Now, consider the aggregate balance sheet of the banking sector as a whole, where the assets are summed across individual banks and the liabilities are summed across the banks, also. Every liability that a bank has to another bank is an asset when viewed from the point of view of the lending bank. One asset cancels out another equal and opposite liability. In aggregate, all the claims and obligations across banks cancel out. Thus, in aggregate, the assets of the banking sector as a whole against other sectors of the economy consists of the lending to non-bank borrowers. This lending must be met by two sources - the total equity of the banking system, and the liabilities that banks have to lenders *outside* the banking system. Figure 7 illustrates.

Figure 7
Aggregate Balance Sheet of Banking Sector

Equation 8 is a statement of the aggregate balance sheet identity. What is useful is the fact that equation 8 tells us how the leverage of the financial intermediary sector as a whole depends on the leverage of the individual institutions.

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

The total debt liabilities of the banking sector to the household creditors can be expected to be sticky, and would be related to total household assets. Thus, the first term on the right hand side of equation (8) will be slow-moving, in line with shifts in the total household holding of debt claims on the banking sector. For the purposes of short-term comparative statics, we could treat it as a constant. If we treat the first term on the right hand side of equation (8) as a constant, we learn much about the impact of various shifts in the parameters on the configuration of the financial system. We now examine two scenarios.

2.1   Boom scenario

Consider a boom scenario where the marked-to-market equity of the banks is healthy (that the profile of equity $\{e_i\}$ is strong) and the decline in measured risks leads to an increase in leverage, $\{\lambda_i\}$. In order for the first term on the right hand side of equation (8) to remain constant, there must be an overall decline in $\{z_i\}$, the proportion of funding coming from outside claimholders. In other words, banks must lend more to each other in order to achieve their