Between 20% and 30% of American homes have mortgage debt that exceeds the current market price of their homes, a situation known colloquially as being ‘underwater’. This paper investigates whether individual differences in time preferences, and other individual difference variables, affect mortgage choices that lead to underwater mortgages, and consumers’ response to being underwater. Using data from a survey with 244 mortgaged households, we measure two components of individual time preferences, both a present bias, a tendency to overvalue immediate outcomes, and an exponential discount rate for outcomes beyond the present. Underwater homeowners exhibit both a greater present bias and a greater discount rate. In contrast, while higher exponential discounting increases the likelihood that the consumer will abandon a house, greater present bias decreases the chances that they will walk away from a mortgage. Time preferences remain robust predictors in the presence of controls. We close by discussing, more generally, the role of time preferences in other consumer financial decisions and the status of normative models of long-term financial decisions.