

APPENDIX 4 Additional figures

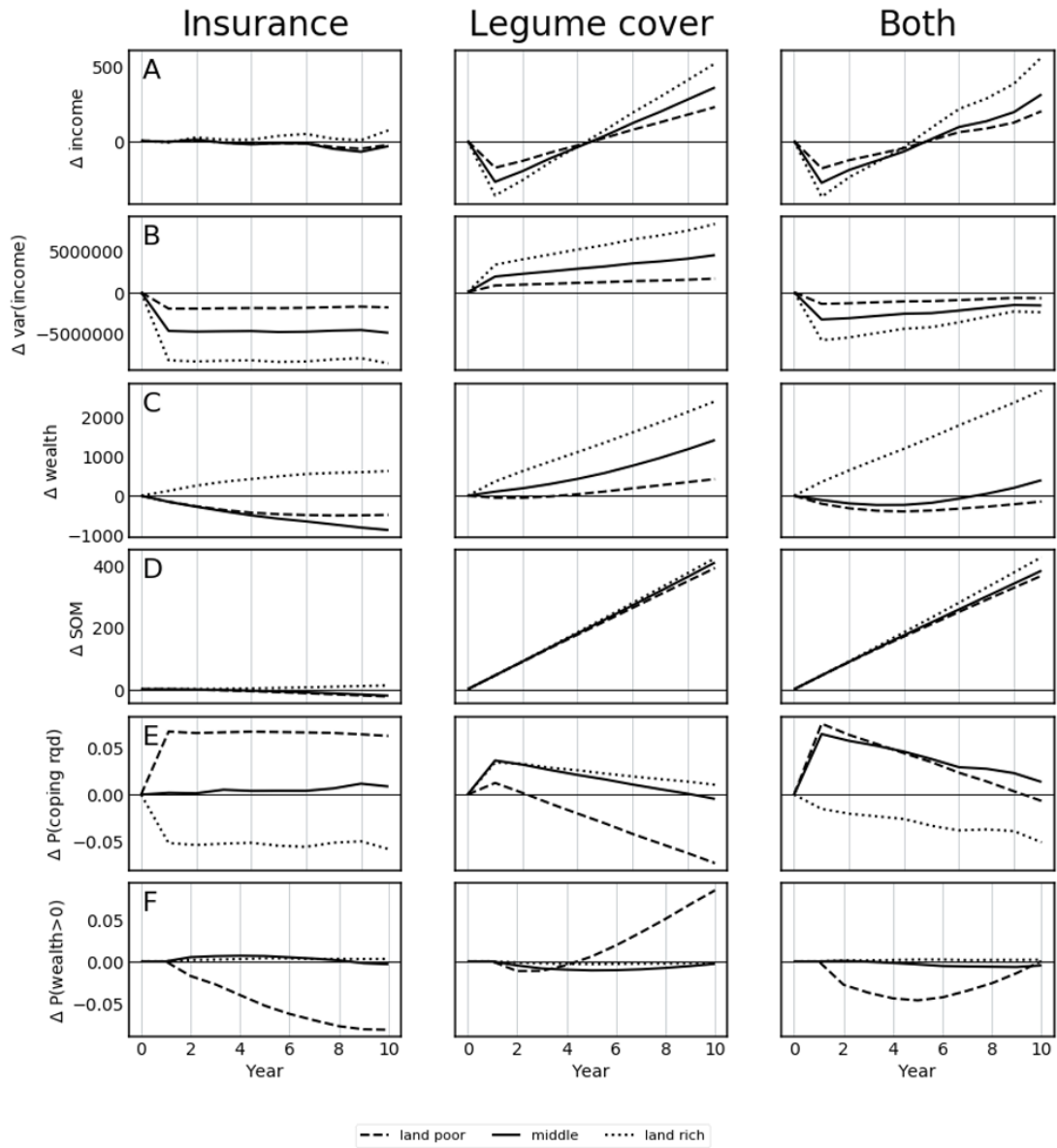


Figure A4.1: Effects of the strategies on various model characteristics relative to the baseline scenario for each type of household. In all cases, the horizontal line at zero represents no change relative to the baseline model conditions. “Change in P(coping rqd)” refers to change in the probability that a household must sell their livestock at each time step. “Change in P(wealth>0)” refers to change in the probability that a household has positive wealth (i.e., livestock) at each time step.

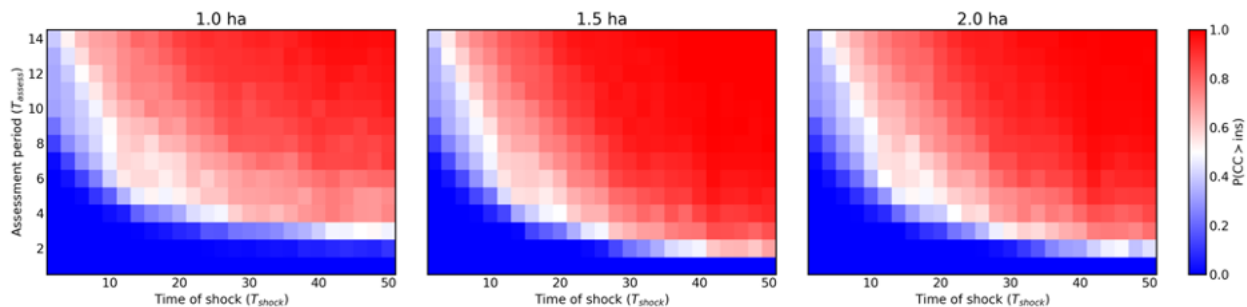


Figure A4.2: Comparison of insurance and cover cropping on $P(CC > Ins)^{shock}$ for the three types of household, which differ solely in their land holdings. Land-poor households have 1 ha of land, middle households have 1.5 ha, and land-rich households have 2 ha.

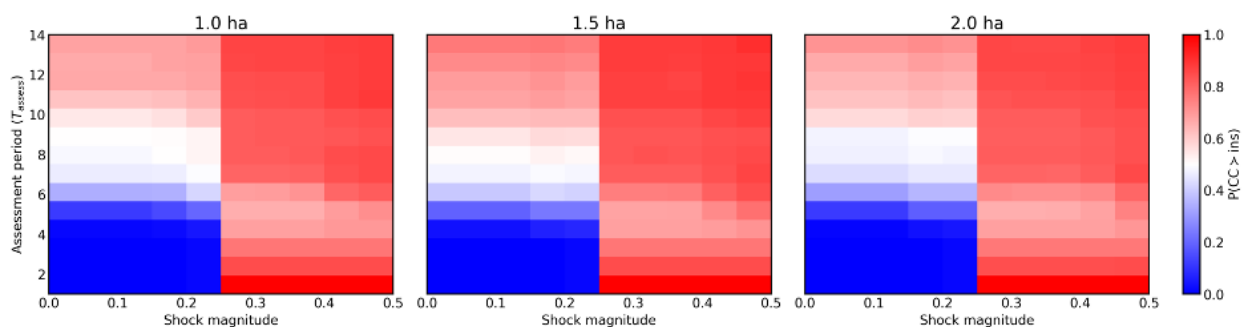


Figure A4.3: Comparison of insurance and cover cropping on shock absorption as the magnitude of the drought is varied, with $T_{shock} = 10$. The vertical threshold at 0.25 represents the microinsurance climate index.

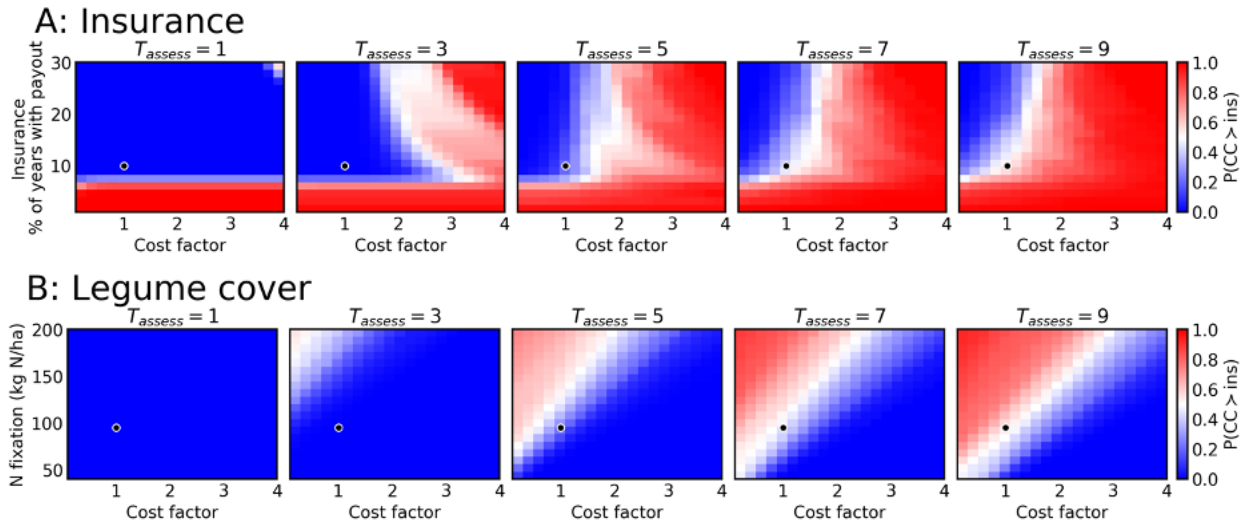


Figure A4.4: Influence of strategy characteristics on the shock absorption comparison. The black dots represent the baseline settings used in other experiments. In all cases, we simulated a 0.2 magnitude shock with $T_{shock} = 10$ and averaged results over all household types. Results were qualitatively similar for each individual household type.

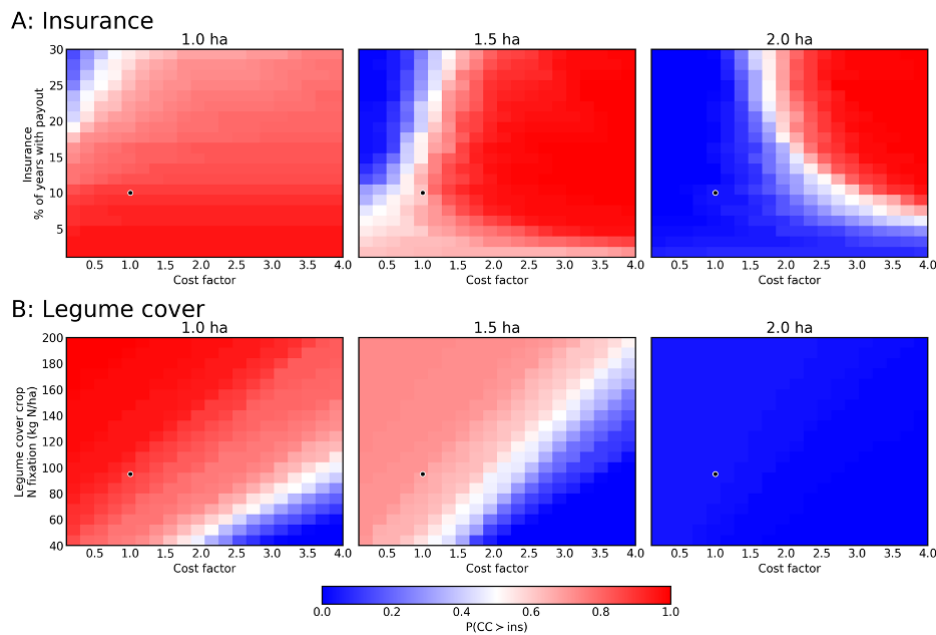


Figure A4.5: Influence of strategy characteristics on the poverty reduction assessment for different household types with $T_{dev} = 20$. Note that poverty reduction measures households that have lost all their wealth; since the land-rich households (2 ha) very rarely lose their wealth even under baseline conditions (Figure 5), the stark differences seen in this assessment (right-most plots) for these households are not meaningful.

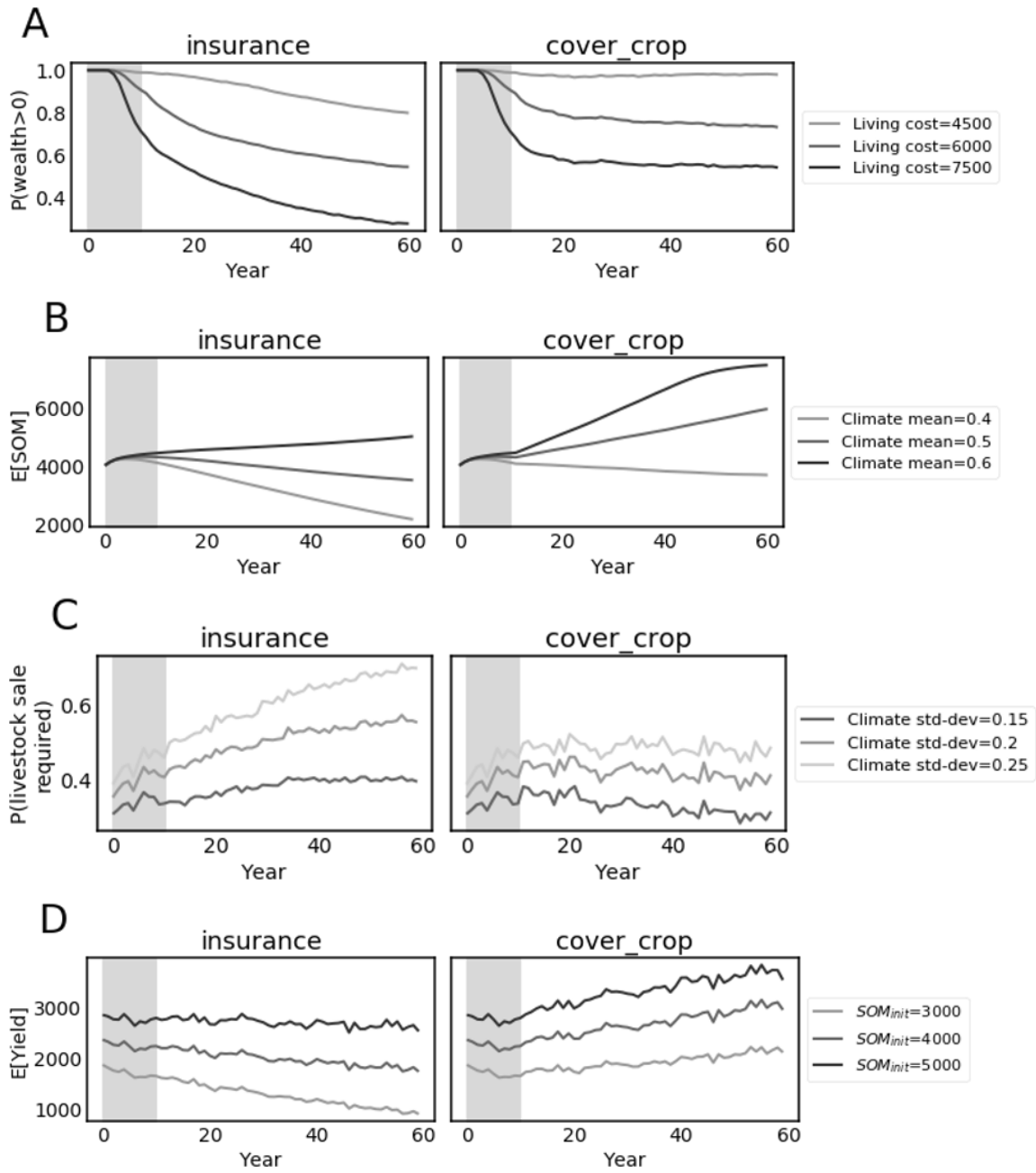


Figure A4.6: Evolution of model metrics under different parameter settings. Plotted values represent averages over all household types. “P(livestock sale required)” represents the probability that *any* livestock sale is required, independent of the number.