



Legend Advisory Corporation

The Asset Allocation Neural Network

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Legend Advisory Corporation is a leader in the use of sophisticated artificial intelligence technology in the investment management process. Specifically, Legend Advisory Corporation uses a proprietary neural network to provide investment recommendations for its mutual fund asset allocation programs. This neural network, known as the Asset Allocation Neural Network (AANN), has been developed and trained and is utilized in an effort to reduce risk and enhance portfolio returns within given risk tolerances.

An apt description of an artificial neural network is a computerized model that classifies patterns or makes forecasts or decisions based on past experience. Such systems use mathematical algorithms to simulate the processes of the human brain, a biological neural network. The artificial neural network differs from the human brain in that it is able to process huge volumes of data at very fast speeds. Another important distinction is that artificial neural networks are not affected by emotion, bias, distractions, fatigue, or the twin emotions of greed and fear.

AANN's inner workings are extremely complex, but can be summarized through an analogy. Just as a human being learns to think and understand by observing the patterns in the world around them, AANN reviews thousands of pieces of historical data, identifies patterns and causal relationships, and interprets those patterns and relationships as they relate to various asset classes.

Artificial neural networks similar to AANN are rapidly replacing traditional rules-based computer modeling or expert systems. Rules-based systems establish a series of rules and compare the data input to these rules to draw conclusions. Such systems are extremely limited for a number of reasons. In order to be effective, rules for each and every scenario must be developed. The more complex the system being modeled, the more difficult it is to include all of the rules needed. Rules-based systems are inflexible and cannot adapt to changing input and interrelationships without defining new rules.

Financial modeling and forecasting is much more complicated. In the financial field, modeling and forecasting typically involve large numbers of variables that can interact with one another in an endless variety of ways, and therefore, create an infinite number of possible outcomes. Neural networks may excel at making predictions when there is an uncertain outcome. Such networks are currently being applied in a variety of financial and non-financial applications. For instance, many major banks employ neural networks to identify credit card fraud and approve credit card and mortgage applications. Various medical institutions are also using specially designed networks in clinical diagnostics. The results produced by these methods far exceed the results produced by humans doing similar work.

At Legend Advisory Corporation, AANN is fed a variety of market and economic data including various stock market indices, global interest rates, earnings and a myriad of other economic and technical data. This data is used to train and test the network to provide predictions of the relative strength of a variety of asset classes representing the major domestic and foreign debt and equity asset classes.

AANN by its very nature is an adaptive system that adjusts to an evolving global market place. Unlike traditional modeling, which is more static, AANN will discard assumptions which have proven invalid over time. It also continuously retests its hypotheses regarding the relationships between various economic variables in an effort to determine their impact on the world's financial markets.

A description of the actual neural network process follows. The process begins by normalizing the data inputs that are fed into the network. These normalized data are then fed into the network. The network performs a series of mathematical calculations that emulate the function of biological neurons to determine the interdependence of the various input variables and the relationship between different inputs and outputs. Finally, AANN predicts a weighting for the various asset classes.

The output produced by AANN predicts the relative strength of the following asset classes:

- Large capitalization domestic stocks
- Small capitalization domestic stocks
- High quality domestic debt
- High yield domestic debt
- International equity
- International debt
- Cash

The weightings produced by the network are fed into a proprietary quantitative optimization program that provides percentage weightings by asset class for each of Legend Advisory Corporation's managed portfolios. The optimization software establishes numerical outputs for different asset class sectors balancing risk with returns as is appropriate for each portfolio's investment objective. Actual results dating back to 1978 are used in this process.

The Steps to Investment Success

1. Recommendation Process

At Legend Advisory Corporation's weekly Investment Committee meetings, relevant data derived from fundamental and technical analysis of the markets are carefully reviewed. The Investment Committee discusses both the asset allocation recommendations offered by the neural network and the recommendations made by Legend Advisory's analysts. The Investment Committee then evaluates current world economic, political and capital market situations and develops a recommendation as to how client assets should be allocated. This recommendation is the basis upon which the specific portfolio allocations are made.

2. Mutual Fund Selection

Legend Advisory Corporation carefully researches the mutual fund families and variable annuity products included in its investment advisory services because studies have shown that proper allocation of funds among assets is one of the most important factors in investment success.

- Step 1 The fund family is reviewed to assess the quality and type of funds available.
 - Step 2 Individual mutual funds are evaluated to ensure that their performance compares favorably to that of their peers.
 - Step 3 The relative strengths of different asset classes are reviewed. Funds are then matched up with the selected asset class.
 - Step 4 Finally, a detailed study of the mutual fund's management is completed to determine whether the security selection process is sound, consistent and adheres to a strict discipline.
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3. Ongoing Investment Management

Once the portfolios have been allocated, they are regularly monitored and adjusted as necessary. Legend Advisory Corporation continuously evaluates each individual mutual fund's holdings and portfolio allocations to ensure that the mutual fund continues to meet the program's recommendations.

Legend Advisory Corporation's investment processes and systems are designed to provide investors with a series of mutual fund asset allocation programs with objectives ranging from conservative to aggressive growth. Legend Advisory Corporation uses sophisticated self-adapting technology to meet client investment objectives while seeking to reduce the risk inherent in equity investing. Through the years, Legend Advisory has provided tens of thousands of investors with the peace of mind that comes from knowing their investments are diversified and are being monitored on an ongoing basis, ensuring that their portfolio continues to reflect their needs. As a leader in the use of neural networks in the investment management process, Legend Advisory Corporation is committed to providing the best possible programs for its clients.

Before investing in a mutual fund or variable annuity, consider its investment objectives, risks, charges and expenses carefully. The prospectus, which contains this and other information about the mutual fund or variable annuity, can be obtained by contacting Legend Equities Corporation. Please read the prospectus carefully before you invest or send money.

*Advisory services offered through Legend Advisory Corporation, a registered investment adviser:
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