

The U.S. income tax system penalizes married couples with similar earnings and subsidizes specialization between spouses in such couples. To see how the progressive income tax impacts household formation and intra-household allocations, we construct a life-cycle model to study how changes in tax policy affect labor supply --- especially those of secondary earners in married households --- and household formation/dissolution. In the model, agents differ in realized wage and fertility and face the U.S. income tax code, and agents make household formation and allocation decisions as well as allocation decisions. Married households make allocation decisions jointly without being able to commit future arrangements. With this model, we find the sensitivity of the marriage patterns to the tax code: changing tax unit from a household to an individual increases the number of married households by 3%, mainly via a reduction of the marriage age coming from reduced rewards to search for advantageous tax partners. We also consider the same policy reform but abstracting the responses of marriage/divorce decisions and intra-household sharing rules to show how those are quantitatively important. We then use the model to compute the optimal income tax progressivity that maximizes welfare under two scenarios; (i) married couples filing jointly and (ii) individual taxation. In Scenario (i), the optimal progressivity for married couples is lower. At the same time, that of singles is slightly higher than the current U.S. tax code. In comparison, the optimal progressivity in Scenario (ii) is much higher than the current U.S. single income tax schedule.