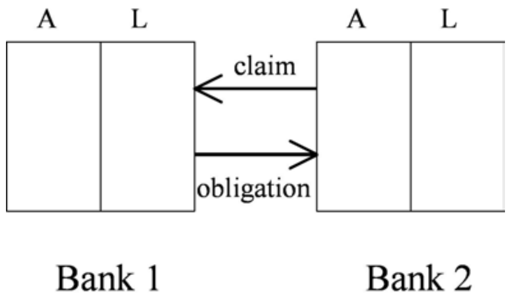
Figure 9
Financial Intermediary Run in the Bust Scenario



from the point of view of Bank 2 is a run from the point of view of Bank 1. Arguably, this type of run is one element of what happened to Northern Rock, Bear Stearns and Lehman Brothers.

3. Prescriptions

The prescriptions for moderating the flucutations associated with the boom and busts scenarios can also be understood in terms of the aggregate balance sheet identity (8). We discuss three in particular - regulatory interventions, various forms of forward-looking provisioning, and the reform of the institutions involved in financial intermediation.

Approach 1: regulatory intervention

The first approach is to moderate the fluctuations in leverage and balance sheet size through capital regulation with an explicit countercyclical element, such as the countercyclical capital targets advocated in the recent Geneva Report (Brunnermeier et al. (2009)) and the Squam Lake Working Group's memo on capital requirements (Squam Lake Working Group (2009)). The leverage cap introduced in Switzerland recently (Hildebrand (2008)) can also be understood in this connection.

$$\sum_{i=1}^{n} y_i = \sum_{i=1}^{n} e_i z_i (\lambda_i - 1) + \sum_{i=1}^{n} e_i$$

Leverage caps or countercyclical capital targets aim at restraining the growth of leverage $\{\lambda_i\}$ in boom times so that the corresponding bust phase of the financial cycle is less damaging, or can be avoided altogether. In the above expression, moderating the fluctuations in $\{\lambda_i\}$ implies that the marked-to-market equity values $\{e_i\}$ and the outside financing proportions $\{z_i\}$ can also be kept within moderate bounds, so as to prevent the rapid build-up of cross-exposures which are then subsequently unwound in a disorderly way as runs against other banks.

A closely related set of proposals are those that address the *composition* of assets, rather than the capital ratio. The idea is to impose liquidity requirements on the banks so as to limit the externalities in the bust phase of the cycle. Cifuentes, Ferrucci and Shin (2004) is an early statement of the proposal, subsequently incorporated in the Bank of England's RAMSI framework for systemic risk.[4]