

LECTURE 37: THE FUTURE II

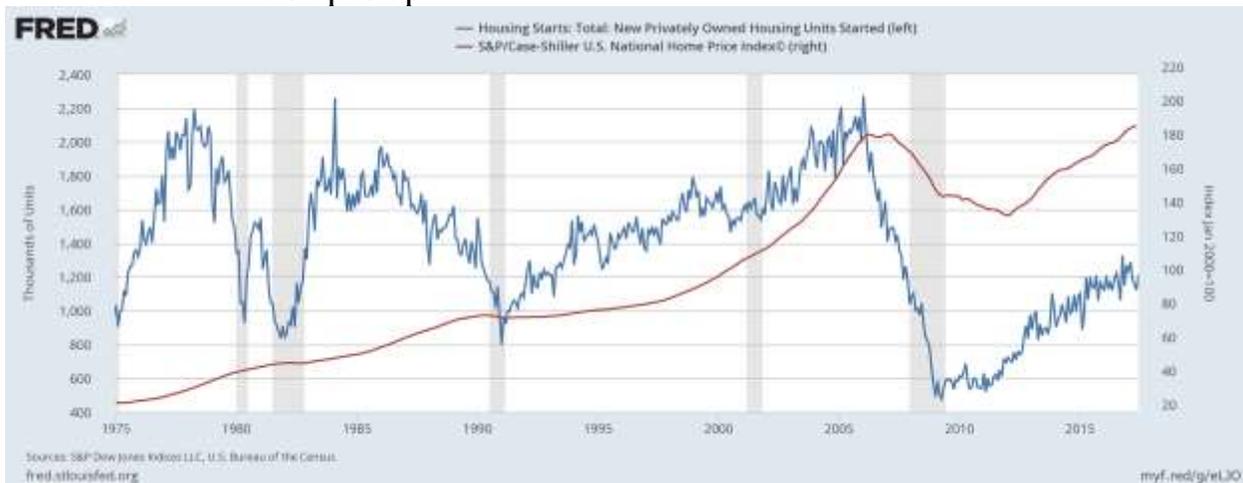
I. Recycling

- a. It's tempting to think of recycling as something that should always be done because it saves resources. It's sustainable.
 - i. *Sustainable*—able to be maintained at a particular level.
 - ii. Consider a business. If you sell food at below cost, that's not sustainable. You can't keep doing that forever because you'll run out of food.
 - iii. In other words, in order to make our lives and livelihoods sustainable, the argument goes, we must recycle.
- b. But recycling requires resources. Recycled material must be sorted, cleaned, and repurposed for the physical material to be used again. There's an opportunity cost; is it worth it?
- c. One way to check is profitability. If all the resources used to make something out of recycled material is less than the resources needed to make that same thing out of virgin material, then you can make money recycling.
 - i. Profitability equals sustainability. As long as something is profitable, we can expect it to endure.
 - ii. But often, recycling is not profitable.
- d. Is something trash or a resource? Look at prices! When prices render it cheaper to make out of virgin materials, the item is trash. When it's cheaper to recycle, the item is a resource.
 - i. There's a lot that goes into this calculation: not just the prices of harvesting new resources, the prices of repurposing old resources, the price the finished material could be sold at, and even the price of disposal.
- e. Recycling is not inherently good, but it's not inherently bad, either. It's just a tool people have to adjust to changing circumstances.

II. Housing

- a. Housing, as we know, can be very, very expensive. Increasing shelter prices is the single biggest reason the price level creeps up year after year. Should we be concerned about running out of space?
- b. Yes and no. Again, prices convey information and induce action. The higher housing prices encourage people to add to the housing stock just as lower prices discourage additions. When housing prices

flattened and then fell leading up to the Great Recession, housing starts (the number of new housing projects) plummeted. The supply curve slopes up.



- c. But that doesn't explain why housing prices continue to rise; you can see them rising for many years. Why hasn't the price stabilized?
 - d. Housing, like new technologies, has a long lag. It takes years for a project to go from planning to execution to completion.
 - e. Moreover, regulatory barriers and NIMBY (Not In My BackYard) attitudes make it difficult to start new projects. My own neighborhood is located near a metro stop. Metro wants to turn a parking lot they own into a high-rise development but local residents are resistant. They fear overcrowding in schools, traffic congestion, and, above all, maintaining their homes' value. The last thing many want to see is competition.
 - f. Landfills have similar NIMBY issues. There's plenty of space for landfills, but vested interests can make it difficult to act on prices.
- III. Institutions Matter!
- a. Institutions: the rules of the game
 - i. The incentive structure matters a lot.
 - ii. Again, economists are more concerned about if someone has the *incentive* to solve the problem.
 - b. All things are not rosy.
 - i. Certain kinds of fish (i.e. tuna)
 - ii. Global warming
 - iii. Clean water in developing countries
 - c. Recall the tragedy of the commons.
 - d. So what's "too many people?" It depends on the incentives.