

# A Holistic Approach to Risk Assessment

**A**lthough US stock indexes hit record highs in 2014, many investors opened their year-end statements and found much more modest results. Why did so many investors seemingly 'underperform' and, ultimately, fail to meet their expectations? While US stocks performed exceptionally well, most investors do not hold US stocks exclusively. Bonds, foreign investments, and commodities did not kept pace, and yet they are common components of diversified portfolios. The only investors that are exceedingly happy with their results over the last couple of years are those that are concentrated in US stocks. This trend leads to frustration and confusion among some investors as well as pressure on financial advisors. Those advisors serving as fiduciaries should address these challenges with the goal of delivering appropriate advice, but that is not always easy. ***When specific, higher-risk investments significantly outperform other assets, how should investors comprehensively assess risk to improve their investment decisions?***

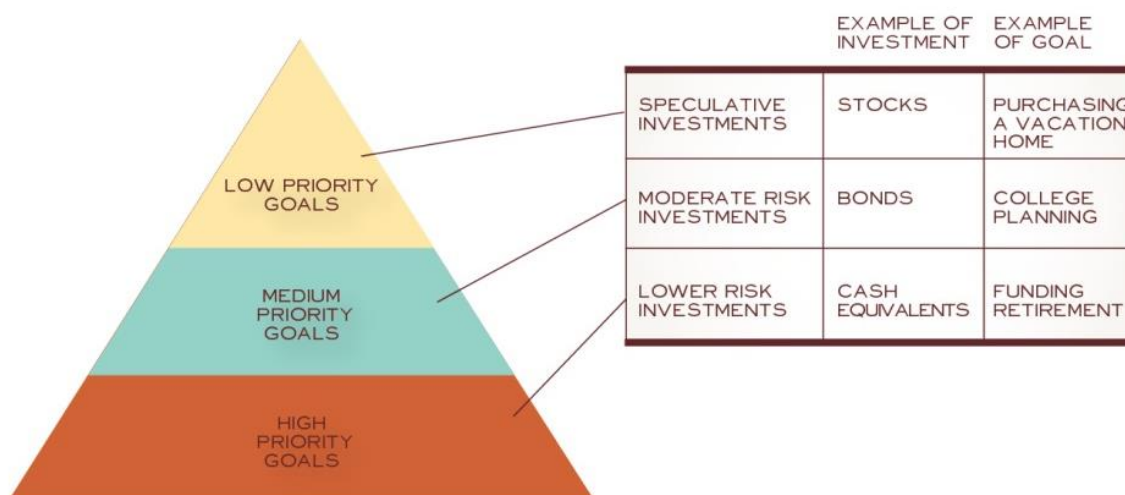
## Holistic Approach to Assessing Risk

Risk tolerance is a key factor in designing an investment portfolio and one that often dictates account performance. In some years, the impact is relatively small, but this is not always the case. Most investors make investment decisions based on their risk level and financial goals. Although the process employed to determine risk tolerance, return objectives, and investment constraints isn't always the same, there are several factors that are commonly overlooked by investors. Specifically, there are two techniques that are often disregarded, yet can drastically improve the assessment of investment objectives and the resulting investment selections: using a portfolio perspective and considering human capital.

## Account vs. Portfolio Perspective

Many investors view their assets independently as opposed to as one single portfolio. Often, investment objectives are formulated individually as well and segmented based on priority. This can lead to a pyramid style process to allocating investments rather than using a diversified or portfolio-driven approach.

## PYRAMID-STYLE ALLOCATION



Investors often follow this process, funding the most important goals first before progressing onto the next level. The investor's goals are completely fragmented and the investment selection is a byproduct of each individual goal. A major

---

problem with this approach is that it may result in inappropriate investment selections when considering an investor's combined or comprehensive goals. An investor's risk tolerance, return objectives, and investment constraints should be determined holistically, and typically include personal factors, as opposed to strictly account specific details.

Investment selections should be made in the context of these properly defined investment objectives. However, the specific investment allocation should be directed by the principles of diversification – capitalizing on how different asset classes work together to achieve all of an investor's goals. This involves understanding the forecasted risk and return characteristics of each investment, and then using this information to combine investments into a portfolio. This portfolio perspective helps minimize unwanted risk because it may not be efficient for select assets or accounts to fulfil one single investment goal.

## Implementing the Portfolio Perspective

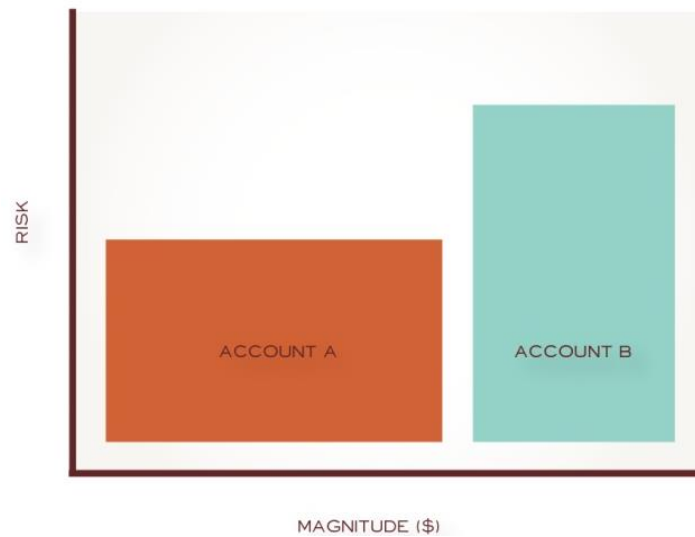
Implementing this portfolio perspective can become more complicated when it is not possible to overhaul an entire investment allocation or when unique assets are part of an investor's mix. Simplistically, many investors have assets that are moveable and others that are immovable. Immovable investments could be illiquid, bound by high surrender charges, subject to significant tax penalties, or an emotional attachment for the owner. They may include the following: annuities or insurance products, bank CDs, hedge funds or private equity, business interest or company stock, or real estate.

The moveable investments do not have these restrictions and can be easily or cost-effectively repositioned. Any investment decisions pertaining to these assets should consider all of the assets that compose the investor's portfolio. This is not always natural for an investor but nevertheless is beneficial. There are two factors pertaining to these immovable assets that should affect the investment selections made for the moveable assets.

- *Magnitude* - The relative size of the immovable assets compared to the movable assets
- *Risk & Return* - The risk and return characteristics of the immovable assets relative to the true investment objectives of the investor

These two factors indicate how dependent the total portfolio is on the immovable assets. This also impacts the degree to which the moveable assets need to respond or account for the unique risk and return introduced by the immovable assets. The following chart helps to illustrate the potential impacts of two different immovable accounts on the allocation of the moveable assets. The impact is determined by the area of each account in the following chart. In this case notice that while Account A is a lower risk account, it is of larger magnitude so its impact is the same as Account B, which is of smaller magnitude but holds more risk. Both of these factors should be analyzed for all of an investor's immovable assets to ensure that the moveable assets respond accordingly. The goal is to maintain the necessary risk level on across all assets based on the investor's risk tolerance.

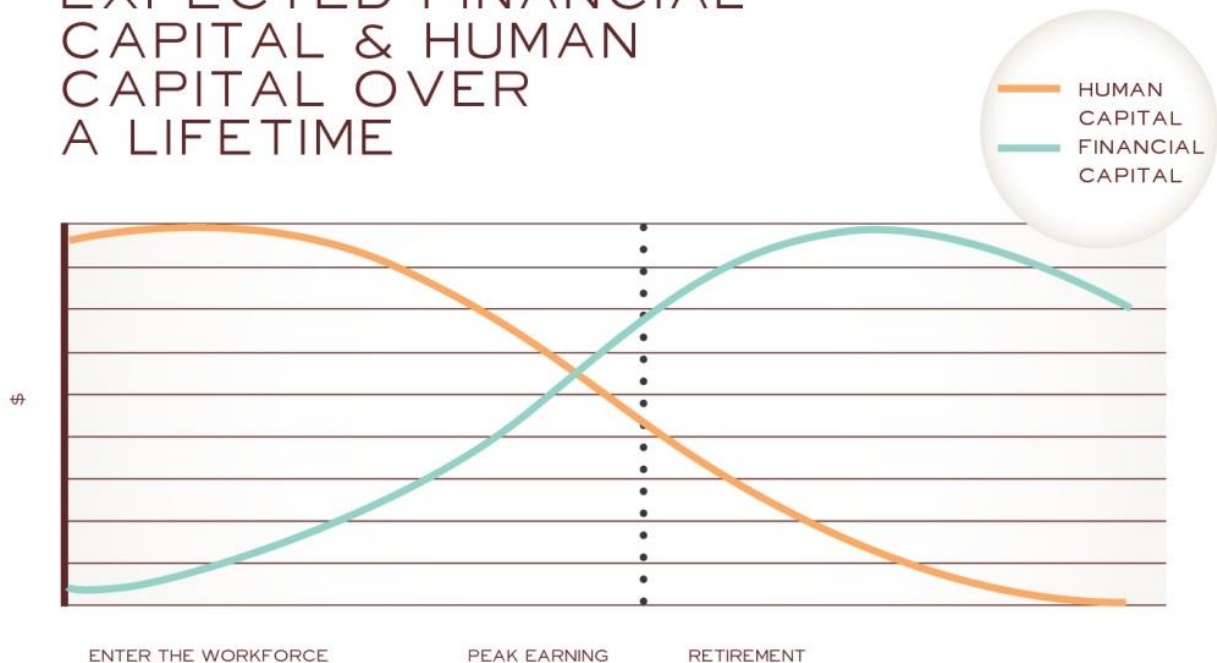
## COMBINED IMPACT OF MAGNITUDE & RISK



### What is Human Capital?

An investor's total capital includes both human and financial capital. Financial capital contains all of the investable assets, cash reserves, real estate, and retirement accounts. These are the assets that most investors think of when discussing capital and net worth, but investment decisions shouldn't be made based on financial capital alone. Human capital represents an investor's future earnings potential and capacity, mainly derived from future employment earnings. The relationship between human and financial capital shifts over time as an investor approaches retirement. The value of human capital is typically highest on the first day of employment. Traditionally, an investor's financial capital rises and human capital declines as time progresses. Human capital may or may not decline to zero at retirement. If an investor receives a pension or social security, human capital will always be a component of total capital.

## EXPECTED FINANCIAL CAPITAL & HUMAN CAPITAL OVER A LIFETIME



---

Human capital is an asset, yet many investors fail to appropriately factor this into their investment objectives or portfolio allocation. There are several factors related to human capital that should be assessed by every investor, although this process is often not intuitive or common and may not be easily quantified using a traditional financial questionnaire. These considerations can have critical impacts on an investor's financial situation as human capital is often a significant asset. Specifically, an investor's human capital should impact the asset allocation of financial capital. This helps to ensure that the total capital is aligned according to the investor's goals, risk and objectives.

## **Magnitude or Size of Human Capital**

For those that are just starting their career, human capital will be massive and most likely the majority of their total capital. This provides a significant buffer for these investors and allows for the financial capital to tolerate increased risk. The financial capital is such a small portion of total capital that the investor can afford to lose this with little impact to their financial goals. Conversely, an investor nearing retirement may have very little human capital. This implies that the majority of their capital is financial. Therefore, it is critically important that the financial capital is not too aggressive as they depend on this to achieve their financial goals.

## **Nature of Human Capital**

The nature and volatility of human capital can be very different from one investor to another. This often depends on if human capital is derived from employment income or is a result of pension and social security income. Employment income can affect human capital very differently based on the volatility of that income. For instance, a business owner's income will be very erratic and risky which makes the human capital equity-like. This can be compared to a tenured professor's compensation which is consistent and predictable resulting in bond-like human capital. If human capital will be similar to an equity or higher risk asset, the financial capital may require a more conservative allocation. Conversely, it may be prudent to increase the financial capital's risk in situation where human capital functions like a bond. Ultimately, these decisions should be made based on the total capital relative to an investor's risk tolerance and investment goals.

These same rules apply when human capital is composed primarily of pension or social security income. However, it may be easier to picture this type of human capital as an asset in the context of an investment portfolio. This is because it is possible to derive an estimated asset value for the pension and social security income based on the value of the monthly payments. Given a specific monthly payment and an investor's estimated life expectancy, which indicates how long the monthly payments will last, an asset value can be calculated. The resulting asset is very low risk, bond-like in nature and should influence the investment allocation of the investor's financial capital. In this situation, the financial capital may be able to withstand a higher risk level than that originally specified by the investor's true or total risk tolerance.

## **Correlation between Human Capital & Financial Capital**

The magnitude and volatility of human capital are necessary components in understanding how human and financial capital should work together, but the final piece of the puzzle is to determine the level of dependence or interconnectivity of human and financial capital. Are these components influenced by the same factors or do they move independently of each other? It is prudent for investors to minimize the correlation between their human and financial capital to minimize their portfolio risk. This can be accomplished by intentionally selecting assets within the financial capital that are disjointed from factors influencing the human capital. One of the most common examples driving home the importance of this concept is when investors buy company stock using their financial capital. Inherently, the investor's human capital is tied directly to their employer and now their financial capital is also dependent on their employer. In the case of Enron, Lehman Brothers, and many others, the bankruptcies destroyed the human and financial capital for many of the employees. From a risk management perspective, investors should protect themselves by diversifying away this risk.

---

## Conclusion

Regardless of the returns of any specific investment, investment risk needs to be managed comprehensively in building appropriate portfolios. Traditional risk tolerance evaluation methods often overlook important aspects of an investor's circumstances and fail to holistically define risk. Specifically, investment objectives should be understood for the portfolio as a whole, so that the advantages of diversification can be applied to all of the investor's assets. Similarly, the investor's immovable assets should factor into the risk level of the entire portfolio. Finally, the investor's human capital, or lifetime earnings potential, is often a disregarded portion of the portfolio and should be considered when determining the overall risk profile of the investable assets.

Written by: Steve Osterink, Jr. CFA®, CFP®, AIF®

Investing involves risk, including loss of principal. No investment strategy, such as asset allocation or diversification, can guarantee a profit or protect against loss in periods of declining values. Please note that rebalancing investments may cause investors to incur transaction costs and, when rebalancing a non-qualified account, taxable events will be created that may increase their tax liability. Rebalancing a portfolio cannot assure a profit or protect against a loss in any given market environment. Information presented is for educational purposes only and does not intend to make an offer or solicitation for the sale or purchase of any securities. Investments involve risk and, unless otherwise stated, are not guaranteed. Be sure to first consult with a qualified financial advisor and/or tax professional before implementing any strategy discussed herein.

Steve Osterink, Jr. offers Investment advisory services through Advisory Alpha, LLC an SEC-registered investment advisor an SEC-registered investment advisor. CFA® is a trademark owned by the CFA Institute. Certified Financial Planner Board of Standards Inc. owns the certification marks CFP®, CERTIFIED FINANCIAL PLANNER™ and federally registered CFP (with flame design) in the U.S., which it awards to individuals who successfully complete CFP board's initial and ongoing certification requirements.

The information presented in this report is believed to be accurate, but our firm cannot guarantee the accuracy of the data. Under no circumstances shall our firm or any of its affiliates, offices, employees, or agents be responsible for damages, errors, omissions, inaccuracies, or misuses of this report by you or your agents. All charts were prepared by staff of Advisory Alpha, LLC and may contain data provided by third parties. All charts are for illustration only.