

Advanced Macro II

Project 1

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θ	Tax rate	Wage rate	Return to capital	Average consumption	Capital Stock	Average income	Average utility
0.000	0.000	2.055	0.018	0.473	3.964	0.997	-89.408
0.100	0.024	1.977	0.025	0.493	3.587	0.986	-86.888
0.200	0.046	1.912	0.031	0.507	3.259	0.975	-86.502
0.210	0.049	1.910	3.122	0.508	3.234	0.974	-86.562
0.225	0.052	1.902	0.032	0.510	3.201	0.972	-86.692
0.250	0.058	1.888	0.034	0.514	3.140	0.970	-86.930
0.275	0.064	1.874	0.035	0.517	3.075	0.967	-87.250
0.300	0.069	1.859	0.037	0.524	3.020	0.964	-87.631
0.350	0.081	1.834	0.040	0.526	2.896	0.958	-88.551
0.400	0.092	1.809	0.042	0.532	2.796	0.952	-89.782
0.500	0.115	1.764	0.048	0.542	2.603	0.941	-92.933

Table 1. Population growth and lifetime uncertainty, $\beta=1.011$, $\gamma=2$.

Figure 2. Consumption path

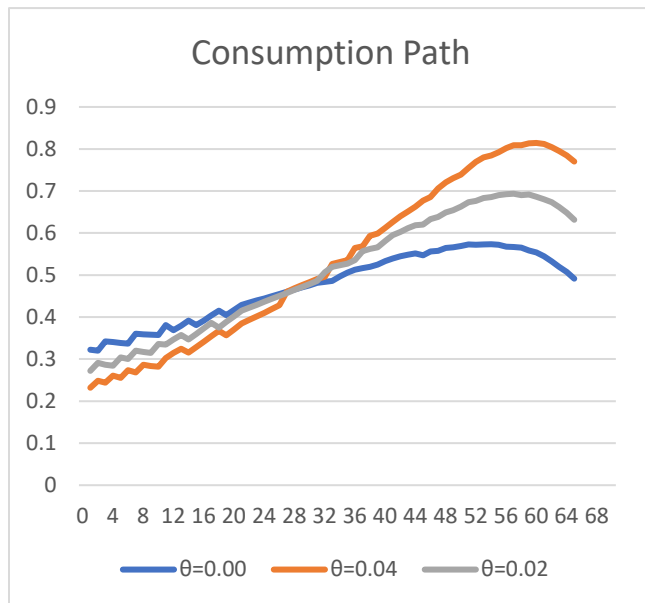


Table2. The role of population growth and lifetime uncertainty

θ	Zero population growth certain lifetimes			Population growth certain lifetimes			Population growth lifetime uncertainty		
	K/Q	r	Utility	K/Q	r	Utility	K/Q	r	Utility
0.000	4.689	0.001	-133.010	4.338	0.001	-125.666	3.964	0.018	-89.408
0.100	4.212	0.008	-123.788	3.975	0.002	-114.865	3.587	0.025	-86.888
0.200	3.878	0.011	-121.764	3.694	0.006	-109.651	3.259	0.031	-86.502
0.225	3.727	0.016	-121.970	3.642	0.012	-109.103	3.201	0.032	-86.692
0.250	3.658	0.018	-122.768	3.632	0.013	-108.676	3.140	0.034	-86.930
0.275	3.580	0.020	-123.873	3.537	0.015	-108.407	3.075	0.035	-87.250
0.300	3.491	0.022	-125.043	3.382	0.017	-107.988	3.020	0.037	-87.631
0.350	3.359	0.027	-128.207	3.281	0.021	-108.324	2.896	0.040	-88.551