“Solution” to the Financial Crisis: Game Theory Exposes PPIP As Fraudulent

By James Keller
Global Research, April 10, 2009
realclearmarkets.com 10 April 2009

Region: USA
Theme: Global Economy

Game theory tells us that a risk neutral gambler would pay $50 dollars for a coin flip that paid $0 for Heads and $100 for Tails. Game theorists would call $50 the value of the bet.

Suppose someone is willing to fund your gambling problem, and lend you $80 at zero interest. Better still, if you lose the bet you don’t have to pay him back. Under that scenario, the same gambler would pay $90 for the bet, giving him an even chance of winning or losing $10.

This is a microcosm of what the Public-Private Investment Program (PPIP) is intended to do: create an incentive for investors to pay $90 for a bet that is only worth $50. It is bad economics and bad public policy and it is probably fraudulent. Congress should act pre-emptively to halt Treasury Secretary Tim Geithner’s latest scheme.

In the gaming example above the lender has a bet where he gets $80 or zero with equal odds. The value of that bet is $40. Since he paid $80 for it, he has an expected loss of $40. The PPIP puts the taxpayer, via the Federal Deposit Insurance Corporation, in a similar position. The details are only slightly more complicated. A full analysis would include the diversity in the pools of loans, the interest rate charged by the lender, and the opportunity cost to the lender for a similarly risky bet.

We don’t have enough information from the FDIC about what it intends to charge for the 84% of the PPIP it is guaranteeing and we don’t know the exact mix of assets. But once these are revealed, the analysis becomes straightforward, and the expected loss to the FDIC can be estimated with a reasonable degree of certainty.

Why is this particularly interesting? Many commentators have pointed out the obvious: that the PPIP is another welfare program for the big banks, funded by the taxpayer.

It is interesting because the legislation governing the FDIC does not allow it to take expected losses above its capital base, and that capital base is now just $30 billion. Against a $500 billion PPIP, it only requires a 6% overpayment to wipe out the FDIC’s capital.

The *New York Times’* Andrew Ross Sorkin pressed the FDIC’s Shelia Bair on this point and she apparently claimed that the accountants “signed off on no net losses.” But we are now in zero sum territory. There are only the assets, the banks, and the government. The windfall to the banks is offset by the expected loss to the government. Convincing one’s accountants that a transaction with a high expected loss has no expected loss is fraud.

Here is where the over-engineered PPIP begins to raise troubling questions. Recall that in the initial announcement of the PPIP in March, Geithner made much of the auction process that would be used to price the assets. This auction, where five of the top asset managers in the country would bid against each other, was meant to ensure the fairness of the process.

In his *Wall Street Journal* editorial announcing the program on May 23, Geithner assured us that "private-sector purchasers will establish the value of the loans and securities purchased under the program, which will protect the government from overpaying for these assets."

One suspects that the accountants for the FDIC were convinced that the loans would be purchased at a fair price because they would be sold through an auction mechanism. But if every bidder in the auction has the same incentive to overbid, it is no longer a fair auction. A naïve accountant might equate "auction" with "fair" and ignore the distortion built in to the process.

Jeffrey Sachs did a fine job pointing out that the incentive is actually to massively overbid, and perhaps even collude. Paul Krugman pointed out that the plan is a "disguised way to subsidize purchases of bad assets." Josef Stiglitz commented that Geithner's plan "only works if the taxpayer loses big time."

Against Sachs, Krugman and Stiglitz, in a straightforward exercise in game theory, who is on the side of government accountants?

"No net losses?" The most likely outcome for PPIP is expected losses to the FDIC. In fact, game theory can be used to predict what the expected losses will be. One simply has to work the game backwards. Once we know the clearing price of the auction, we can calculate how much the government overpaid.

In our example above, if we know the auction cleared at $90, we can demonstrate the fair price was $50. If the auction cleared at $85, the fair price was $25. It's a form of price discovery, but probably not what Geithner had in mind.

It is disturbing that the Treasury Secretary's long awaited plan to solve the toxic assets dilemma relies on an overly contrived scheme to obscure its risk to the taxpayer. Either the disguise is intentional or it has not occurred to the Secretary that the plan jeopardizes the soundness of the FDIC. Neither answer is acceptable.

Mr. Keller, former head of structured products at UBS, now runs a micro-finance enterprise in Peru. He can be reached at jwkellerjr@gmail.com