Mitchell's Musings 9-19-11: Is Your Family a Ponzi Scheme?

There has been much talk recently of Social Security as a "Ponzi scheme," so-named after con-man Charles Ponzi pictured above. Conventionally, Ponzi schemes are defined as arrangements in which investors are promised enticing returns (greater than market) and in which these returns are in fact paid out of new contributions by new recruits.[1] I say "conventionally" because that is not the definition I would use. I will argue below that the conventional definition is incomplete and not especially useful in its application to Social Security. But note that there is a glaring oddity *if* the conventional definition is used.

Those critics who characterize Social Security as a Ponzi scheme are also prone to say that it is a *bad* investment, i.e., that it gives retirees a *lower* return than they could earn in the market. Opponents argue that participants would do better if only they could take their payroll tax contributions and place them in the market. It is hard to reconcile low return with a scheme that depends on offering a high return.

A recent poll asked respondents if they thought Social Security was a Ponzi scheme. Seventy percent disagreed with that characterization, 20% agreed, and the rest didn't know. I would not put much stake in these results – there was no evidence that the pollster asked respondents if they knew what a Ponzi scheme was or – if not - what they thought it was. But the word "scheme" does not sound particularly nice – it connotes fraud. And recipients may have had a sense that a phase that combined "Ponzi" and "scheme" was even more negative in its implications than just "scheme."

Perhaps most telling was that 82% said they would not support eliminating Social Security.[2] What we mainly learn from the poll is that if people like Social Security – and they apparently do - then they don't

[1] The Wikipedia definition is "a fraudulent investment operation that pays returns to its investors from their own money or the money paid by subsequent investors, rather than from any actual profit earned by the individual or organization running the operation. The Ponzi scheme usually entices new investors by offering returns other investments cannot guarantee, in the form of short-term returns that are either abnormally high or unusually consistent. The perpetuation of the returns that a Ponzi scheme advertises and pays requires an ever-increasing flow of money from investors to keep the scheme going."

[2] The poll, by Public Policy Polling, can be found at http://www.publicpolicypolling.com/pdf/2011/PPP_Release_US_0913925.pdf

like giving it negative-sounding descriptions. (Note that some respondents must have opposed eliminating Social Security *even if they thought it were a Ponzi scheme*!)

The classic Ponzi scheme is of the chain-letter variety. Under a chain letter, recipients of a letter are told to mail some amount, say a dollar, to a name listed on the letter and then to send the letter to, say, ten friends with a similar request. If every letter recipient follows the rules (and there is no guarantee that they will) – eventually your name shows up on many letters as the place to send a dollar. You receive some large number of dollars in exchange for your meager investment. Chain letters typically involve such high rates of return and rates of participant expansion that they literally run out of people who could be participants after a few iterations. That is, they are bound to fail after a short time.

Other Ponzi-type schemes are less obvious and may involve selling some product. Participants may ostensibly be sales people for, say, some vitamin concoction which they sell and also recruit new sales people who buy the concoction to sell to still others. However, the return is not really the profit on the concoction but the recruitment revenue that is generated; people keep buying more tonic to sell to others. These schemes are harder to detect and prosecute – their promoters will claim they are just in the health tonic business - but they also eventually run out of people to recruit as sales agents. They fail for later participants.

Most prominent in recent years – at least in terms of magnitude - was the Madoff scheme. The gimmick here was that the investment returns promised were not extraordinary, just better than typical; no one was promised that his/her money would double in six months. But the return was high enough, and seemingly-steady enough, to attract enough new investors in sufficient numbers to keep the scheme going for many years. The plan would fail if too many folks started cashing out – as tends to happen during financial panics such as occurred in 2008.

The essence of Ponzi schemes is that they must ultimately fail, with the date of "ultimately" a function of the details of the plan (not promising too high a return keeps it going longer) and that the returns are paid by new participants.

So, is Social Security a Ponzi scheme? It does involve, at least in part, an intergenerational transfer, i.e., younger workers and their employers pay into the system and support older workers who are retired. But that is not a complete definition. The critical part is whether it must fail and exactly what is being promised.

There was a time when there was no Social Security. The first payments under Social Security didn't begin until the 1940s. So who paid for elderly support before then? It might be nice to think that each elderly person, pre-1940, saved enough as a youngster to pay for himself/herself in old age. But in fact – although there certainly was saving – elderly people were often supported by younger relatives in extended families, by charities, or by local governments through such institutions as poorhouses.

Family payments, charitable payments, and local government poorhouses are all examples of intergenerational transfers. Younger family members, donors to charities, and local taxpayers were in effect transferring resources to the elderly. You can look at the process involved as new "participants" paying a "return" to earlier participants (who themselves were once young family members, donors to charities, or local taxpayers). So if new participants paying for earlier participants is your definition of a Ponzi scheme, you would have to label families and – indeed – whole societies and nations as Ponzi schemes.

Indeed, nations are Ponzi schemes under that definition even if the elderly seem to save for retirement on their own. At any moment in time, new workers are entering the labor market and – combined with the workers already there – are generating the national GDP. Older workers are exiting the labor market and drawing on that GDP which younger workers are producing. There is, therefore, an intergenerational transfer going on. (If younger active workers all went on strike and refused to generate GDP, the elderly non-workers could not consume, regardless of what they had been saved.) Put another way, saving gives you consumption entitlement tickets – the means to buy. But if you are an elderly non-worker, you depend on younger active workers (the new participants in the national "scheme") to provide something to buy with those tickets.

The critical point of a Ponzi scheme is not that there is some version of an intergenerational transfer (the economic system *always* depends on new participants) *but that the scheme must fail*.

So let's go back to the extended family example, which was the human race's *de facto* retirement plan long before there were actuaries, trust funds, or – for that matter – individual accounts. In less developed parts of the world, the extended family is still the default retirement plan. Parents have children. If the parents live beyond an age when they can work, the children or other economically-active relatives support them. The plan can fail only if there are no children or younger relatives. However, there is a question about *how much* support each of the children or younger relatives will provide to elderly parents and relatives and about how much per capita support each elderly non-worker relative will receive. Those amounts are not fixed.

In fact, the amount of the transfer in an extended family plan is likely to vary with the economic fortunes or misfortunes of the workers in the family and with the ratio of elderly non-workers to younger workers. In a steady-state situation, there might well be a reasonably constant intergenerational transfer flow. But there will inevitably be shifts over the years in family fortunes and in the elderly-to-young ratio.

Let's suppose that the usual plagues and illnesses happened to be at a lower-than-normal point when a particular generation was born so that more of that generation survived to working age than would typically be the case. There would first be a bulge in the youth part of the family; the elderly-to-young ratio would fall. Probably, the elderly in the family would especially benefit from the bulge in younger workers and each younger worker would have less of a support burden imposed for transfers to the elderly. But as that fortunate younger generation aged, the ratio would eventually rise.

However, there need be no failure of the extended family retirement plan because of this deviation from the steady state. What there needs to be is an adjustment; some internal family agreement must be reached concerning the magnitude of the transfer. What we might expect, when the elderly-to-young ratio rose, is that the younger generation would end up paying somewhat more per capita than in the past. And we might expect that the elderly non-workers would receive somewhat less per capita than what they might have expected had the demographic bulge not occurred. There is not a failure but there is an adjustment. Readers will not have a problem seeing the analogy to the baby-boom/baby bust demographic story that has characterized the U.S. after World War II.

The debate over whether Social Security is a Ponzi scheme is not helpful in understand these dynamics. If you define a Ponzi scheme as anything with a new-participant-to-old-participant transfer, than almost any system is a Ponzi scheme including Social Security. But under that definition, families are Ponzi schemes and nations are Ponzi schemes. True Ponzi schemes combine the transfer with absolute guarantees that ultimately cannot be met because the promises cannot be changed, either to recipients or those paying in. (Madoff could not make good on his absolute promise to cash out all participants if they so-requested.)

Social Security, while it has formulas on both the tax and benefit sides, is not frozen and immutable. Both sides – taxes and benefits - can be changed. Over time, for example, payroll taxes have been increased. And cuts were made in promised benefits in the 1980s by the so-called Greenspan Commission through raising the retirement age and other devices.

At present, there is a failure related to – but not in - Social Security. *The failure is in the political system that is supposed to be the plans adjustment mechanism – rather than in the plan itself*. The debate over whether Social Security is a Ponzi scheme is a symptom of that political failure.