

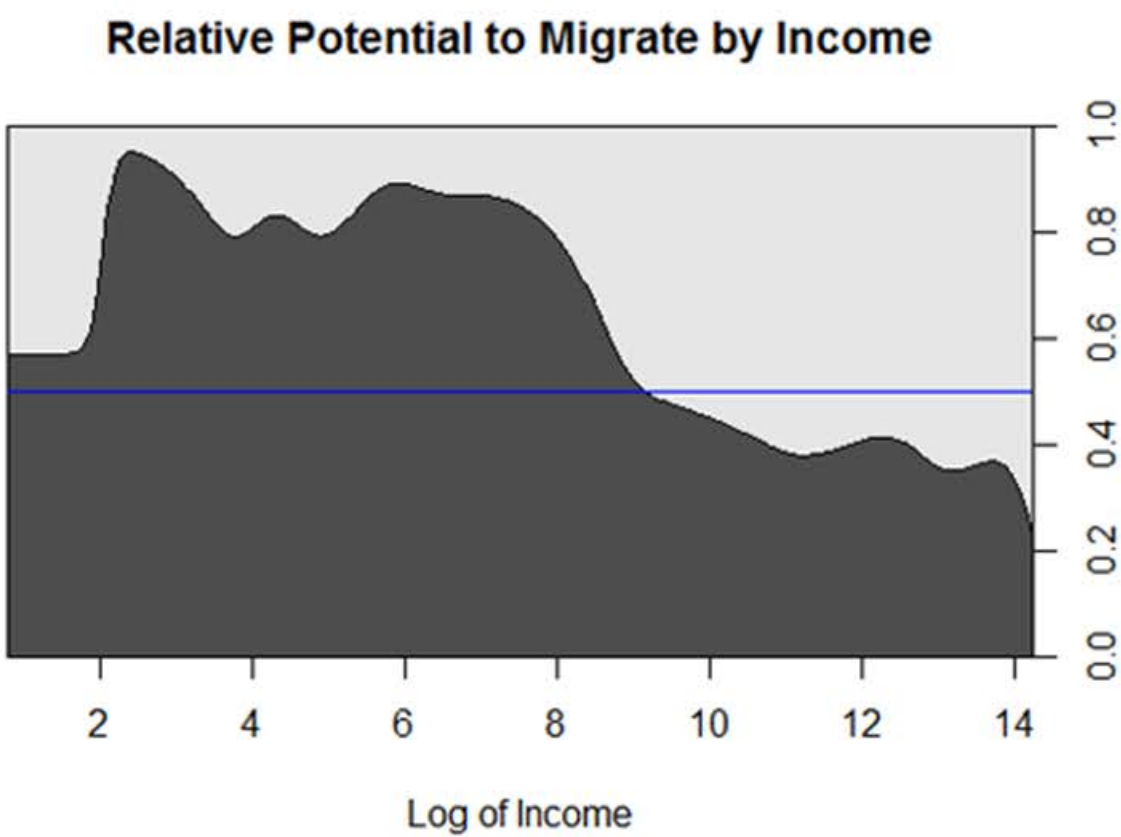
CHARACTERIZING MIGRANCY

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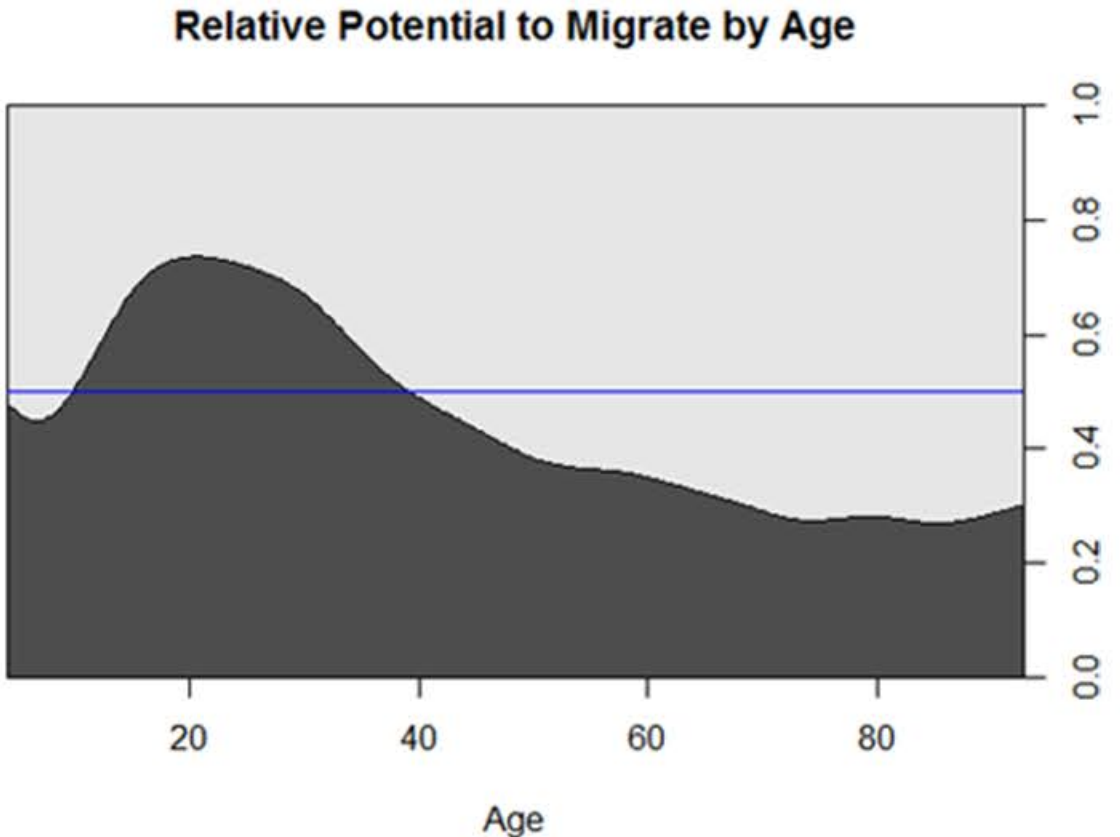
We examined migrants -- people who do not live in the same state as they did the year previous -- with respect to race, age, and income. Data were drawn from random households surveyed in the US, taking 1161 migrants and 1161 nonmigrants from different households.

Compared to the general population, Black and Mixed Race people are more likely to migrate, while White and Asian people are less likely to migrate. People in their 20s are most likely to migrate, with the likelihood of migration generally decreasing over time. People with incomes below around \$8,000 are more likely to migrate.

INCOME

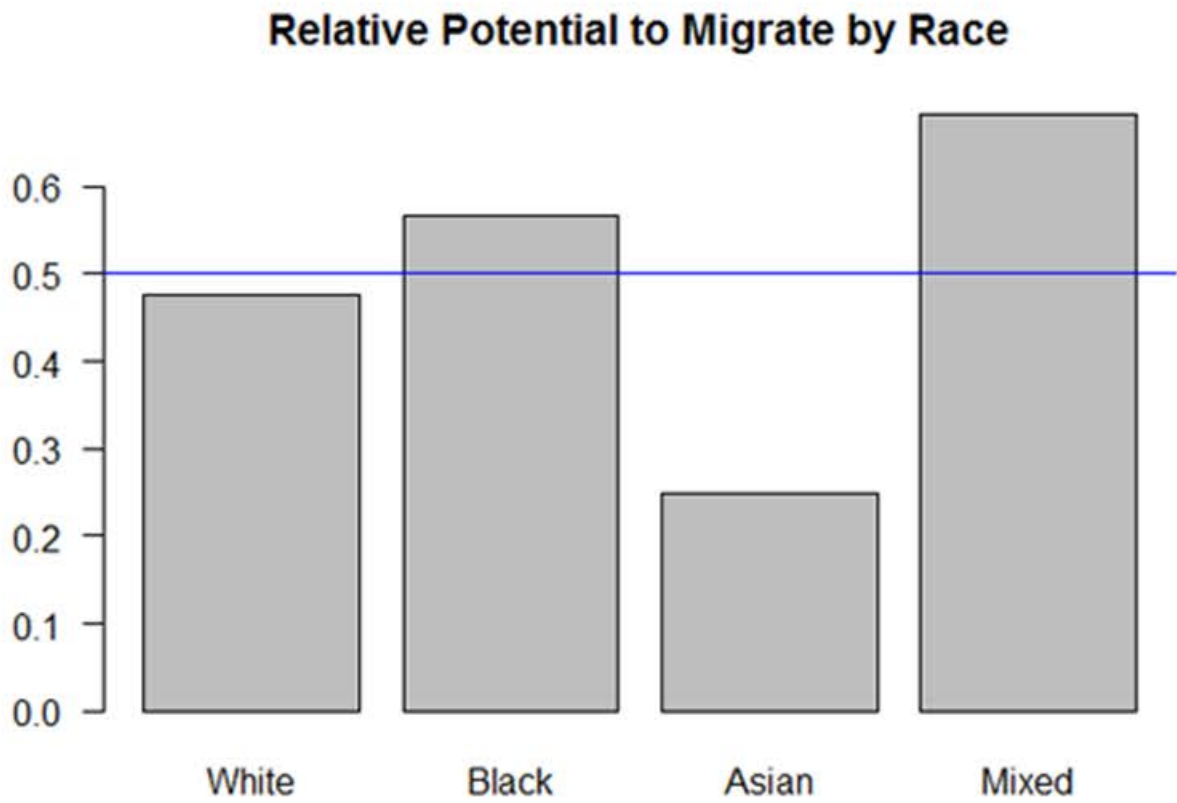


AGE



Because we had random samples of migrants and nonmigrants in equal quantities, we were able to use the prevalence of migrant status relative to 0.5 as an indicator of likeliness of migration. The conditional densities for age and income are shown above -- at any given point, they demonstrate the probability that someone in our dataset would migrate. Since we know the global probability is 0.5, the degree to which the probability is above or below 0.5 indicates how much more of less likely one is to migrate.

RACE



A similar relationship can be found for race, simply calculating the portion of people in a race who are migrants, and checking this against 0.5.

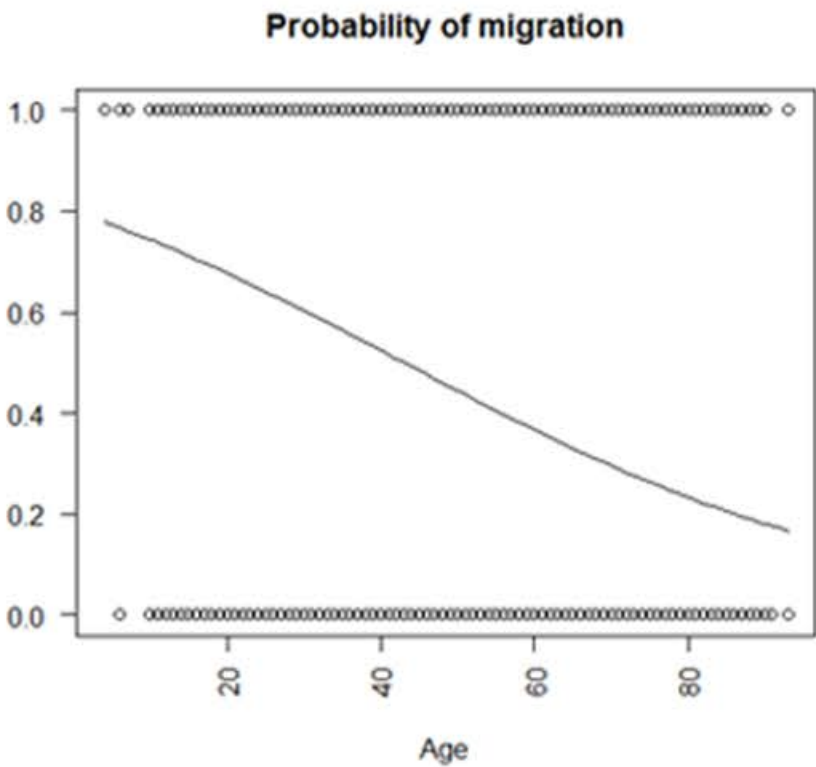
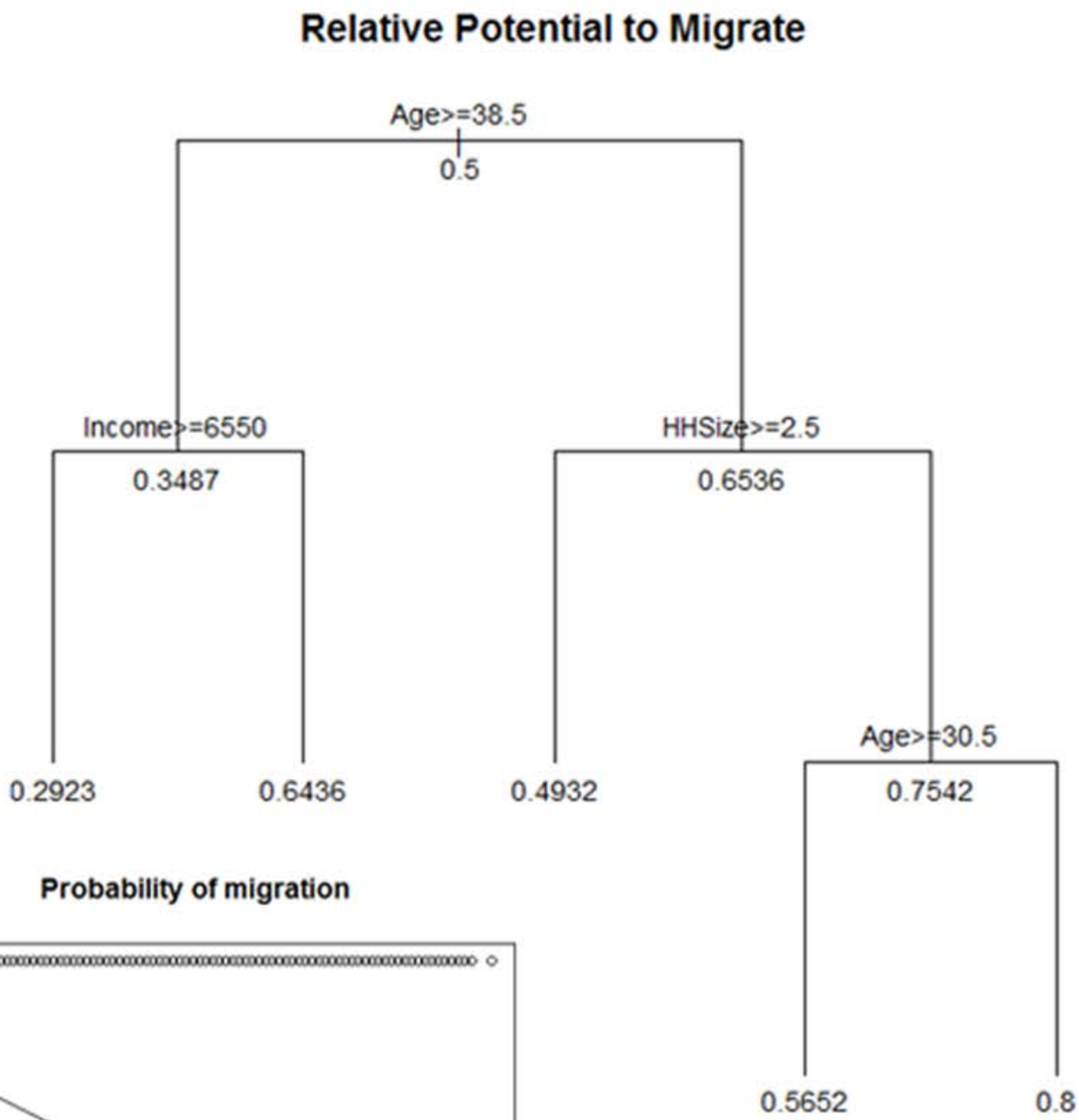
OVERALL

The regression tree shown right maps out the probabilities of migration given particular characteristics, again relative to 0.5. It may be worth noting that race does not appear to play a significant role in migration relative to the other factors in this model. Indeed, attempting to predict migration solely based on race does not allow a regression tree.

We ran a logit regression of race, logged income, and age on the probability that one is a migrant. In this model, the log odds of being a migrant or not are modeled as a linear combination of race, log income, and age.

In this, we found that age and income were extremely significant -- $p = 0$; and that no race was significant other than Mixed Race, which was significant to $p < 0.03$.

We also ran a logit regression of age on migrancy, for a easily visible relationship, pictured right.



All tests were planned beforehand and altered minimally to avoid issues of multiple comparison; all instances of statistical significance reported are based on p-values < 0.01 . Dataset from American Community Survey, by the US Census Bureau, available at http://www2.census.gov/acs2013_1yr/pums/.