Developments In Business Simulation & Experiential Learning, Volume 24, 1997 FINANCIAL ENGINEERING OF GLOBAL INVESTMENTS A SIMULATION

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ABSTRACT

The investment opportunities of today encompass a wide range of tools available to not only corporations and institutions, but also to individual investors. The purpose of this simulation is to give the participants the knowledge and skills necessary to wisely invest in today's global markets: and, to teach them how to protect their investments via financial engineering. The Investment Simulation is specifically designed to create a realistic investing experience, enabling each individual to design a portfolio meeting their individual investment goals.

BACKGROUND

The simulation starts by having participants evaluate their investment needs and define goals they would like to achieve in their investment activities. They will access their security and risk positions and begin developing an investment strategy suitable to them. Basic skills and jargon will be reviewed. Then participants will begin building their portfolios by selecting single stocks and be guided through the addition of additional investments during the entire course of the seminar.

Several factors have necessitated investors and the business world to use Global Financial Engineering to protect themselves against undue risks, and to enable them to maximize their capacities: advances in technology, global sourcing, telecommunications, competition, trade alliances and increasing deregulation are examples of a few. The development of new financial instruments which are specifically designed for operating in the global market place necessitates business and investors to have a complete understanding of what these instruments are, and

how they can best be used to maximize their benefits.

METHOD

At the start of the simulation participants are given a "Portfolio Objectives and Strategy Report". This is to clarify in each investor's mind exactly what their objectives are, placing an emphasis on areas like long term growth, aggressive income or risk reduction. Participants access their original goals and progress throughout the seminar, and are able to make adjustments based upon their increased understanding.

Portfolio building will begin with participants receiving 500 units of stock (available in blocks of 100), then 500 units of bonds, and carry on through indexes, futures and options. At each of these stages, detailed explanations of each of the instruments' uses are given so participants have a comfortable understanding of each instruments use. Each day, or week (depending upon the length of the seminar) participants are required to go "Market to Market", thus accessing the performance of their portfolio on a continuous basis.

Global Financial Engineering cannot be completely without a realized competent understanding of the foreign exchange markets and foreign exchange rate risks, therefore concurrent with our examination of the various securities markets, we will embark upon a detailed examination of the foreign exchange markets and how they work. The foreign exchange market is the largest of all markets today, the average daily turnover being 1 .2 trillion dollars. Any global investor, be it an individual or an institution.

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cannot ignore its effects on their investments. For this reason we will introduce our participants to the intricacies of all areas of foreign exchange trading.

The foreign exchange market section of our simulation will include several topics, beginning with the Spot Foreign Exchange, Bid and Offer Spread, Direct versus Indirect Quotations, and a work exercise. After each participant has a competent understanding of the spot market, we will introduce them to the Forward Foreign Exchange Market, including: premiums and discounts, forward outrights, forward odd date and odd amounts, forward/forwards and swaps; and, of course, a forward trading simulation.

The next section of our foreign exchange studies will include the various derivative instruments. Derivative instruments include the futures and options markets. We will discuss not only the mechanics of these instruments, but their uses in both financial arid securities trading. The intelligent use of derivative instruments is essential in both protection of assets and protection of asset value. Our topics will include: an introduction of foreign exchange derivatives, swaps, the mechanics of the foreign exchange futures market, foreign exchange forward swaps, and a futures trading simulation.

After thoroughly examining the foreign exchange futures market, we will go on to the foreign exchange options market. As always, the implications and consequences of using this market, and strategies involved will be thoroughly discussed. The topics presented will be: an introduction to foreign exchange options markets, listed options contracts and a listed options trading simulation. Then we will proceed to over-the-counter foreign exchange options, their contracts, their uses and strategies for their uses.

At the culmination of our seminar investors, both institutional and individual, will be fully versed on the intricacies of both the securities markets and the foreign exchange markets, therefore being able to intelligently invest and protect their investment via the use of Global Financial Engineering.

RESULTS

At the final "Portfolio Objective and Strategy Report", the instructors and the participants are clearly able to see how each participant has used skills gained throughout this seminar to enhance their investment goals; and, how these goals may have changed due to a deeper understanding of the financial and securities markets. Likewise. participants are able to ascertain how the simulations have enabled them to clarify and redefine their investment objectives and attain their goals via the use of Global Financial Engineering. Each simulation participant will have designed a portfolio that reflects their individual needs; whether they be personal or corporate; and, whether the participant's needs include simple monetary growth or the more sophisticated protection of assets and risk management.

The Financial Engineering of Global Investments Simulation is specifically designed so the instructor can provide a realistic investing environment for the simulation participants. This simulation has been performed countless times in both classroom and workshop settings for several years. For participants with little or no investing experience, the simulation provides practical investment skills in a realistic format, thus enabling them to enter the financial world with knowledgeable confidence. For those participants with some previous experience, the simulation enhances their skills and broadens their financial expertise via the interactive use of all of the financial markets and tools available in today's market.