The "Postmodern" Investment Pyramid

The true finish is the work of time, and the use to which a thing is put. The elements are still polishing the pyramids. David Thoreau

Thomas Schneeweis

Abstract

I have been told that 'never try to teach a pig how to sing, it is a waste of your time and it annoys the pig. But I have also been told that people have an innate interest in pyramids and one can use that desire to tell them a story that is not a waste of your time and does not annoy the reader. Pyramids have been used for centuries as a means to describe the past, the present and the future. Here is my version

Read on.

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Introduction

When one starts an article with reference to 'Figures in Finance' most readers quickly put down the page and pick up the remote. **DON'T**. This article is not about those figures (numbers, equations …). This article is about the other kind of Figures; that is, lines, circles, graphs and most importantly, "The Pyramid' may be used to help the average individual understand the importance of investing. In addition, without trying to bury the lead, this article will also introduce another concept, Calorie Beta in Investments. Prior to the 1960's an individual who desired to check on the risk of a stock (and it's potential return) looked to a stock rating similar to today's bond rating. In the 1960's academics came up with the concept of an Equity 'Beta' or the sensitivity of any stock to a benchmark stock (e.g., S&P 500). This was a boon to the investment advisory business since no average individual had an idea what a 'beta' was. This this article we also introduce the concept of a Calorie beta. Every average individual knows what calories are and how many each day are health and how many are too much or how many to help you lose weight (e.g. low return). So why not in today's health conscious investor friendly world, change the 'Equity Beta" to a "Calorie Beta". As a final section, we use both the Pyramid and the Calorie in every day financial planning in which one's anticipated annual dollar or calorie needs may be filled by one's various sources of income(calories) including investment income.

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Lastly, when introducing a new concept, it is often worthwhile in interject a bid of whimsy and well as seriousness into the presentation. The reader is forewarned that the following contains both. It is your tasked to determine what is what.

The Importance of Figures in Finance

Every day I am astonished as to the degree that the investment industry increasingly uses a wide variety of visual presentations (digital and print) to convince investors of the benefits of the industries' products or processes. In this world of unlimited financial data and of unlimited forms of presentation, an increasing amount of time is being spent on determining how best to create visual data that best impacts the investor's cognitive processes in the investment decision making including perception, memory, thinking, reasoning, etc. Sometimes this process falls within what is widely described as behavioral finance (Hirshleifer, 2014). For many academics and investment practitioners, behavioral finance, with its emphasis on individual decision making (both form and fluff), has overtaken traditional finance with its emphasis on data driven empirics. To put it bluntly we may soon come to a point when investors have no other option or desire but to turn their chairs around to see screens of visual data representing a wide range of geometrical presentations which help them in their investment choices. The only book in the room may be what they can upload on their IPad or whatever passes as the current mode of transmission.

Despite the proclaimed benefits of the dominance of the graphical interface, I believe we will be less for it. In this, "Once There Were Books World", I fear that we will be held captive by the purveyors of visual data with little understanding of its real use or of its controlled evolution

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over time. Of even greater import is how little impact we have in determining how that data is collected and how that data is presented visually for investors' use in decision-making. Many investors respond however, that the new visual summaries of more complex mathematical systems make the decision process faster, easier to implement and, more importantly, easier to understand. How easily we are won over by flash rather than substance. Of course, this point is well known in "great" or at least good literature. In Norman Juster's Newbery award winning "The Dot and the Line: A Romance in Lower Mathematics" the story details a straight line who is hopelessly in love with a dot. The dot, finding the line to be unexciting and structured, looks for affection in a less controlled squiggle. The line wants the dot's attention so badly that it creates shapes so complex that he has to label his sides and angles to keep organized. Fortunately, for the 'line' in Juster's story, "function trumps form" and the dot realizes that she has made a mistake and that the squiggle is nothing more than "form over function".

In short, the line's ability to create meaningful structural presentations has its benefits. This is no more so true than in the use of pyramids in financial presentations. The use of the word "Pyramid" in finance has had a checkered past. On the negative side, the word pyramid has been used in a variety of financial enterprises where a few individuals get rich at the top off of the payments of many folks at the bottom (see Ponzi scheme, Madoff…).[1] So often has the pyramid been used to entice individuals into certain types of investment that various

[1] A Ponzi scheme or pyramid scheme is an investment fraud that involves the payment of purported returns to existing investors from funds contributed by new investors. Ponzi scheme organizers often solicit new investors by promising to invest funds in opportunities claimed to generate high returns with little or no risk. With little or no legitimate earnings, Ponzi schemes require a constant flow of money from new investors to continue. Ponzi schemes inevitably collapse, most often when it becomes difficult to recruit new investors or when a large number of investors ask for their funds to be returned.

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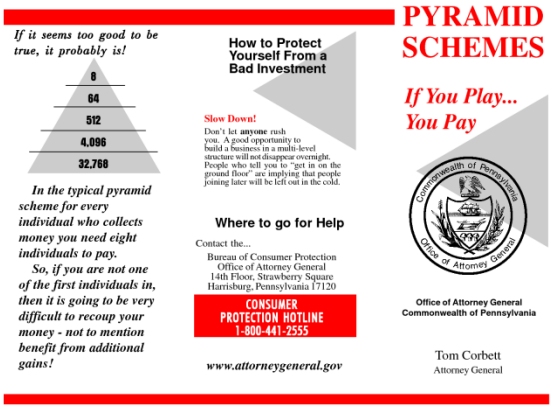
government bodies have as core activity to directly investigate various 'pyramid ventures' and to warn investors against similar "Pyramid or Ponzi schemes".[2] Yet these financial ventures continue despite governmental warnings and there reference to "Pyramids'**.** In the first six months of 2014, at least **37** Ponzi schemes were uncovered, with a total of more than $1 billion in potential losses. This equated to the discovery of a Ponzi scheme (1) more than once per week, (2) every 4.9 days, or (3) every 118 hours.[3] Perhaps Pyramids in finance have a vital function other than creating an impression of an unwarrented transfer of income.

Exhibit 1: Sample Governmental Pyramid Scheme Warnings



In fact, it is not the purpose of this article to discuss the mathematics of Ponzi schemes or the use of the Pyramid structure in discussing them but to offer an 'alternative view' as to the use of the concept of 'Pyramids in Finance'. Pyramids are found in a wide variety of marketing, management and product descriptions. The most famous perhaps is the well-known "Food

[2] "SEC is Beefing Up its Enforcement Over Web-Savvy Pyramid Schemers," Wall Street Journal (December 4, 2014). Page C1. See Ponzitracker. Ponzi Schemes Remain Prevalent in 2014: Jordan D. Maglich Thursday, August 21, 2014.

[3] See Ponzitracker. Ponzi Schemes Remain Prevalent in 2014: Jordan D. Maglich Thursday, August 21, 2014.

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Pyramid" whereby individuals are given a simplified presentation as to what foods to eat and how often to eat them. In recent years, however, it has been shown that the 'historical' food pyramid failed to properly represent the today's "alternative" understanding of modern nutrition. Emboldened by those who would turn the "Food Pyramid" on its side (and in fact this is what the new nutritionists have done)[4], it is the purpose of this article to propose our own "Postmodern Investment Pyramid' whereby individuals can determine their own investment calorie count. The hope is that this alternative "Postmodern Investment Pyramid" may offer readers a greater appreciation for an alternative use of the word "Pyramid" in finance and investment as well as to encourage different views of the use financial images in financial, investment and other life altering decision making for all Americans.

Figures in Finance

When speaking of figures in finance, no one would be criticized for expecting a host of numbers or mathematical notations to flood the page. At this point it may be a good idea to ask the question why, that is, why do people use figures to present ideas which have their origin in a more complex mathematical world? One reason, rarely discussed, is simply that many ideas are tough, I mean really tough to convey to others. Figures are used in the is hope that somehow people's own 'on shelf' computer (e.g., their brains) are able to see things in figures that for some reason does not come though when they see written words on pages (the Where is Waldo Phenomena? Where one is asked to locate an individual or item among a myriad of other forms). I am sure that many of us have commented to ourselves the oft mentioned "this

[4] See Willet (2005).

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hurts my head" when reading financial analyses similar to that presented in the following excerpt from an article on Payoff Patterns in Structured Equity (Henderson and Pearson, 2007)

> For the structured products based on individual equities, the vast majority of the payoff profiles are concave, and many of them are qualitatively similar to the payoff profiles of covered calls. These products offer relatively large interest income in exchange. For example, only one of the structured products in our sample includes a digital payoff for truncated exposure to stock price increases. The underlying common stock is usually a growth stock, and often a technology stock. In contrast, when the underlying asset is a diversified stock index, the majority of the payoff profiles are convex. The index-linked notes generally offer very low coupons, often lower than the dividend yield on the portfolio underlying the reference index, and offer limited downside risk together with participation in the upside performance of the index. …… Given these findings, it seems unlikely that investor purchases of SEPs can be explained by any plausible normative model of the behavior of rational investors. That is, it seems implausible that purchases of these products are due to (rational) hedging or rational speculation. Thus, our interpretation of the patterns we document is that these patterns in the SEP payoffs are likely to provide information about the cognitive or behavioral" biases of investors in these products. Notably, the payoff patterns suggest that the cognitive or behavioral biases differ depending upon the underlying asset. These biases cause investors predominantly to demand concave payoff profiles when the underlying asset is a common stock, and convex payoff profiles when the underlying is an index.

If one continues into the above article, there are real figures (numbers) presented which reflect the aforementioned convex/concave return patterns. The article concludes that in the context of the structure equity derivatives analyzed and the cognitive and or behavioral bias of investors it is implausible that the pricing patterns of the financial products analyzed are due to rational hedging or speculation. Since most of us are not looking for implausible answers for anything, without the promise of an assured answer, for any traditional investor it is out the door to their friendly investor representative for more understandable plausible alternatives for our investment options.

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Academics have long been aware of the 'quantitative hurdles" involved in explaining asset pricing and asset allocation to the average investor. Given concerns over the mathematical depth of the average investor, many academics have illustrated their results using certain shapes and sizes that reflect their numerical figures so as to better convey the 'conceptual' nature of numbers to the waiting public. (As a sidebar, understand that these various shaped based presentations are so simple that if you use them as a sole basis for decisions, the weirdo in the backroom who created them and has access to all the real complex data will use that knowledge to beat the heck out of you – but there has to be some return for sitting by yourself getting your Ph.D. in all of that esoteric mathematical finance stuff so give the guy/girl a break).

In fact, geometric figures in finance such as lines, circles and the like have been an inherent part of financial and investment education. One need but remember such classically known financial concepts as 1) the Capital Market **Line,** 2) the Security Market **Line,** 3) the Efficient Frontier (OK a little bent **Line**). We have even gone beyond such simple 'Lines' (or for the sophisticated reader who wishes to feel special about them themselves and may feel I am shooting a little low in the presentation one can substitute 'vector' representations for lines at their wish) to more evolved concepts such as curvilinear presentations involved in investments such as option pricing as well as economic concepts such as production functions as well as the oft used circle for presentations such as cross holdings in portfolio or the actual asset class investments in asset allocation programs.

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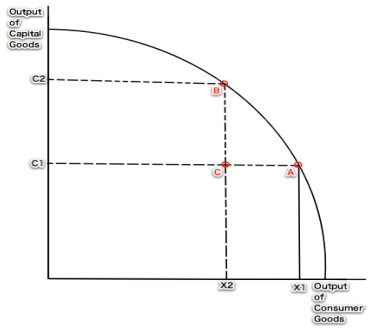
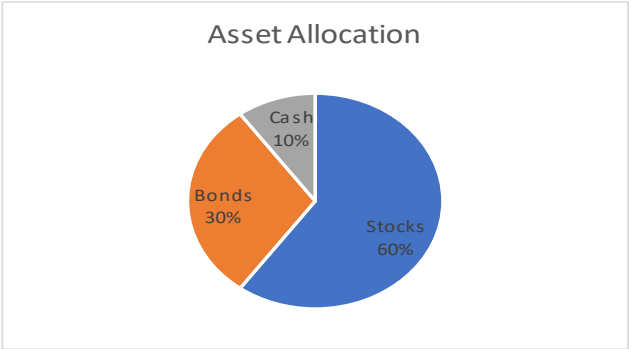
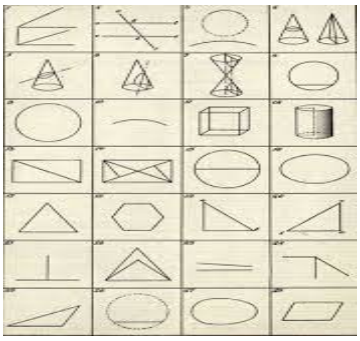
Exhibit 2: Non Linear - Graphical Representations in Finance and Economics





There is certainly more to say about this topic. There are entire books on data presentation as well as modern software with a myriad of alternatives to illustrate alternative means of financial presentation (see Excel). The following are but a few examples of what is available from even the most basic of sources.

Exhibit 3: Sample Design Figures In Excel



In the above Exhibit 3, there are multitudes of shapes of all sizes and contortions. However, there is only one pyramid. (Can you find it – This is the Where is Waldo Part of our Discussion)

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Why? Given the negative stereotype of “Pyramid Schemes” in finance it would not be surprising that finance in general and investment in particular would like to used other geometrical forms to describe the pros and cons of various investment enterprises. However, this of course was not always the case. While data presentation is an art and has taken many forms, throughout history, the pyramid in general, and in certain cases in the specific, has been directly linked to money and finance. Now many monetary historians may criticize me at this point to emphasize that there is little if any information to support the following. But for all readers, remember despite their protestations, they were never there. **So in short, how do they know**. So while not the focus of this article, I will suggest that many the early Egyptian Pyramids were really large banks and the smaller ones in front just associated AMTs. (for the non-historian the automated money transfer terminal). Throughout the ages, the attempts by the many prior Egyptian invaders as well as current European archeologists to find their way into these stone monoliths were merely attempts to find their way into these banks. This was the true meaning of the concept “the wealth of the Nile” or the secret treasures of the Pyramids.

Exhibit 4: Early Egyptian Banks with ATMs

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So important was the pyramid in finance that it found its way onto the America Dollar bill. On the version of the seal that was eventually approved, the Eye of Providence is positioned above an unfinished pyramid of thirteen steps (symbolizing the original States. The symbolism is explained by the motto that appears above the Eye: Annuit Coeptis, meaning "He [God] approves (or has approved) [our] undertakings".

Exhibit 5: The Pyramid in American Finance

More to the point, with the pyramid on the everyday dollar, the pyramid could easily find its way into other more common uses such as the financial planning arena, where the pyramid has been used as an educational tool to describe a series of processes by which financial professionals can help protect or manage investors' assets. The following are but a few examples of how financial practitioners have used the 'Pryamodial Pyramid Form' to describe their financial services and product structures.

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Exhibit 6: Sample of the Pyramid in Financial Planning

Over the years since the use of the Pyramid on the U.S. dollar and on the front pages of various marketing presentations, investment professionals have used this accepted "Pyramid" form of financial wealth presentation to help explain the broader concepts surrounding the investment process. Moreover, unlike the simple line, it can accommodate a broader three-dimensional view of the investment process. Unlike the circle it has a definite start and stop and has an apex we can aspire to (often similarly associate with Maslow's Hierarchy of needs).[5] It is interesting to note that despite academics attempts to use straight lines (Capital Market Lines, Security Market lines) or curved lines (Efficient Frontiers) to describe the investment process, the more complex 'Investment Pyramid' remains a primary focus among investment professionals. As intimated earlier, perhaps there is something in our cognitive map that is simply attracted to the Pyramid form, its broad base, its top reaching for the sun. Similar to the Dot in the Norman Juster book, perhaps it has just taken time for investors to stop searching for beta, multi-factor, conditional eigenvalue based squiggles and return to the more solid pyramid forms as a basis for their investment decision process.

[5] See Maslow (1954). His description of personal self –actualization was centered on a Pyramid in which the base was Psysiological Needs, and then rose through Safety Needs, Belonging Needs, Esteem to the Apex of Self-Actualization.

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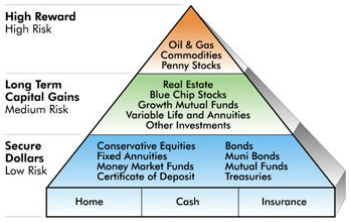
Exhibit 7: Sample Investment Pyramid Forms or (Schemes)



Food Pyramid Versus the Investment Pyramid

So wherein lays the problem or the potential for the growth of the Investment pyramid in investment planning in general and the alternative investment industry in particular. Well simply put, things change. Even the original Egyptian banks were more in the form of a basic stone block. It did not take long for early bank architects to see the benefit of shaving off the sides (reduce cost) and give the bank owners a nice perch at the top better to survey their holdings (or incoming armies) rather than the original square blocks or half circles.

Exhibit 8: Early Egyptian Bank (60 cubits by 100 cubits)

Note Deposit Entry at Top

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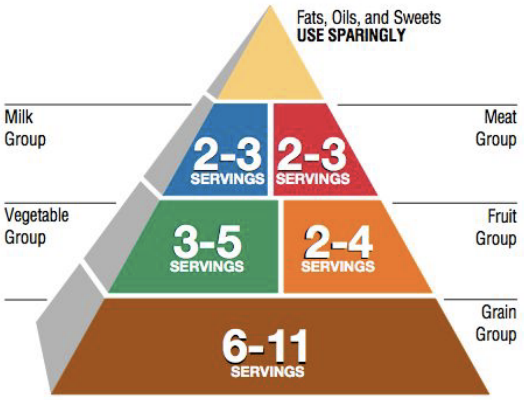
Change is inherent in the human condition. Unfortunately change for many individuals, and those with a stated interest in the current investment paradigm, often refuse to accept changes in concepts or the forms they take (see Thomas Kuhn's Structure of the Scientific Revolutions (1962)) despite the factual evidence in favor of the change. The evolution of the change in the historical food pyramid is but one example. In 1992 the USDA created the original Food Guide Pyramid. The original "Food Pyramid" unfortunately was based on less than solid scientific ground. It was promoted by the government agency responsible for supporting American agriculture rather the government agency in charge of nutrition and health. In brief, the 'food politics' involved in the creation of the Food pyramid determined in part is form and function.

Exhibit 9: Sample Original Food Pyramids



By 2005, its known failures lead to an attempted revision which some maintain fell victim to political infighting which even included use of the marketing firm used to promote the original

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food pyramid.[6] Change had to come from the outside. For those interested, the detailed description of the new "Food Pyramid" is detailed in the book "Eat, Drink and Be Healthy" (Willet, 2005). Its primary adjustment is basically to turn the original "Food Pyramid' on its side such that each food category is not built on top of each other but is considered alongside (that is simultaneously) with the other food groups when considering a diversified and complete nutritious diet.

[6] See Willet (2005).

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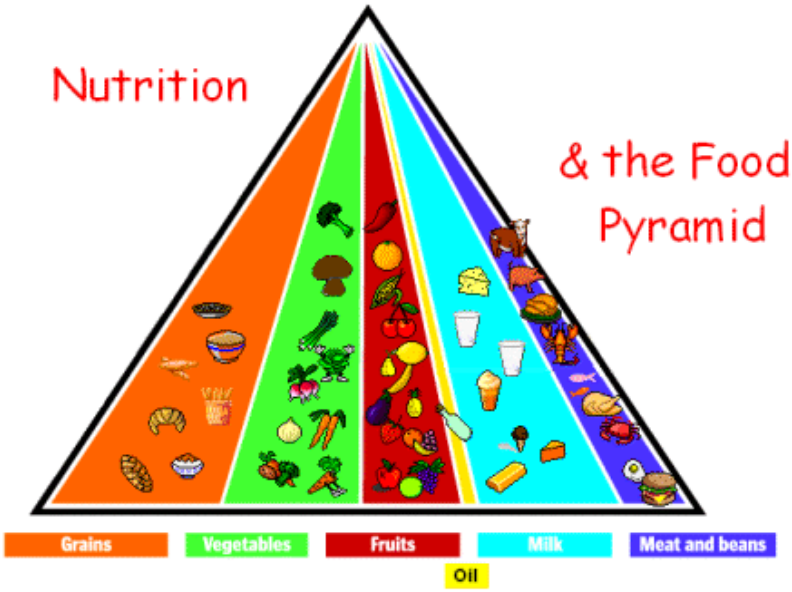
Exhibit 10: The New Food Pyramid



In addition, Willet's book emphasizes that each food group needs to be further analyzed as to the benefits and costs of each food within that category. For example, while all breads might be made of grains not all grains are equal (some have higher HDL and sugar and salt context). In addition, each individual has their own unique "nutritional profile" based on their personal attributes (height, age etc.) such that acceptable calorie consumption may differ among different individuals.

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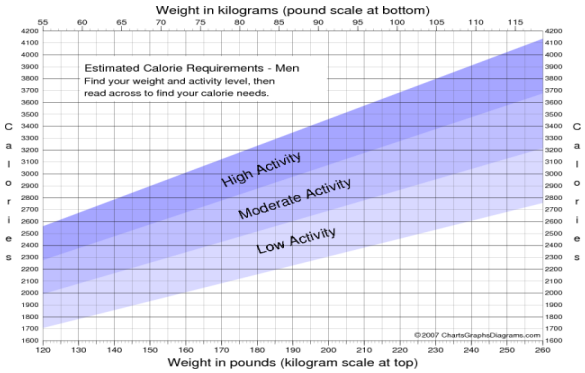
Exhibit 11



If Willet's "New Food Pyramid" approach, that is turning the classical "Food Pyramid" on its side can work to suggest a more diversified and beneficial approach to nutrition than the one considered in the Traditional Food Pyramid, why not the Investment world; that is simply turn the 'Investment pyramid on its side' instead. In today's world of Postmodern Investment[7] one requires a Postmodern Investment Pyramid which differs fundamentally from its traditional form.

It may have taken time to get here, but this article requires 5,000 words (we all live in a world of constrained optimization and journal requirements). If one looked at the original traditional investment pyramid, one might have a majority (up to 50%) of one's investment in savings, bank accounts, pennies under the mattress (e.g., basic grains and foodstuffs in the basic food

[7] Crowder et. al., Postmodern Investment.

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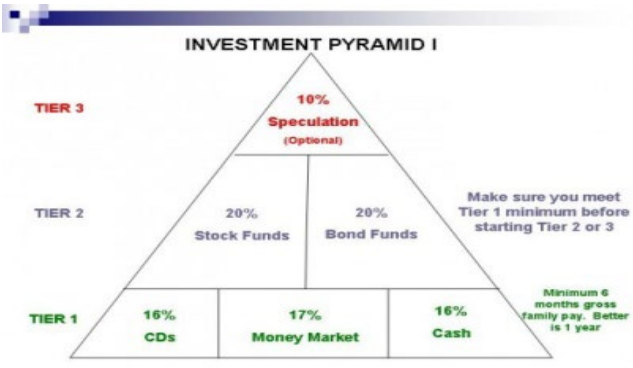
pyramid). Only after fulfilling those needs should the investor try to scale the sides of the pyramid and look to more fixed income and yield based investments (bonds, annuities) perhaps in the range of an additional 30%. After one had the appropriate servings of bread and potatoes as well as fixed income assets one may wish even to add a little meat and fish (U.S. and foreign equity – a final 20%). If one had not completely filled one's investment basket, one could have added a little desert (some speculative investment in individual stocks like Apple or Facebook) but for most investors desert is not allowed and investment in this top part of the financial pyramid is a big zero. Some more advanced investment nutritionists might adjust for age or occupation (similar to life cycle or targeted investment programs) but the traditional financial pyramid led investors to a series of the sequential decisions from secure low yield financial instruments to higher risk higher yielding assets.

Exhibit 12: The Traditional Investment Pyramid



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Again, if something as widely used as the food pyramid was based on faulty science and required a major rethink to reestablish its place in the nutritional program, it may also make sense similarly to take a look at the well-known 'Traditional Investment Pyramid'. To summarize, the traditional investment pyramid advocates that an investor start with a major portion of his investment portfolio with cash investments. Only after meeting Tier 1 requirements is the investor permitted to move into Tier 2 investments and then only in rare cases should he/she consider investment in 'optional 'Tier 3 speculative investments (e.g., alternative investments).

The basis for the traditional investment pyramid structure was concern over the underlying risk of the investor's portfolio. Advisors were concerned over the potential loss of investor capital, however, over emphasis into cash-based assets also resulted in an even greater failure; that is, the failure to make an adequate rate of return. Most investors kept a large portion of their capital in low yielding bank and guaranteed funds. If one had a more conspiratorial view one might suggest that the original investment Pyramids emphasis on Bank deposits was driven in part on the impact of that financial industry on the design process. Similarly, the focus on bonds and stocks as secondary to bank deposits but superior to other investment forms may have to some degree being influences by the relative size of that industry in the investment paradigm.

If one turned the Traditional Investment Pyramid on its side what would we see? While this article is only exploratory and we have not fleshed out the entire new 'Postmodern Pyramid Design" one can see an investment smorgasbord that is similar to the simultaneous food court

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in the New Food Pyramid. The New Postmodern Financial Pyramid would have investments across all Asset Classes even at the most basic investment level. In contrast to the Traditional Investment Pyramid's answer to the investment question of Bank Deposits first and nothing in anything else until later, the Postmodern Investment Pyramid would instead invest even at the most basic level in multiple asset classes as a means of promoting investor financial health or wealth. In the current Traditional Investment Pyramid, the concentration of beginning wealth in bank or low yield guaranteed products simply means that there will never be a chance to move to higher levels of wealth unless one is blessed with a rich uncle or aunt, a winning lottery ticket or something similar. One simply never earns enough in the basic grain\bank Tier 1 to make it to the second level.

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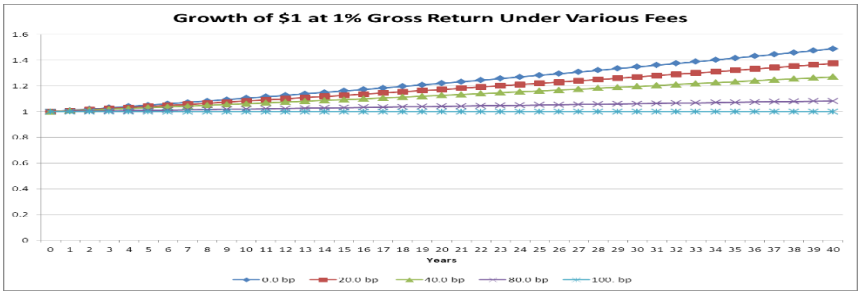
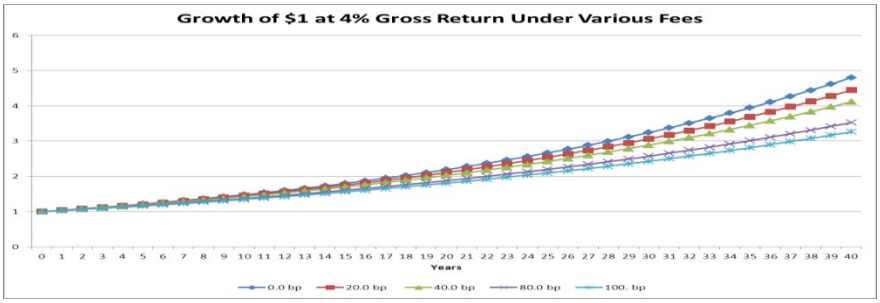
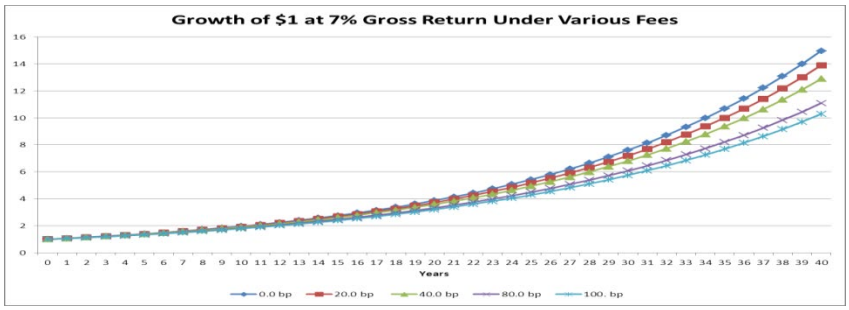
Exhibit 13: Growth in Wealth For Alternative Levels of Return and Fees







It is obvious from the above graphs, that bank or investment fees charged at the most basic levels impact results. In short, what we own matters. At 1% (Tier 1 of the Traditional Investment Pyramid) there is almost no growth in assets even under the lowest fee assumptions. In brief, the traditional investment pyramid is relatively constrained and the expected return may be limited. More importantly, the investor at the most basic Tier 1 level has almost no means to realized growth in value and to become familiar with other asset classes other than through discrete jumps in investment

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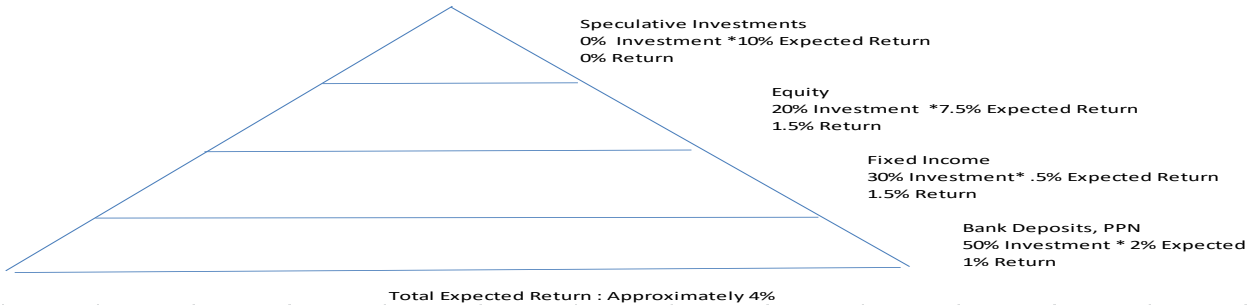
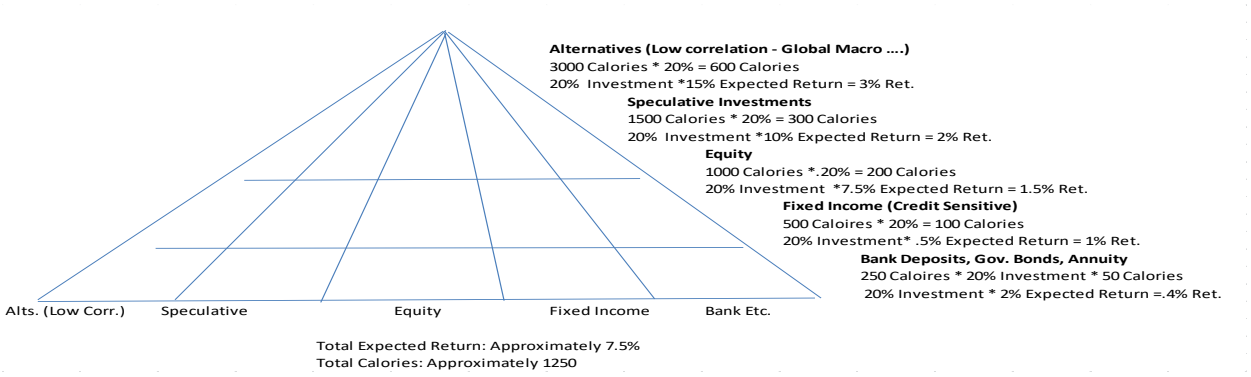
Exhibit 14: Traditional Investment Portfolio



In contrast, in the New Postmodern Financial Pyramid (Exhibit 15), investment across multiple asset classes provides even for relatively basic Tier 1 investors, expected returns which offer the potential of increasing value. As one managed the pyramid, one has access to less liquid and perhaps less available assets within any asset class, but the decision is what assets to hold within an asset class rather than the prescription against investment in an asset class. If one wishes lower return/risk one only needs to invest in lower calorie investment.

Exhibit 15: The Post Modern Investment Pyramid Higher Return/Risk



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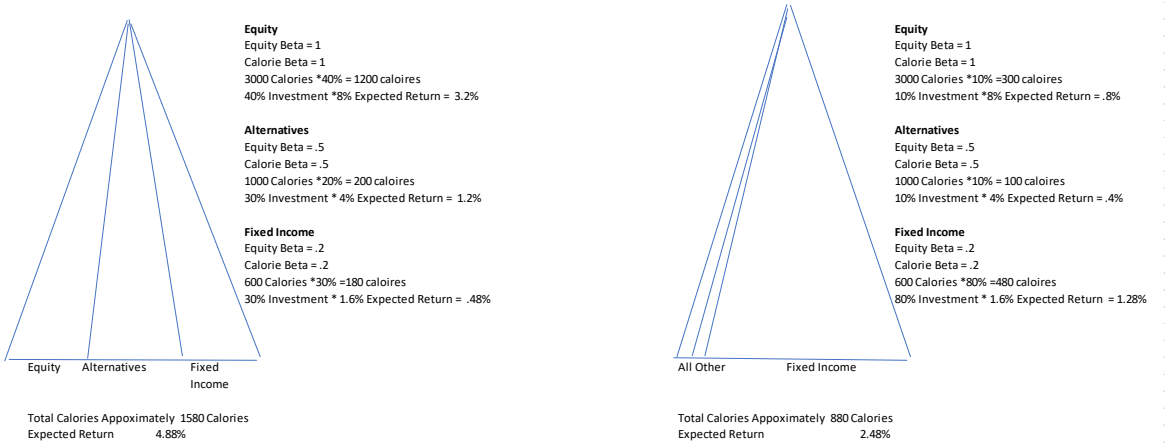
Calorie Beta/Equity Beta

Some investment academics and practitioners may not be comfortable with this new design which in its basic form calls for a simultaneous non-sequential approach to investment decision across multiple assets in contrast to a simple sequential approach to investment allocation. Considerable effort has gone into creating the existing Traditional Investment Pyramid 'marketing design', but if change is good in one area such as nutritional health, one should feel comfortable in stealing their ideas if they can be used efficiently in other areas. Consider this just an efficient market in ideas.

Exhibit 16: The Post Modern Investment Pyramid Higher and Lower Return/Risk



However, one may ask if the new Postmodern Investment Pyramid provides a clean understanding of the bedrock of modern finance; that is the tradeoff between risk and return. Again, the nutritional standards industry may offer us a solution. In nutrition, three thousand

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calories may be considered a normal daily goal. This may be considered the benchmark and the idea may be transferred to a calorie based investment index. In the New Food Pyramid, quantifiable nutrition standards include estimates of desired calories as well as the cost and benefit of various food classes in reaching a desired calorie level. Similarly, in the Postmodern Financial Pyramid, each investment will have its expected return as well as an expected risk. Since calories provide a measure or estimate of the energy available from various foods that our body burns food (though a complicated gut wrenching process and I mean cut wrenching process) to meet our body based production goals, one would believe that the calorie concept could easily be related to calorie estimates for individual assets (types of food) to measure their impact on expected return (energy) in the investment world. Just as we need a certain level of calories in a nutritional sense we need a certain level of calories (return in an investment sense) in a financial sense. More importantly, just as the quality of the food and type of food impacts the risk that the food calories may not be a good estimate of true nutritional benefit, similarly one may find that the quality of the investment impacts the risk that the calorie provided by an investment may not have a "risk" that the investment may not provide a sufficient investment return. There is, of course, more to this than simple calorie counting, but that is for the next section.

Calorie Counting and Risk and Return in the Postmodern Investment Pyramid

So perhaps this is the time to rethink the whole risk and return presentation in the investment pyramid in terms of the concept of calories (return for investment) and quality of calories (risk). The traditional food pyramid was founded on the basis that one required a certain number of

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calories each day and that those calories were available in less costly and somewhat nutritious grains etc. Unfortunately, just as all calories were found not to be equal, not all grains were (some are more beneficial in other aspects of nutrition than others – some have more sugar, harder to digest). Similarly, even in the original investment pyramid, after the 2008 financial crisis we have come to realize that not all banks' investments (see Grains in the food pyramid) are equal. More importantly, the banks and other low yielding sources of guaranteed products were found not necessarily to be safe (similar to high salt, high sugar bread) such that Tier 1 financial products exist that had high risk (e.g., default) with very little return (lower calories than expected).

Thus, while the original food pyramid focused primarily basic proper food consumption, the new food pyramid requires an understanding both of the calorie intact and how those foods interact (e.g., a greater range of risk concerns). For example, the new food pyramid is multi-dimensional such that one requires one to weight a food by 1) Glycemic Index (high) and 2) its Glycemic load (low good), 3) Protein, 4) Calcium and magnesium, 5) Sources of Folic Acid. What we are suggesting in this section is for investors to think of their Postmodern Investment Pyramid in the same conceptual terms as their New Food Pyramid. Each investor should have a calorie goal based on their age, wealth, and overall current financial health. For example, younger investors with few financial resources may be required to focus on a 1500 a day calorie goal. Note this is not and cannot be reached by investment in traditional investment pyramid Tier 1 bank and guaranteed deposits. They simply do not provide enough calories (return) to give you the energy (growth in current savings) to move to Tier 2. One requires a more

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diversified mix of asset classes (similar to a mix of food classes) some of which have a higher calorie count (see alternatives) which may provide the energy to move asset growth to your financial goal. Note this is not a static concept. As individuals' health changes over time, one may wish go for a higher calorie count (more risky alternatives and/or high risk assets within an asset class). As in Exhibit 11 for the New Food Paradigm, in the Postmodern Investment Pyramid some individuals can accept a higher calorie count because they simply can afford it (they are young, they have better bodies (e.g., financially fit)). Moreover, one can expand the risk characteristics of each asset class such that one can better compare the impact of various investments on the overall risk index of one's portfolio.

One may say this cannot work. It is simply too simple. Well as in all things there is a tradeoff between risk and return and in limiting ourselves to the 'Pyramid' form. While not the focus of this article, other more complex geometrical forms may allow more detailed examples of more complex asset allocation patterns, but for the moment we stay with what is good for the U.S. dollar is good for us. In addition, the new Modern Investment Pyramid is not that simple and provides a fairly adequate view of the benefits of multi-asset investment at the most basic level... First, one must estimate the calorie (return) in each investment asset (food) class). Historically in finance this return was fundamentally related to estimated risk (standard deviation or beta). However, just as in the nutrition area, there are investments that can be seen as having high calories (high relative return) or low calories (low relative return) depending on a range of economic conditions (high investment calorie standard deviation) and a high or low investment calorie beta depending on what else is in the portfolio. In the nutrition

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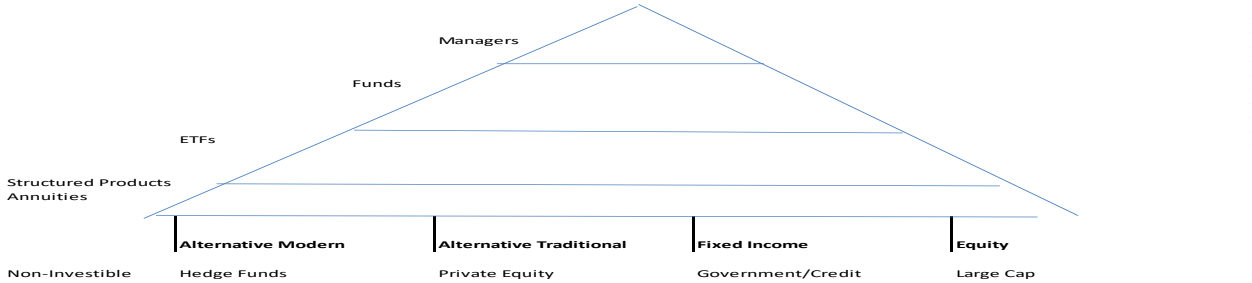
area, the differential value of various foods in the same Tier could be broken up into Good and Bad HDL, LDL and other food characteristics. Similarly, in the investment area, assets must be viewed across a range of risk characteristics. Certain bonds may have a low return (low yield or calories) and have low risk (low duration) but have low liquidity or transparency. In short, just as in the food area where one should consider various foods impact on ones total body, in the investment period, various financial assets need to looked at across a wider range of risk characteristics; that is, they need their own HDL\LDL classifications so that individuals can balance various characteristics of assets within their own portfolio or asset class.

Exhibit 17: The Alternative Post Modern Investment Risk Index Scale



	Score				
	Manager Based	Fund Based	ETFs	Sample Product (Fixed Income)	Sum of Scores
Transparency,	3	2	1	3	
Operational Risks	3	2	2	3	
Ability to Redeem	2	3	1	2	
Market Risks	1	2	3	1	
Return (Calories)	3	2	1	1	

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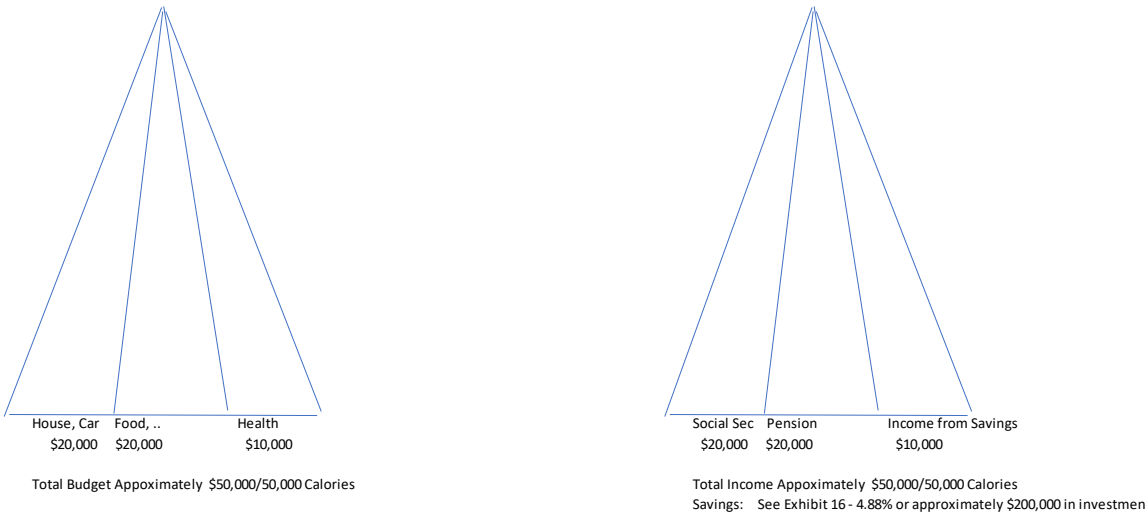
The Full Pyramid: Financial Planning

In short as in the nutrition area one is looking for a more proper nutrition index, in which the characteristics of a food (e.g., high calories) may in fact have real benefits to the overall investment health of the individual given its other characteristics (e.g., balance blood sugar in nutrition and increase overall asset diversification in investments). Similarly, moving to a multi-risk based Modern Investment Pyramid will also allow us to compare assets on a more common level. In finance we have often criticized looking at the investment portfolio in isolation and not considering one's other assets (job, health, age). Adding these characteristics onto pyramid and presenting it in more three-dimensional form will provide the basic multi-asset form with the mix of 'Personality' or stage of life assets within any individual asset class a such as health considerations, personal growth, retirement planning.

Exhibit 18: Financial Planning – The Third Side of the Three Sided Pyramid



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While we cannot present a three dimensional pyramid on a two dimensional space, the concept is there; that is, the Three Sided Pyramid: Nutritional, Investment, and Financial Planning. There is certainly more to be explored in this area and one need not limit the discussion of investment risk and return to a single Pyramid form. Perhaps the Dot could find a way to date both the line and the squiggle. Perhaps investors could come likewise to learn to love both modern financial terms (beta, duration) and modern forms of Pyramid based investment. One thing for sure, the old investment pyramid like the food pyramid needs a makeover.

Here is to good financial health and to reword the end of Norman Juster's the Dot and the Line "to the Vector belongs the spoils".

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Thomas Schneeweis: Books

Thomas Schneeweis was the Michael and Cheryl Philipp Professor of Finance and Founding Director of the Center for International Securities and Derivatives Markets at the Isenberg School of Management, University of Massachusetts-Amherst. He was the Founding Editor of The Journal of Alternative Investment and Managing Editor for over fifteen years. He is Co-Founder of the Chartered Alternative Investment Analyst Association (CAIA: www.caia.org) and the Chartered Alternative Investment Analyst Foundation. He is also the Co-Founder of the Institute for Global Asset and Risk Management (INGARM: www.ingarm.org). He has published more than 100 articles in the area of investment management and is the co-author/editor of six books in the area of investment management (e.g.; New Science of Asset Allocation (John Wiley, 2010) and Postmodern Investment (John Wiley, 2012)). He was awarded with the CAIA Award for Research in the Area of Alternative Investments (2012).

He has more than forty years of experience in asset management including Director of Research at an approximately $5 billion hedge fund managed account platform. He has been President of a managed futures fund as well as an equity long short hedge fund and President of an approximately $1 billion commodity based investment firm. He is currently Managing Partner at Yes Wealth Management, LLC (www.yeswealth.com) a wealth management firm and President of Quantitative Investment Technologies (www.quantinvesttech.com) an investment management firm specializing in asset allocation and investment strategy/fund based asset replication programs. He is also head of TRS Associates which is a private consulting firm and which serves as the source for TRS Comments and research. **See www.trschneeweis@trs--assoc.com for a source of his monthly personal business comments, articles and other publications.**

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