Macro Theory – Exercise 1
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Pricing Assets

Let $\{p_t(z^t)\}$ be the Arrow-Debreu prices of the consumption good where $p_0 = 1$. The set of possible event histories Z^t is finite. The date t event history is $z^t = (z_1, z_2, \dots, z_t)$. Price the following assets:

i. The unconditional delivery of one unit of the date t good. (t period bill)

ii. Ownership of a firm with dividend stream $\{d_t(z^t)\}$.

iii. Ownership of the firm at date t (pre dividend price) in terms of the date t good at date t if the event history is z^t.

iv. The option to buy the firm at date T or at date T+1 for q units of that date consumption good.