

# QUALITATIVE ANALYSIS OF INSURANCE PRODUCTS: THE “ENGLISH” PART

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## ABSTRACT

Life insurance products are complex bundles of financial assets that are most difficult to evaluate. Most are described with complex terms and many contain option-like characteristics. Further, many consumers often purchase them because of an effective salesperson had them focus on a single characteristic. Modern linguists have identified the common errors that evaluators of such complex bundles too often make. The purpose of this paper is to identify those fallacies and to provide examples by identifying features, provisions, and definitions that are contained in many of these financial products.

## INTRODUCTION

Most finance professors will admit that they feel uncomfortable in conversations where financial products are discussed with lay people. It is this anxiety that motivates our study. Certain single features in financial tools, perhaps because they can be described with one-liners, tend to dominate these conversations: “You do not pay taxes with a Roth-IRA.” This focus on a single feature is often misstated, misleading and, misunderstood. In the case of the Roth-IRA example, the depiction of the only the single feature distorts the message and renders it false and misleading.

The products offered by financial intermediaries have also become complex. For example, most of the most heavily marketed life and annuity products offered by insurance companies have been developed within the last fifteen years, and each of these products includes contract choices and specialized features that permit these products to be customized to meet customer--specific needs. As such, individuals and households are called to evaluate very, very sophisticated financial engineering products, for which there is little financial theory/counseling support.

The purpose of our study is to investigate insurance products, financial assets with qualitative features that are not easily captured numerically. They also carry option-like features that invalidate the continuity-differentiability requirements of classical microeconomic choice. [The logical implications and extensions of this study are explored in a companion work, (Tarrazo and Murray, 2004), which uses the methodology of fuzzy sets to develop practical, qualitative models similar to those of Smith (1974), and Tarrazo (1997; 1999).] We intend that this study to be only the first part of the required analysis: an examination of the words used to describe and define financial assets. After describing the issues we will then suggest a plan of action for the second part of this analysis which will lead to the comparison of these assets one to another.

## WORDS AND FALLACIES: ENSNARES FOR UNAWARE BIRDS

To develop qualitative, natural language-based models to analyze complex financial products requires: 1) enhancing the precision with which the words-based analysis is carried out; 2) selecting a methodology capable of discriminating and ranking products in terms of their relevant characteristics; and 3) developing qualitative models to be tried in practical endeavors. In this section, we address the first of those steps. [The selection of the words-based methodology and the development of specific models will be developed in a companion study. ]

The errors —i.e., fallacies— that we make when using oral or written language are well known. What interests us is how those errors can creep into our analysis of financial products and cripple it. This is a brief description of the fallacies we will focus this study on:

1. **Fallacy of accent.** The accent is intentionally placed in a feature that is irrelevant or not important. One example of this error is when a person buys a car exclusively because of safety, in which case the feature becomes what we will refer to as “the single feature trap.”
2. **Ambiguity, division, reification.** This error happens when the abstract is mixed with the specific. One case of reification occurs, for example, when people are treated as things: “How old is your mother? Eighty-five? —That means she won’t need a house in about six years.
3. **Fallacy of composition.** This error has to do with making sense of a product when we only have incomplete information, as it is often the case. In finance, the ignorant and his money quickly part.
4. **Unhelpful questions; also known as fallacy of interrogation:** “Could you pay \$200 a month? Then, this car loan is good for you —and smile— because you can take this car home right now.” Obviously, nothing is said about the length, principal, fees, or nominal interest in the loan, which may hide exorbitant effective rates.
5. **Unnecessary detail** that has little to do with the decision —also known as a **red herring**.
6. **Misleading statements/questions.** This category also includes false analogies: “If buying equity is good for Warren Buffet, it should be good enough for you.”
7. **Fallacy of equivocation,** also known as illicit redefinition, which consists in changing premises and definitions on the fly. Changing the rules of the game while the game is being played resembles this fallacy: “The company retains the right to change the terms of this contract ...”
8. **The black & white fallacy.** This error consists in making artificial divisions, setting up false boundaries, or in seeing distinctions where there are none. An aggressive sales technique could be to set the customer up for a black & white fallacy, and combine it further with another fallacy for good measure.
9. **Appeal to ignorance.** This fallacy consists of taking advantage of lack of knowledge on the part of the customer (“Buy this type of annuities because nobody can really assure they will be bad investments.”)
10. **Fallacy of complex question.** Questions can be so complex that a) any answer can do, or b) any answer is compromising.
11. **Non sequitur** —also known as **irrelevant conclusion.** One statement, or the conclusion, simply does not follow from what was previously said. “Obviously, you see that mutual fund A is better than B —it looks A is the right one for you.” Well, no —both of them may be terrible funds.

12. **Hasty and/or sweeping generalizations:** “Equity funds have proven to be good investments. Therefore, you should buy this product because it is an equity investment.”

It is easy to see that any unsuspecting individual could be overwhelmed by the cumulative effect of fallacies. As we will attempt to show the effect of these fallacies is usually devastating.

### **INSURANCE PRODUCTS MYSTERIES**

But even with honest communication, and even if we make an honest effort at learning about insurance products, we come to the doors of seemingly unassailable mysteries. Here is a short list of such mysteries:

1. How cash values are calculated and how to ascertain future cash values.
2. How annuity payments are calculated and what is the role of the interest rate variable used.
3. How to ascertain the quality of sub accounts in insurance investments.
4. How to construct comparative returns/risk data on insurance products versus alternative investments.