Human Capital and the Theory of Life-Cycle Investing

By Paula H. Hogan

Human capital is something we all have, and it's becoming a front of mind issue in the press and in the field of financial planning. What's up with that?

What Is Human Capital?

For economists, there is a very specific definition for human capital. They say it is the value of

future earned income expressed in today's dollars as if it were a lump sum.

That's an idea that makes conceptual sense, but is hard to specify in a practical sense. Who really knows what the range and pattern of their future earnings will be?

But even if you don't know the exact value for your human capital, it is possible to develop a sense of its character—and that's important for investment planning. You would manage investments differently depending on how high and how secure your earned income is likely to be, how long it may last, and how correlated it will likely be with financial markets.

For you personally, "human capital" is simply your God-given gifts. From a financial planning point of view, the implied planning issues are: How will you use these gifts and how will society financially reward you for doing so?

Why It's a Hot Topic

People are living longer, and we are beginning to understand the implications of that. Protecting against the risks of longevity and inflation are coming into focus for baby boomers as the key retirement planning goals, especially in light of declining pensions and job security.

As a result, we're seeing more personal investment products and services that incorporate academic theories—in particular, the theory of life-cycle saving and investing.

Life-cycle theory, first developed

in the 1970s, points out that each person has both human and financial capital, with the former usually being the most important. [The theory of life-cycle investing discussed here should not be confused with the target-date or age-based life cycle asset allocation process, adopted by many mutual funds and that is a common investment choice in many 401(k) plans.]

It seems like a small change to focus more centrally on human capital than on financial capital, but it has major planning implications. So let's take a closer look at the theory of life-cycle investing.

Life-Cycle Investing: The Theory

In life-cycle investing, a person's total wealth is defined as the sum of their current financial wealth and the present value of their human capital—that is, what their labor will earn during their lifetime.

Under this theory, there is a key assumption that, in general, people like to smooth consumption across their lifetimes and that they especially want to avoid big down-



ward swings in their standard of living. Using this approach, financial planning consists of transferring consumption across time and across contingencies, throughout the entire life cycle of the individual.

How does this work?

As an example, the act of saving for retirement shifts consumption from high earning years to years when the individual is no longer in the workforce. Student loans and mortgages, on the other hand, allow individuals to shift in the other direction, consuming more in the present by borrowing against income expected in the future. And health insurance is a vehicle for transferring purchasing power across contingencies—that is, from "good" times of robust health to "bad" times when medical care is needed.

From a life-cycle investing point of view, preparing for retirement thus requires investing savings in safe investments to the extent that is appropriate for one's personal circumstances, and insuring or otherwise addressing the risk of catastrophic losses, such as from poor health or challenging longevity. Then and only then does one consider how to capture the upside potential of volatile investments with an acceptable level of risk.

An additional tenet of life-cycle investing is that the source of labor income must be taken into consideration when making investment choices in order to avoid having the investment portfolio move in a highly correlated manner with labor income.

For example, if you are a stockbroker, you may think that because you are familiar with investment trends, you would be a good candidate for investing in stocks. Yet if your income rises and falls with the market, a more sensible strategy would be to manage financial capital as a counterpoint to earned income. Thus, as a stockbroker, you would keep portfolio volatility low in order to avoid having investment wealth plummet at the same time labor income sinks in a market downdraft. So, odd as it may sound to modern ears, not investing in stocks at all is a reasonable default choice for someone whose income goes up and down in lockstep with the stock market.

A Different View of Risk

In this context, "safe" investments are investments such as annuity-based products, inflation-indexed savings bonds, Treasury inflation-protected securities, and targeted savings accounts (for example, a college savings plan where the promise to the investor is a payment of tuition instead of a payment of a specific dollar amount).

In fact, a key implication of lifecycle investing is that there are safe investments, and further, that safe investments are appropriate as the base layer of personal wealth, an idea that is quite different than the notion that stock investing should be the mainstay of an individual's portfolio.

For example, financial planners frequently focus on an individual's time horizon: "If you have a long time horizon, invest in stocks because you have time for everything to work out OK."

However, from a life-cycle investing point of view, this statement doesn't work. There is no reason to think that time softens market risk. The long-term average return is likely to be a positive number, perhaps a number even above inflation. But the range of possible ending values grows rapidly as the time horizon expands. This means that you might earn a nicely positive average annual return over your lifetime, but on the day that you need to start drawing cash from the portfolio for living expenses, your portfolio could be a fraction of total deposits—not a good outcome, and not financially safe.

Using a life-cycle investing planning perspective, the more correct statement would be that, rationally, you can consider increased investment risk to the extent that you have resiliency in your labor income. Thus, a young professional at the beginning of his career, everything else being equal, can consider ramping up investment risk, not because he has a long time horizon, but because he has resiliency in his labor income. If something goes wrong in his investment portfolio, he can ramp up lifetime labor income by working harder or longer.

In contrast, consider the situation of a 60-year-old. Given current longevity trends, he has a long time horizon, and so according to current popular lore, might consider investing heavily in stocks. But, if the 60-year-old is not able by preference or personal skills to ramp up lifetime labor income by working longer or harder, then he cannot really afford to take considerable investment risk. To the extent that he needs portfolio income for daily expenses, he also cannot afford to have anything go wrong in his portfolio and so must keep investment risk commensurately limited.

The Outlook

As the life-cycle theory of investing washes into daily financial life, you can expect to see an increased focus on safety first in investments as well as increased attention to coordinating investment policy with human capital.

Human capital is something that we all have and there is tremendous choice about what to do with it.

The financial planning implication is that what you do with your God-given gifts has a lot to do with personal happiness and your mark on the world—and everything to do with how you manage your investment portfolio.

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