WEBSITE REVIEW

WEBSITES FOR A BAD ECONOMY: 10000 PENNIES
HTTP://WWW.YOUTUBE.COM/USER/10000PENNIES

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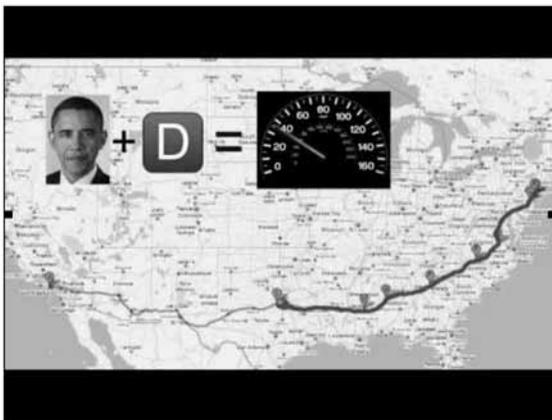
My business students are both uneasy and confused about the economic downturn in the United States economy and what is being done to change it. They have heard contradictory things from parents, the media, contemporaries and professors–and they don't know which of these, if any, are accurate. Part of the problem is that in order to discuss the economy, people must talk about millions, billions and trillions of dollars, and our human brains tend to be poor at getting a perspective on such large numbers and distinguishing differences between them.

Matthias Shapiro, a young software developer from Utah with a talent for visualizing data, has created a series of videos to illustrate various numerical debates on the economy. It is hard to say where his videos originate, because they get cross-linked so fast, but Shapiro says they are on the YouTube 10000 pennies channel (the URL is at the top of this review). He takes the raw numbers from original documents or political state-ments and converts them into things most people do understand – such as pennies, cups of water, ice cubes, and so forth. His demonstrations are interesting, illuminating and funny. What is more important, the official number-keepers (Econo-mists) are not challenging either his numbers or his explanations.

There are other videos and related expla-nations, along with Shapiro's, at the Twitter: @PoliticalMath site and some may be worth using in a classroom, but Shapiro's videos seem more completely thought through, and are at once logical and understandable. He starts with the politicians' own words and numbers, but explains obfuscations until what was difficult becomes clear.

The first Shapiro video (well, the first I could find) was posted in April, 2009, and is called, "Obama Budget Cuts Visualization." What Shapiro visualizes is the $100 million that Presi-dent Obama said he would find to cut from the proposed federal budget. What Obama didn't say, or at least wasn't reported to have said, was that the proposed Federal budget was $3.52 Trillion. Shapiro stacks five pennies together, and has us assume that it represents $2 Billion. He then places 8,800 pennies on a table in 1,760 stacks of five pennies each to represent the Federal Budget.

Before showing us how much $100 Mil-lion is, Shapiro demonstrates the amount of the budget that cannot be cut – mandatory spending, such as Social Security, Medicare, etc. This is shown on the table by laying a white line across the pennies – a bit over one half of the budget is mandatory spending. Then Shapiro shows how

many pennies the government actually has (from taxes, etc.), by laying a blue line that lies to the right of the white line. Everything that lies to the left of the blue line is money the country has.

It is now easy to see that the pennies between the blue line and the right hand edge of the table is the amount the government will need to borrow, and now Shapiro can show us how much the $100 Million is in comparison. If five pennies equals $2 Billion, each penny ($2 Billion divided by 5) is worth $400 Million. Therefore, $100 Million is one quarter of one penny. Shapiro cuts a penny in half, and then cuts that half in half again, puts the three quarters of a penny back on the table and holds up the last one quarter of a penny, which illustrates $100 Million, in comparison to the other pennies still laid out in front of us. Very effective.

In other videos, Shapiro explains how many jobs the nation lost compared to the number the President said would be saved by the Stimulus Bill, and the cost of the Health Care Reform proposal in comparison to the General Motors bailout, how much we paid our soldiers last year, and our current Social Security and Medicare/Medicaid budgets. When comparing the Health Care Reform proposal to the current two medical budgets (Social Security and Medicare/ Medicaid), he makes the important point that, under current proposals, the two medical budgets we have now will not be replaced. The proposal would add a third medical plan to the two we already have and all three would continue to grow into the future.

Possibly the most mind-boggling of Shapiro's videos is called "The National Debt Road Trip." He visualizes a road trip, starting in the year 1900 at Madison Square Garden. Every mile traveled away from Madison Square Garden toward the West Coast, is equal to about $6 Billion ($5.8 Billion to be exact) in deficit. If we then consider every year as an hour, we can see how fast the debt is increasing in terms that we use every day – miles per hour. All of the numbers are adjusted for inflation. He shows this on a cross country map to allow the viewer to see how big the deficit is growing (the distance), and at what speed it is growing (how fast), using constant dollars.

The comparison most people are interested in, of course, is between our last president and our current one. When we get to George Bush's presidency, the Debt Car speeds up to 64 miles per hour, the fastest it had ever gone, though only one mile per hour faster than during his father's presidency. Then we get to the comparison between Bush and Obama. By Obama's own budget predictions for the next eight years, the debt car will speed up to 174 miles per hour. As Shapiro says in ending this video, "What I don't understand is that people who were screaming that we were driving irresponsibly fast at 64, suddenly claiming that 174 is a perfectly reasonable speed. I think it may have more to do with who's driving."

Michael Steele, the Chairman of the Republican Committee invited Shapiro to Washington D.C. to "do a dog and pony show" while talking to some lawmakers, and also announced that the Republican Committee was making Shapiro the first recipient of the "Grass Roots Logic Award."

It seems unlikely that the Republicans would be willing to give an award to Shapiro if his results were coming out against, rather than for them, and it is easy to think that Shapiro must be a right-wing Republican, but he argues with that, saying it is a factor of the data he has to work with – he simply visualizes the data that is there. Politically, he says, he leans Libertarian, a fact that I tell my students. However, his visualizations continue to catch attention from people of all political sides. A number of economists have checked out his numbers, as I did when I first came across his videos. So far, no one is willing to argue with him.