Rational Choice

We define strategic play as individuals making rational choices motivated by self interest when their goals conflict with each other. This definition implies that strategic play is based on rational choice. These next two chapters analyze rational choice. Loosely speaking we shall argue that individuals are rational if they behave as expected utility maximizers when confronted with prospects that involve uncertain outcomes. An implication of expected utility theory is that individuals understand the laws defining probability distributions, and can solve optimization problems. Chapter 3 takes up the latter topic within a dynamic context, while Chapter 4 analyzes rational behavior under uncertainty.

Many of the applications are related to business entities. For example Chapter 3 includes examples on internally financed investment, prioritizing investment projects, determining the optimal mix of suppliers, managing inventory and scheduling orders. In Chapter 4 we show how firms maximizing their expected wealth would evaluate sources of new information and conduct job search.

The chapters also include applications in human resource management. The first examples in Chapter 3 focus on the intertemporal aspects of managing wealth, and other lifecycle decisions, such as investment in education, interruptions in workforce participation to give birth and nurture offspring, and planning for retirement. In Chapter 4 we explain why it might be beneficial to insure your house to reduce your exposure to natural disasters, yet simultaneously increase your exposure to the business cycle by placing some of your wealth in the stock market. Another application pursued in Chapter 4 concerns the tastes for entrepreneurship: what kind of person is more likely to invest in projects that have a high probability of failure and a small probability of spectacular success.

Our rationale for mixing professional challenges of the workplace with domestic issues is fourfold. Sometimes the two overlap as work spills over into the home. The ability to rationally solve personal wealth and lifecycle choice problems is a useful life skill. Understanding the human lifecycle also helps in retail marketing and in selling consumer services, because market demand almost invariably culminates at the individual point of purchase. Finally this approach demonstrates the logic of individual choice carries over to investment decisions made by value maximizing firms.