λ_i : leverage of bank i (ratio of total assets to equity)

z_i : proportion of bank i's funding that comes from outside the banking system

Then, the sum of y_i across all banks (i.e., total lending to ultimate borrows plus holding of real assets) can be written as:

$$\sum_i y_i = \sum_i e_i \left(1 + z_i (\lambda_i - 1)\right)$$

In the appendix to the paper, we derive the above formula. The point to emphasize here is that the z_i terms are crucial in determining aggregate lending to end-users. Note that z_i refers to the proportion of funding that comes from sources outside the banking sector. Even if we fix the leverage profile of individual banks, a shift in the funding source of those banks toward greater use of non-leveraged claim holders would increase the total supply of lending to end user borrowers.

One way in which z_i can increase is when banks issue securities which are then bought by non-leveraged institutions, such as mutual funds or insurance companies. In a traditional banking system that intermediates between retail depositors and ultimate borrowers, the total quantity of deposits represents the obligation of the banking system to creditors outside the banking system. However, securitization opens up potentially new sources of funding for the banking system by tapping new creditors. The new creditors are those who buy mortgage-backed securities (MBSs), claims that are written on MBSs such as collateralized debt obligations (CDOs), and (one step removed) those who buy the asset-backed commercial paper (ABCP) that are ultimately backed by CDOs and MBSs. The new creditors who buy the securitized claims include pension funds, mutual funds and insurance companies, as well as foreign investors such as foreign central banks. Foreign central banks have been a particularly important funding source for residential mortgage lending in the United States.

Although securitization may facilitate greater credit supply to ultimate borrowers at the aggregate level, the choice to supply credit is taken by the constituents of the banking system taken as a whole. For a financial intermediary, its return on equity is magnified by leverage. To the extent that it wishes to maximize its return on equity, it will attempt to maintain the highest level of leverage consistent with limits set by creditors (for instance, through the "haircuts" on repurchase agreements). As measured risk fluctuates, so will leverage itself. In benign financial market conditions when measured risks are low, financial intermediaries expand balance sheets as they increase leverage. Securitization enables the tapping of new creditors, thereby increasing the proportion of the banks' funding that comes from creditors outside the banking sector. In this way, the leverage of the banking sector as a whole increases.

Although the intermediary could increase leverage in other ways – for instance, returning equity to shareholders or buying back equity by issuing long-term debt – the evidence suggests that they tend to keep equity intact and adjust the size of total assets (see Adrian and Shin (2007, 2008)).