and forces a smaller investment scale. Therefore the supply of capital shifts to the left, leading to a lower level of capital K_{t+1}, lower output Y_{t+1} and lower entrepreneur net worth N_{t+1} in period $t+1$. This decrease again leads to lower investment and lower net worth in the following periods. Note however, that the shift in the supply of capital caused by the lower net worth also leads to a higher price of capital. This increase in price has a dampening effect on the propagation of the net worth shock, very different from the amplification effect in Bernanke, Gertler, and Gilchrist (1999) and Kiyotaki and Moore (1997) discussed below.

The original paper of Bernanke and Gertler (1989) (hereafter BG) uses an overlapping generations framework where agents live for only two periods instead of the infinitely lived agents in CF. Entrepreneurs earn labor income in their first period and then invest these earnings and outside funding from households to create capital for the next period. After production, capital depreciates fully so the return to creating capital equals only the rent it is paid in production, $R_t^k = A_t f'(K_t)$.

In period t the capital stock K_t is given from the previous period. Together with the productivity shock A_t this determines wage income and therefore the young entrepreneurs' net worth N_t. As in CF there is costly state verification of the individual entrepreneur's investment outcome. In BG this implies a supply curve of capital for the next period,

$$K_{t+1} = S\left(E\left[R_{t+1}^k\right], N_t\right), \tag{6}$$

which is increasing in both arguments. The demand curve for capital for the next period only depends on its expected rent and is implicitly defined by

$$E\left[A_{t+1}\right] f'\left(K_{t+1}\right) = E\left[R_{t+1}^k\right], \tag{7}$$

which is decreasing in $E\left[R_{t+1}^k\right]$ for concave f.

In the setting of BG, shocks again have persistent effects: A negative productivity shock in period t decreases the wage w_t and therefore current entrepreneurs' net worth N_t. This increases borrowing frictions and leads to decreased investment in capital for period $t+1$. The lower capital reduces output in period $t+1$ and therefore the wage w_{t+1} which implies a lower net worth N_{t+1} for the next generation of entrepreneurs. The next generation also invests less and the effect persists further.

Both BG and CF as well as the following Bernanke, Gertler, and Gilchrist (1999) do not solve for the full dynamics of their models. Instead, they log-linearize the model