Exercise 2 c: Show that in the competitive equilibrium, the period-0 price of period-2 goods is 1/R

Answer:

Consumers buy x units at price p

	t=0	t=1	t=2
	Invest 1-px		Get x
If patient			R(1-px)+x
If impatient		liquidate (1-px) Sell claims x at price 1/R (period-1 price of period-2 goods)	

Expected utility is therefore:

$tu(1-px + x/R) + (1-t)\, u(R(1-px)+x) = t\, u(1+ x\,(1/R - p)) + (1-t)\, u(R+x(1-Rp))$

market clearing price : p =1/R identical under autarky (hence, no trade)