To detect and quantify the effects of cultural biases in large-stake risky choices, we study a leading Indian FinTech peer-to-peer lending platform paired with an automated robo-advising tool. Comparing the choices lending consumers (“lenders”) make with those made by the robo-advising tool on their behalf, we find both in-group vs. out-group discrimination and stereotypical discrimination are pervasive and sizable. Discrimination affects performance negatively: discriminating lenders face 32% higher default rates and about 11% lower returns on the loans they issue to borrowers who belong to favored demographic groups relative to available borrowers in discriminated groups. The extent of discrimination is higher in locations in which cultural biases are salient, due to historical inter-ethnic conflict and political polarization.