**Finite-horizon model of sovereign debt**

**SET-UP**

**Preferences:**

**Endowments:** where

**Default costs:**

**Debt:**

* Debt at the start of the period at
* Government issue new debt at price

**Budget constraint:**

**BACKWARD SOLVING**

**Value Function at Terminal Period**  (At , no future borrowing)

**Default policy function**:

**Value Function for (Value function iteration):**

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**Debt pricing:** the debt pricing should reflect the probability of repayment in the next period

where

* is the probability of default in
* is the lenders’ discount factor

**Borrowing policy function**: the government chooses to maximize if it does not default