

be affected by the fine details of the game. For our purposes, let us take C as given.

If the terminal date T is reached without the failure of firm 0, then the project is wound up without the costs associated with contingent liability. Upstream firms have an incentive to exert effort to avoid early failure, and thus avoid the penalty C associated with contingent liability.

The increased probability of default before date T resulting from low effort by firm i from t onwards is

$$\Delta\pi \equiv (1 - \pi^H)^i \sum_{\tau=0}^{T-t} [(1 - \pi^L)^\tau \pi^L - (1 - \pi^H)^\tau \pi^H] > 0 \quad (29)$$

The expected value of private benefit by exerting low effort from date t is

$$bw_i \left(\sum_{\tau=0}^i (1 - \pi^H)^\tau + (1 - \pi^H)^i \sum_{\tau=1}^{T-t-i} (1 - \pi^L)^\tau \right) \quad (30)$$

Exerting high effort is optimal when $\Delta\pi \cdot C$ is large relative to (30). Promissory notes overcome moral hazard through the “stick” of contingent liability implied by endorsement, rather than the carrot of higher amortization cash flows when firms have accounts receivable.

5.2 Descriptive Statistics

Until the 1990s, promissory notes were an important means of payments between firms in Korea, especially for small firms. Promissory notes accounted for almost 50% or more of all payments made to Korean SME firms until the crisis of 1997, as shown below.