I thank you for all the responses. This reminds me of what I think is the best part of being a teacher. The teacher learns along with the students.

It is impossible for me to address all of the points you have made, many of which I agree with, but here are some further clarifications.

- 1. I completely understand that lower prices are part of the solution but lower prices are also part of the problem. Left alone, this is not a market that finds the right price very easily. This housing market suffers from overshooting when the market is hot and undershooting when the market is cool. Our much-touted free market system relies on what economists call downward-sloping demand curves – cut the price and sell more, or raise the price and sell less. That is how a normal housing market behaves, but in hot speculative markets higher prices increase sales as buyers rush in before prices go higher. And in pathologically weak markets, lower prices reduce sales as buyers hold off in expectation of lower prices later. The logic for government intervention rests on this market failure. Thus the Fed should try to cool a hot market with higher interest rates. If successful, the elimination of the excessively hot market periods would likely eliminate the excessively cool periods as well. But that's not where we are now. We are two years into a housing downturn with no end in sight. Should we sit back and do nothing? That's a recipe for a very sluggish economy for an extended period of time.
- 2. For my economist friends and their friends: There is a difference between a market equilibrium and a market that is seeking an equilibrium. The theoretical efficiency of a market is measured when equilibrium is attained. The housing market seems constantly to stumble back and forth across the equilibrium. The logic for intervention is to reduce the amount of stumbling.
- 3. In other words, if you asked me in 2002 if the housing market needed another tax subsidy I would have said definitely no. It needed higher interest rates and greater transparency lending. I am not so sure that it needed greater regulation, but I understand the argument that home buyers rely on the lenders to determine if they can afford the home. When buyers are approved for a loan, buyers naturally think the home is affordable. If the lender doesn't assume that role in some way, we have a problem that needs addressing. But that is a problem of the hot markets in the past and the future, not today. Today our problem is a very cool market that threatens to be too cool for too long.
- 4. Actually, the variability in home prices is not my primary concern. The problem is the ups and down of home building. Though residential investment comprises less than 5% of normal GDP growth, it makes up as much as 30% of the weakness in recessions, and it is the only component of GDP that gives an early warning sign of an oncoming recession. This deserves our attention. If we could smooth out the housing cycle, we would substantially lower the frequency and severity of our economic downturns.
- 5. The focus on construction and sales volumes rather than price has an important benefit. While it hard to know when home prices are too high or too low, it isn't hard to see when building is extreme. Historically, average annual housing starts are around 1.6 million units (single and multi-family) per year. That's what it takes to

create new places to live for an expanding population. The story of housing is vast swings up and down around this level. When housing starts rose to 2 million units a year in 2004 and 2005, there was obviously an overbuilding problem. Because of that overbuilding it appears that we have about 1 million units more than we "need". Now that housing starts are down to only 1 million compared with 1.6 million normal, that's a problem too, if sustained for a long period of time. The current low level of building is appropriate to work off the overhang of excessive building in 2004-5, but we are making a lot of adjustment already. The number of new single-family homes for sale is dropping sharply from 550 thousand in October 2006 to 467 thousand in February 2008. 300 thousand would be a low number by historical standards. Thus by the end of this year, as housing starts continue to decline, much of the overbuilding overhang will be worked off, and it will be time for starts to begin to return to normal. If not, we are going to be in an under-built situation in 2009.

- 6. What will bring the buyers back? Most of us are frightened silly by the decision to buy a new home even in the best of times, and it takes some urgency to overcome the fear. When the market is hot, it is price increases that cause the urgency. Then buyers rush to get homes before it is too late. The housing market is now utterly lacking urgency. Waiting seems the best option. The point of a well-timed temporary rebate is to create some urgency. Buy it now, or you don't get it. That will prevent the market from undershooting. If we can get some additional buyers back into the market, that will bring others soon enough. We also get all the collateral spending that comes with home buying. We support home prices at an appropriate level, deter additional foreclosures, put value back into those mortgage-backed securities. Happy times for all.
- 7. The design of this market intervention has complexities in terms of timing, efficacy and geography, all of which are raised by you. One of you wisely correctly pointed out that just discussing this idea makes our current problem worse by encouraging more waiting. To limit this damage, we are going to need to keep the discussion very iffy until the program quickly becomes a reality. Another raised the very valid point that there are substantial differences in the state of the housing market in different states and cities. To deal with this, it is appropriate for states and cities to help out home buyers too. But that isn't my recommendation. Too much potential for mischief.
- 8. What is exceptional about the current downturn is the speed at which prices are adjusting in regions where there are substantial numbers of motivated sellers builders with unwanted inventory and banks sitting on foreclosed properties. The vast difference in the price and volume cycles between these regions and regions dominated by owner-occupied units causes me the greatest concern for my proposal. We do not want to retard the price adjustments in the regions that still need more those regions with little new building and few foreclosures. Because of these geographic considerations, it might be wise to limit the rebate to the purchase of a new home or a foreclosed home. But that seems likely to cause a political firestorm. However, the price limitations (no more than \$25,000) of a general subsidy are likely to focus most of the demand on the regions that need it most.
- 9. This is a program whose effects will be very uncertain. The problems of choice of timing and amount of a housing stimulus are not different from the same problems in

setting interest rates. I think the offer to have a significant part of the down payment paid by Uncle Sam will be attractive to many, but there is little historical evidence to support that view in the current market circumstances. (It is difficult to tease from the data the effect of the rebates of the 1970s.). But 15% of the purchase price from the buyers own savings and 5% from Uncle Sam seems about right. With 20% down (also a requirement), the mortgage rate should be pretty good. Like the setting of interest rates, it would be good to proceed with enough flexibility to alter course depending on the circumstances.

- 10. All the other schemes for dealing with this mess of which I am aware suffer from terrible "moral hazard" problems in the sense they encourage unwanted speculative behavior by bailing the losers out. As for myself, I will feel proud to have contributed via my tax payments to making the dream of home ownership a reality for some Americans who prudently sat on the sidelines as the housing market went nuts. Of course I would like to help out some homeowners who were duped by their lenders but I cannot for the life of me figure out how to separate deserving from undeserving home owners. The best way to help them out is to get the buyers back.
- 11. One other important point: the "real" cost of this program is zero because it merely puts to good use an idle resource. We would be putting happy American families into homes that would otherwise sit empty. That, by the way, is the reason that current home-owners are not included. When a homeowner sells one home to buy another, he or she is not reducing the unemployment of homes. The goal is to make the best use of our existing dwellings by moving families from crowded rental units into empty for-sale units.
- 12. The program could be extended to everyone renting for an extended period of time, like the last three years, if we wanted to be more inclusive.