Fiscal Exercise for Aging Boomers

I have just reached a decadal milestone in the struggle with aging. I will use this as the opportunity to launch a service for those of you about to receive mass solicitations for AARP membership (if you don't receive them already!) The service is intended to help you exploit my knowledge, to make better sense of the flood of financial and exercise advice targeted at aging baby boomers.

This service will include tips for those of you struggling to make sense of conflicting views of the economy, financial markets, and the investment opportunities they offer. This is your battle for *fiscal* fitness, and I hope to assist you use my research base as a finance professor in your fight for it. But it would be remiss for a finance professor in Boulder to ignore the local obsession with physical *exercise*. So in these pieces, I will combine some fiscal advice with some exercise tips. Let's call the combination **Fiscal Exercise**.

Let's start with the conceptually easier part: how to exercise the body.

Exercise Fitness

Keeping up with Boulder's versions of Jack LaLanne is more painful than reading research papers. Earlier postings on my website have described my use of the unusual the slow movement exercise protocol to keep muscular strength and skeletal soundness, and my fast rides on an unusual 2 wheeled recumbent bicycle for enjoyment and cardiovascular health during the warmer weather. The program is intended to minimize the time spent exercising while maximizing the results. So my first piece of advice is to buy one of the paperback how-to books about slow movement weight machine training, join a gym with good nautilus-type equipment, and start doing it. *At first*, it will help to have an instructor demonstrate the correct way, and improve your form. The time spent doing it is only 15-20 minutes, 2 or at most 3 times per week. You won't be huffing and puffing, but you will learn to work the muscles more thoroughly than you are used to doing. You will also need to follow the book's sensible diet advice. If you don't like to bicycle outdoors, use the gym's stationary recumbent bicycle. Strap on a cheap Polar Heart Monitor to keep your pulse around 130 or so (after undergoing a doctor's heart stress test, of course).

How well does this program work? In recent years, I have marked birthdays by a suitable test of strength: the <u>power clean and jerk</u> of a barbell containing slightly more than my bodyweight. The best young Olympic weightlifters warm up with lifts far tougher than that; a North Korean athlete won the Olympic Gold Medal in my weight class (62 Kg), managing a clean and jerk close to triple his bodyweight. But few ordinary gym members of my age -- or any age -- are able to get a bodyweighted barbell from the floor to fully overhead, so this has been my test.

Aging makes injury both more possible and consequential, so I always warm up properly, wear a <u>lower back-supporting weightlifting belt</u>, and practice correct technique. But the "jerk" phase of the lift runs the risk of hyperextending a knee, so this year I switched to the somewhat less effective <u>power clean and push press</u>. Before ESPN had its World's Strongest Man competitions, <u>Paul Anderson</u> was thought to be the world's strongest man during the late 1950s, and he used the push press to win the Olympic Gold Medal. So I wasn't embarrassed to substitute it for the "jerk" phase of the lift.

A little moderation in diet and drinking brought my weight to its level in college, so I didn't have to lift quite as much as in previous years. Once again I dusted-off my snappy singlet (the same design used by the 1996 Olympic team) and wooden-heeled Adidas lifting shoes and went to battle the barbell on my birthday. A couple of relative youngsters witnessed me hoisting the thing to my shoulders, and then pushing the sucker overhead. After a few steps I was able to stabilize the weight with arms locked. The deed was done, and one of the witnesses snapped this photo of my reaction:



You can see that I was glad to be done with Olympic lifting for the rest of the year.

As mentioned in the introduction, an altecocker-in-training must also be concerned with *fiscal* fitness, so that your improved physical fitness doesn't result in you outliving your retirement savings. I plan to write a series of tips about that in future letters like this. Here is the first.

Fiscal Fitness

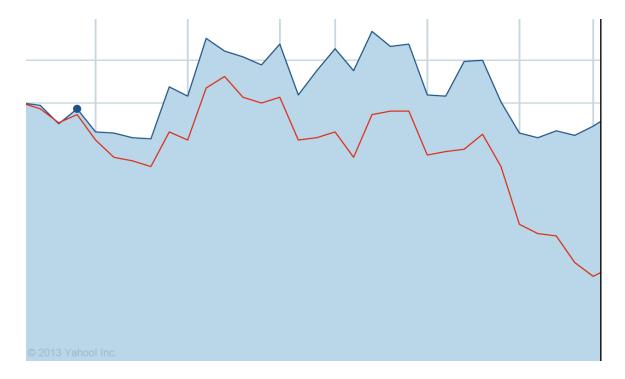
There are so many ill-understood issues in financial analysis that is hard to know where to begin this series. So I'll start with a brief, counterintuitive tip about Exchange Traded Funds (ETFs).

ETFs are portfolios of stock, bonds, and/or commodities intended to track a specific index (most common) or actively managed portfolio, possibly using leverage or derivative securities to provide returns with seemingly appealing characteristics. The "plain vanilla" ETFs are most common, and seek to provide an alternative to popular index mutual funds. Because ETFs trade on a stock exchange with their own ticker symbols, you may buy and sell them just like any exchange-traded stock. Some financial advisors have assembled portfolios of ETFs to implement desired asset allocations for clients.

Plain vanilla ETFs generally do an excellent job of tracking the indexes they are designed to mimic. This is due to an ingeniously simple arbitrage mechanism ensuring that any important deviations between index and ETF returns sow the seeds of their own destruction. That is, qualified institutions can trade to profit from deviations, and those trades push ETF and index values back together. This innovation shows that financial engineering is not all bad!

But some ETFs are different. For example, there are ETFs with names implying that their price movements will either mimic movements of the popular VIX index of stock market volatility, or will move by some (positive or negative) multiple of VIX index movements. The original Chicago Board Option Exchange's VIX products are popular vehicles used to either hedge undesirable effects of market volatility (e.g. stock index declines are often accompanied by a rise in the VIX) or to speculate on the future direction of market volatility. So it isn't surprising that there are ETF-like counterparts of those VIX products.

But there are some practical reasons why the VIX ETFs (actually called ETNs) do not attempt to directly replicate the VIX, which requires assembly of a portfolio of stock index options. Instead, they use VIX futures contracts in an attempt to indirectly replicate the VIX index. The difference appears innocuous unless you have the time and ability to read and properly understand the prospectus. If you haven't, you may be surprised by the outcome. The following plot shows how seriously one of the VIX ETFs underperformed the VIX itself, between October and December 2012:



The plot on top is the VIX Index between October and December 2012. Note that the VIX index wound up very close to where it started, with a lot of zigging and zagging along the way..

The bottom plot is "VelocityShares 2x Daily VIX" (ticker symbol TVIX), whose sponsors designed to produce, on any given day, *twice that day's return* from the VIX index. As noted above, it uses futures contracts to do this, rather than the portfolio of stock index options that professors teach will replicate the VIX. For that and one other reason, having to do with a counterintuitive property of cumulative returns that result from successive earning of twice daily (positive or negative) returns, you can see that the TVIX lost a substantial amount while the VIX index didn't. The prospectus for TVIX warns about the possibility, but because of the excellent tracking performance of the more familiar plain vanilla ETFs, I suspect that some investors think TVIX won't be much different. It is, as are other "commodity ETFs" that are implemented with futures contracts. This doesn't have to happen, but in Fall of 2012 it did.

So here is a Fiscal Exercise Tip:

BEWARE of ETFs that are implemented with futures contracts.

A Final Note

I am available for limited fiscal and exercise consultation. I will eventually develop a website and blog to facilitate that, in order to keep sane during retirement.