The paper presents a simple model of a two-stage electoral competition with two parties: an incumbent party and a challenging party, and shows that the presence of a primary election makes a more moderate policy to be selected in equilibrium and increases the probability that a candidate with a higher personal quality that all the voters commonly appreciate wins in a general election. The model resembles the U.S. presidential election and many analogues are observed in the world, but has largely escaped attention in the literature. In the model, voters are assumed to judge candidates on two aspects: policy promises and non-policy personal qualities referred to as valence. A challenging party has two potential candidates in the first-stage primary election to compete with the incumbent party's nominee in the second-stage general election. The model is analytically tractable having a unique equilibrium, and provides a vehicle for answering normative questions about holding a primary election. Finally, our findings provide empirical predictions on primaries and the roles of valences in election.