-income urbanites
Drought	Not stat. different		Not stat. different
Storm/flood	Not stat. different		Not stat. different
Economic opportunities	Not stat. different		Not stat. different
Family reunification	Not stat. different		Not stat. different
Persecution	Not stat. different		Not stat. different
	Nairobi	Mombasa	Kisumu
Drought	Not stat. diff.	Not stat. diff.	Not stat. diff.
Storm/flood	Not stat. diff.	Not stat. diff.	Not stat. diff.
Economic opportunities	Not stat. diff.	Not stat. diff.	Not stat. diff.
Family reunification	Not stat. diff.	Not stat. diff.	Not stat. diff.
Persecution	Not stat. diff.	Not stat. diff.	Not stat. diff.
	<30	30-50	>50
Drought	Not stat. diff.	Not stat. different	Not stat. different
Storm/flood	Not stat. diff.	Not stat. different	Not stat. different
Economic opportunities	Not stat. diff.	Not stat. different	Not stat. different
Family reunification	Not stat. diff.	Not stat. different	Not stat. different
Persecution	Not stat. diff.	Not stat. different	Not stat. different
	Climate-change deniers		Climate-change believers
Drought	Not stat. different		Not stat. different
Storm/flood	Not stat. different		Not stat. different
Economic opportunities	Not stat. different		Not stat. different
Family reunification	Not stat. different		Not stat. different
Persecution	Not stat. different		Not stat. different

We assess whether the differences in sub-groups are statistically significantly different from each other or not. If statistically significant differences do exist, we also provide information on the direction of the effect difference.

SI Table 3. Comparison of socio-demographic variables

	Hanoi		Nairobi	
	Our survey	GSO statistics	Our survey	Various Statistics
Age	Mean: 39 Min: 17 Max: 65	See note	Mean: 31 Min: 18 Max: 64	Modal category: 30-35
Female	55%	51%	44%	50% ^a
Monthly income	Less than 2 mil. VND 9% 2 – 5 mil. VND: 30% 5 – 8 mil. VND: 32% 8 – 12 mil. VND: 18%	Average monthly income: 6.1 mil. VND	Less than 10,000 KSH 32% 10,001 – 30,000 KSH 42% 30,001 – 50,000 KSH 14% Above 50,000 KSH 9%	Average monthly income: 30,000 KSH
Education	Primary educ. and below: 7% Lower secondary educ.:27% Upper secondary educ.: 35% Above: 31%	Primary educ. and below: 14% Lower secondary educ.: 25% Upper secondary educ.: 37% Above: 24%	Average years of schooling: 13 years Primary educ. and below: 17% Lower secondary educ.: 11% Upper secondary educ.: 23% Above: 45%	Average years of schooling (country averages): 13 years for primary school and 17 years for secondary school
Ethnicity	99% Kinh	99% Kinh	Kikuyu: 27% Luo: 23% Luhya: 15% Kamba: 15% Kisii: 8% Meru: 4%	22% Kikuyu
	Binh Duong		Kisumu	
	Our survey	GSO statistics	Our survey	Various Statistics
Age	Mean: 38 Min: 18 Max 65	See note	Mean: 35 Min: 17 Max: 64	Modal category: 30-35
Female	48%	51%	57%	52% ^a
Monthly income	Less than 2 mil. VND 8% 2 – 5 mil. VND: 29% 5 – 8 mil. VND: 24% 8 – 12 mil. VND: 16%	Average monthly income: 6.8 mil. VND	Less than 10,000 KSH 45% 10,001 – 30,000 KSH 43% 30,001 – 50,000 KSH 7% Above 50,000 KSH 3%	Average monthly income: 20,000 KSH
Education	Primary educ. and below: 25% Lower secondary educ.: 21% Upper secondary educ.: 30% Above: 25%	Primary educ. and below: 58% Lower secondary educ.: 11% Upper secondary educ.: 21% Above: 10%	Average years of schooling: 12 years Primary educ and below: 30% Lower secondary educ: 15% Upper secondary educ: 27% Above: 28%	Average years of schooling (country averages): 13 years for primary school and 17 years for secondary school
Ethnicity	99% Kinh	98% Kinh	Luo: 88% Luhya: 9%	90% Luo

	Ho Chi Minh City		Mombasa	
	Our survey	GSO statistics	Our survey	Various Statistics
Age	Mean: 38 Min: 17 Max: 65	See note	Mean: 31 Min: 18 Max: 64	Modal category: 30-35
Female	54%	52%	51%	50% ^a
Monthly income	Less than 2 mil. VND 9% 2 – 5 mil. VND: 27% 5 – 8 mil. VND: 30% 8 – 12 mil. VND: 24%	Average monthly income: 6.2 mil. VND	Less than 10,000 KSH 40% 10,001 – 30,000 KSH 42% 30,001 – 50,000 KSH 9% Above 50,000 KSH 3%	Average monthly income: 30,000 KSH
Education	Primary educ. and below: 23% Lower secondary educ.: 21% Upper secondary educ.: 24% Above: 31%	Primary educ. and below: 30% Lower secondary educ.: 15% Upper secondary educ.: 37% Above: 19%	Average years of schooling: 11 years Primary educ and below: 24% Lower secondary educ: 7% Upper secondary educ: 30% Above: 38%	Average years of schooling (country averages): 13 years for primary school and 17 years for secondary school
Ethnicity	97% Kinh	93% Kinh	Mijikenda: 36% Kamba: 18% Luhya: 9% Luo: 8% Kikuyu: 7% Meru: 4% Arabs: 4%	35% Mijikenda

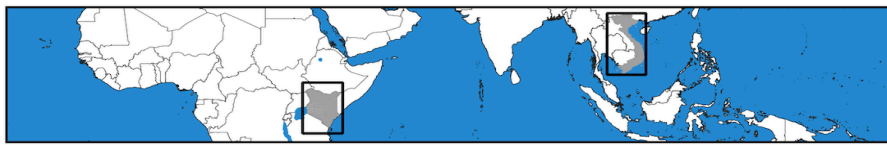
We compare the average distribution of key socio-demographic variables with data by national statistics agencies. For the distribution of age, we were unable to find comparable breakdowns by city/province. According to a report by the Ministry of Planning and Investment based on the 2009 Vietnam Population and Housing Census (GSO 2011), it is reported that the largest age group in HCMC and Binh Duong is the age group in 20-24. For the region of the Red River Delta, where Hanoi is located, the report indicates an even younger population. There, individuals between 15 and 19 comprise the largest age group. Instead of asking respondents to submit the absolute amount of their average monthly income, we asked respondents to indicate their average monthly income using a 1-8 scale ranging from: 1=Less than 2 million VND, 2=2-5 million VND, 3=5-8 million VND, 4=8-12 million VND, 5=12-20 million VND, 6=20-30 million VND, 7=30-50 million VND, to 8=More than 50 million VND. The comparison data for education are taken from the UNDP's Viet Nam Provincial Governance and Public Administration Performance Index (PAPI) survey¹. The PAPI survey is annual, nationally representative survey based on face-to-face interviews with randomly selected respondents from all of the 63 provinces of Vietnam. The 2018 PAPI surveyed 14,304 respondents. Respondents' highest level of education is measured using a 1-10 scale in the PAPI survey. In our survey, we use a 1-6 scale to capture respondents' highest level of educational attainment. We recoded the PAPI scale by collapsing some categories to generate a 1-6 scale. The comparison data for ethnicity are taken from the UNDP's Viet Nam Provincial Governance and Public Administration Performance Index (PAPI) survey¹.

Data on sex, age and education, income, and ethnicity in the 3 cities in Kenya were compiled from different sources e.g., the 2019 Kenya Population and Housing Census Volume I: Population by County and Sub-County (<https://www.knbs.or.ke/?p=5621>) and the Kenya National Bureau of Statistics: 2015/16 Kenya Integrated Household Budget Survey (KIHBS) (https://sun-connect-news.org/fileadmin/DATEIEN/Dateien/New/KNBS_-_Basic_Report.pdf), as well as from various city official documents, e.g., the Kisumu Country Gender Data Sheet 2019 (<https://sdgkenyaforum.org/content/uploads/documents/4c1a71440ec27b99.pdf>); <https://kenya.hurumap.org/profiles/county-1-mombasa/>), and information provided by the survey company. Concerning education, we were only able to obtain the data for average years of schooling for Kenya at the national level.

Supplementary Table 4. Response rates across survey sites

City	Response rate	City	Response rate
Ho Chi Minh City	74%	Nairobi	75%
Binh Duong	85%	Kisumu	93%
Hanoi	77%	Mombasa	83%

Surveyed Cities and Population



Data Sources: Natural Earth and © 2018 GADM | Projection: EPSG:4326 | Datum: WGS84

SI Figure 33. Map of survey sites.

References

- 1 CECODES, V.-C., RTA and UNDP. *The 2018 Viet Nam Governance and Public Administration Performance Index (PAPI): Measuring Citizens' Experiences. A Joint Policy Research Paper by the Centre for Community Support and Development Studies (CECODES), Centre for Research and Training of the Viet Nam Fatherland Front (VFF-CRT), Real-Time Analytics, and United Nations Development Programme (UNDP).* (2019).