

Games People Play

With apologies to the Beatles....

*What would you do if I bought like a goon,
would you give me a put option for free?
Lend me your eyes,
and I'll lose loads in size,
and you'll launch a bailout for me!
Gonna lend with a little help from my friends,
then I'll spend with a little help from my friends,
yes, I'll buy with a little help from my friends... the taxpayers.*

Essays On Game Theory
John F. Nash, Jr.
Edward Elgar Publishing, Ltd.
Cheltenham, UK
87 pp.

Does Financial Deregulation Work?
Bruce Coggins
Edward Elgar Publishing, Ltd.
Cheltenham, UK
213 pp.

Game Theory, first expostulated by John von Neumann and Oskar Morgenstern as early as 1928, is one of the most powerful descriptive models of human behavior. Traders intuitively understand some of its more common manifestations, like the “zero-sum” game in which gains and losses negate each other, and the “negative-sum” game, in which the perverse consequence of each player trying to maximize his welfare minimizes the welfare of the group as a whole; this describes a market panic in which everyone is trying to sell first. The stock market can – but does not have to -- describe a “positive-sum” game in which all participants can win by virtue of owning a constant slice of an expanding pie.

John F. Nash, Jr., won a share, along with John Harsanyi and Richard Selten, of the 1995 Nobel Prize in Economics for his work in game theory, principally the development of what has become known as Nash equilibrium, an elegantly simple concept which states that a player should choose a strategy that is the best reply to his opponent’s strategy. This behavior is seen often in marketing and political campaigns; players are forced to respond to what others are doing despite what their own optimal or desired strategy might be at the moment.

Games can be divided into cooperative and non-cooperative classes, the former being distinguished by the establishment, before play begins, of irrevocable rules. Cooperative games have finite solutions; both players in a tennis match know exactly what needs to be done in order to win, and a winner emerges eventually. Non-cooperative games are characterized by rules which change during the course of the game; in fact, manipulation of the rules is one of the primary objectives of the players: consider the interplay between Congress and various lobbies over the structure of the tax code.

Non-cooperative games often are played out on a macroeconomic scale, often with disastrous consequences for society as a whole. The issues of financial regulation swirl through the global economy like the fractal from hell; no matter the size of the firm, or the existing regulatory environment, or the state of the economy, financial institutions always manage to extend themselves and their balance sheets too far for the next crisis. And why not? As alluded to in the opening parody, large financial institutions have come to rely upon free put options, such as deposit insurance, (itself designed to forestall a negative-sum game, the “run on the bank”) upon direct government bailouts, such as the Resolution Trust Corporation’s cleanup of the 1980s

savings and loan debacle, or upon multilateral quasi-government bailouts, such as the recent International Monetary Fund rescues in Mexico, Korea, Indonesia, etc.

The concerns expressed by Bruce Coggins in his critique of financial deregulation, while grating to this free market economist, are legitimate. The imperatives of technology are leading us into a global financial system advantageous to the very largest and best-capitalized firms who can amortize the capital expenditures required over a bigger and more diversified customer base. Simultaneously, regulatory barriers, some of which, like the Glass-Steagall Act separating commercial and investment banking, date back to the Great Depression, are crumbling under the demands of the marketplace.

Coggins points out that financial institutions generate significant economic externalities since all business depends upon a healthy system of money and credit. The economic history of the United States through to the Great Depression was marked by a number of banking panics, all of which had macroeconomic consequences. One only need to look to the experience of Japan in the 1990s to realize how devastating a moribund banking system can be.

Multilevel Non-Level Playing Fields

Free market economists, this writer included, look askance at all manner of government intervention in markets; nothing beats the threat of bankruptcy to make managers in any industry adhere to sound risk management practices. Removal of this threat through the various forms of free put options extended to the financial services industry naturally leads to more aggressive business practices.

Games are played at all levels in the financial system. Any junior lending officer, or broker, or salesman who wishes to advance within an organization is going to be measured by his "production." This internal career game is reinforced by the external Nash equilibrium in a non-cooperative game: the business you generate is the business that someone else did not. The organization plays a game against its competitors, with its customers, with governments, and with investors. At each step of the way, the Nash equilibrium of the best reply to the opponent's strategy is sought.

All of this is to be encouraged, of course. To paraphrase Adam Smith, it is not from the benevolence of the banker we get our corner ATM, but from his own enlightened self-interest. However, economies are dynamic and chaotic systems whose future path cannot be forecast. As a result, we all face decisions that "seemed like a good idea at the time." The occasional miscreant aside, no one in a bank ever sets out to make a bad investment or one that will become a bad investment once conditions change any more than you, dear reader, ever execute a trade designed to lose money. To the contrary: It is because an investment looks attractive it is made by a large number of institutions on a system-wide basis, and over-capacity results.

This apparent self-condemnation to boom-and-bust behavior is one more manifestation of the negative-sum game. But is this a failure of free markets requiring government intervention, as Coggins suggests? No, no, a thousand times no. Once regulatory constraints are imposed, they create political rent, the preservation of which becomes a primary objective for players in the non-cooperative game. The long-running debate over the repeal of Glass-Steagall has not been resolved since commercial and investment bankers each try to rewrite the law to their advantage and each manage to defeat the other's initiatives. Politicians who receive largesse from both sides are only too happy to perpetuate the debate. Should we re-impose interest rate ceilings on bank deposits, as Coggins suggests? Hardly: Interest rate ceilings led to the inability of savings and loans to attract deposits in the 1970s and 1980s, which in turn led to the disastrous increase in S&L deposit insurance limits. Another one of Coggins' suggestions, providing deposit insurance to individuals, not institutions, would encourage imprudent investing on the part of individuals.

As painful as the conclusion must be to those on the political left, there is no way to eliminate bad outcomes. Games have winners and losers. The best that government can do is impose one aspect of the cooperative game, an irrevocable rule set, onto the game: Be it known to one and all that there will be no bailouts, no free put options, and no mandatory insurance. Winners and losers will be defined in the economic, and not in the political, arena.

Dying With The Most Toys

Non-cooperative games can produce some interesting results in financial markets. Witness the changes in the U.S. equity market engendered by the voluntary disintermediation of the individual investor. Once upon a time, the stock market was seen as having two classes of player, the pious and heroic "little guy," and the rapacious market professional. Since the professional enjoyed the advantages of better information, lower trading costs, and greater access to capital, he had a decisive advantage in the game. Once individual investors changed the rules of the game by banding together and hiring fund managers, a large chunk of the professional trading class became the employee of, instead of the opponent of, the individual. Fund managers now compete against each other; only professional athletes are measured on a more intensively statistical basis in our society.

The phenomenal bull market in equities extant at the mid-April 1998 time of this writing has created a perverse variation of the positive sum game. A fund manager who is not fully invested risks "falling behind" his benchmark and his peers; therefore, managers have been forced into paying ever-higher multiples – and assuming ever-greater risks – at the behest of their investors. In the old days, the very sort now managing a mutual fund would have been launching frequent bear raids into the market to punish those who believe that infinite wealth can be created effortlessly.

Have investors entered into a cooperative game wherein one of the rules is that one must remain fully invested at all times, till death do us all part? Can everyone always be right by always being on the same side of a market? While current behavior may support this notion, the very nature of our chaotic and dynamic economy suggests otherwise. Some event or set of conditions, unknowable in advance, will appear at some point to ruin the party.

Market history indicates that this even is likely to be a wobble within the financial system, just as the short-lived selloff in October 1997 was the result of a banking crisis in Asia. As we enter into a period of rapidly changing institutional structure in the financial system, we should all be alert for the consequences of games. They're not always for children, and they're not always fun.