

I think Keen captured the essence of GFC response difficulties in the USA.

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Steve Keen’s analysis fits the result of realizing the USA banking system was not simply capital bound, and some banking systems were not capital bound at all.

Primitive form of the banking multiplier equation:

$$m = \sum_{i=1}^n (1 - R)^i \quad (1)$$

where: R = reserve fraction
 n = iteration limit

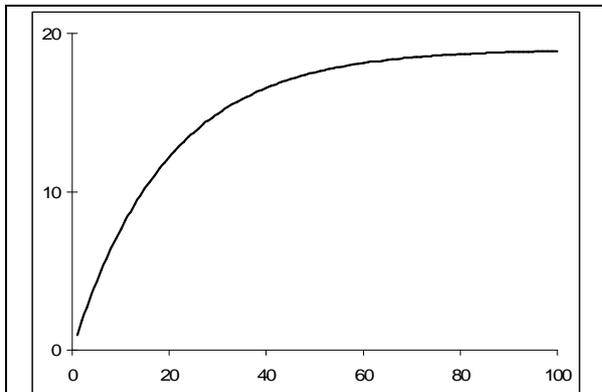


Figure 1 – Iterative results of Equation 1. Iteration (x axis) versus multiplier (y axis) for $R = 5\%$ reserve banking system. Since iteration execution depends on availability of validated borrowers, the real world multiplier has no fixed relationship with time.

In a simplified hypothetical system, if it takes 30 days to approve a loan after acquiring new capital, then in one year 12 iterations are possible, yielding a multiplier of 9.73, which roughly corresponds to the quote from President Obama.

This simplified system is false in the general case, as in the real world, loan queue depth defines outcome of equation 1 relative to

time. If the average queue depth at capital infusion time was, for instance, 5, followed by 30 day borrower acquisition and approval cycles, then the number of iterations would be 14 to 17. This is because iterations of equation 1 would start with nearly simultaneous execution of loans already approved until the queue depth was exhausted, thus generating a higher multiplier. In that case the multiplier would be 11 or 12.

However, queue depth of creditworthy borrowers will only limit the banking multiplier when that queue depth is due to lack of available capital in the banking system. Normally, capital availability is not the loan limiting factor in first world banking systems, although it was temporarily for certain banks in the GFC. In first world banks, the limiting factor is generally availability of creditworthy borrowers. That was definitely the case in the GFC and continues to be.

During borrower contraction, particularly on a massive scale, banks aren’t lending. (Due to the obvious reason of that same borrower contraction.) That is what happened in the USA. Consequently, there could be no execution of equation 1’s iterations on the new capital provided. The multiplier on new bank capital then remains zero, regardless of how much money is infused into a banking system. When new capital is not loaned, thus creating new deposits, such governmental allocations are wasted.

Thus, the correct strategy must include providing support to borrowers in order to generate loan activity by banks, in concert with new capital infusion to shore up reserves that fall below regulatory limits as necessary. Such support can be indirect or direct. However, providing banks alone with recovery funds is clearly incorrect.

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