This slack is tied to various measures of the market price of risk. Figure 3 shows the relevant scatter plot for Barclays, a typical global bank. It plots how much a change in the balance sheet size of the bank is financed through equity and how much through debt. (The chart looks similar for other banks.)

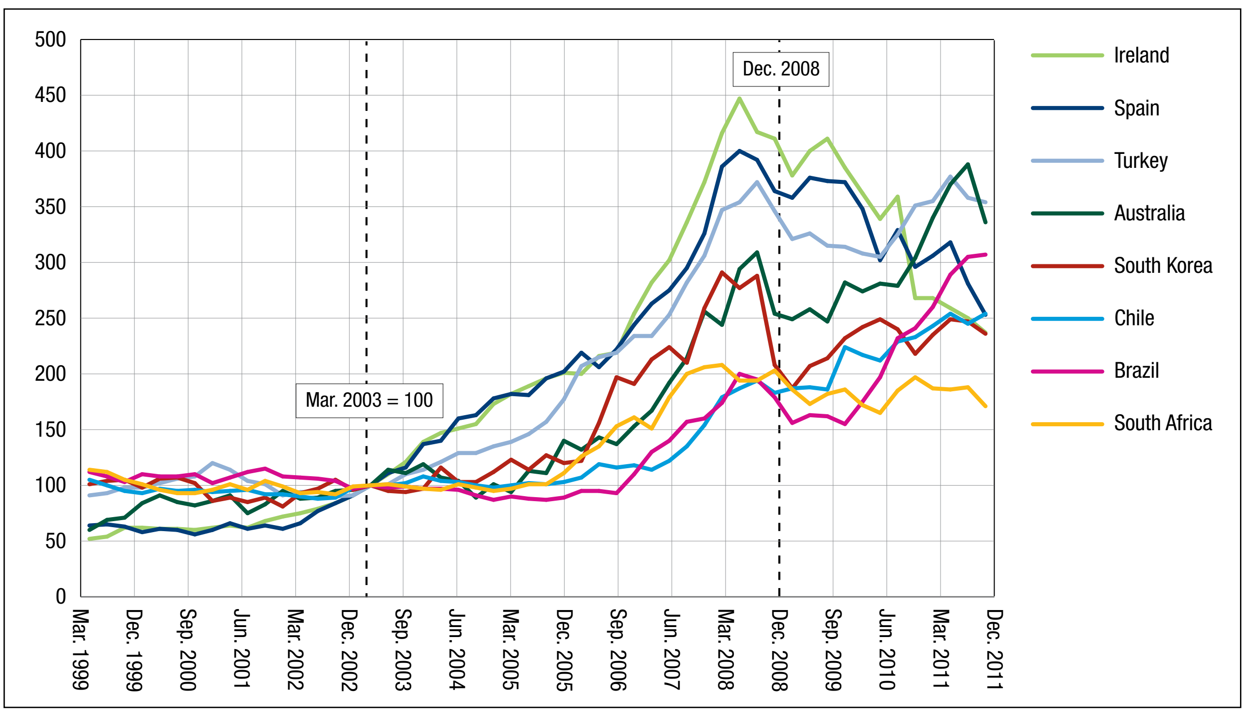
Figure 3 shows a virtually one-for-one relation between the change in assets and the change in debt. In effect, assets expand or contract dollar for dollar (or pound for pound) through a change in debt. What is especially notable is how the risk-weighted assets of the bank (its assets weighted by Basel capital risk weights, which in turn determines capital requirements) barely change, even as the raw assets change by hundreds of billions of pounds.

This phenomenon has a number of explanations. First, during the boom banks added assets that attracted a low risk weight, such as highly rated mortgage-backed securities, while hiding higher risk assets off their balance sheet. Second, measured risks tend to fall during upswings. The fall in perceived and actual volatility during the boom also leads lenders to sacrifice various margins of safety, making them willing to operate at much higher leverage ratios.[10]

Bank lending thus expands to fill spare balance sheet capacity so long as measured risks are low. Causation in the reverse direction may also be at work—that is, the rapid increase in credit supply chasing available borrowers reduces risk spreads, as well as the likelihood of distress, so long as the credit boom lasts. In the presence of this two-way causality, there is the potential for a feedback loop in which greater credit supply and the compression of risk spreads interact to amplify the credit boom.

This procyclical lending behavior in turns has consequences for capital flows. When credit is expanding rapidly, outstripping the pool of available retail deposits, the bank will turn to other sources of funding to support credit growth, typically other banks operating as wholesale lenders in the capital market. BIS data confirm that the vast bulk

Figure 4: External claims (loans and deposits) of BIS Reporting Banks (March 2003 = 100)



Source: Bruno and Shin (2011), data from BIS Locational Statistics Table 7A

[10] See Brunnermeier and Pedersen (2009).