analysis in a way that enables us to understand their achievements. At the same time he reveals the fundamental theoretical problem at the root of their static methods. He does not succeed in solving it, but his essays provide some steps along the right path, that of successively relaxing unrealistic assumptions, introducing hypotheses or axioms that stylize salient aspects of the real world, and exploring their consequences. Along with the other great theorists of his generation, he stands as an inspiration for those who approach the task of developing the science of economics—partly for what he has done, even more for what he tried to do.

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D Microeconomics

Not just for the money: An economic theory of personal motivation. By BRUNO S. FREY. Cheltenham, U.K. and Lyme, N.H.: Elgar; distributed by American International Distribution Corporation, Williston, Vt., 1997. Pp. xii, 156. $70.00. ISBN 1–8598–509–0.
JEL 97–1202

Individuals do not act in expectation of monetary gain alone, nor do they work solely because they are paid. Building upon this essential principle, the author observes that higher monetary compensations as well as regulations often crowd out motivation in important circumstances. For instance, just as a child who volunteers to clean the garden may reduce his volunteer work for other household tasks when his parents give him monetary compensation (as it may signal less appreciation, or appreciation of a different nature, for his work), so a lover may find it offensive to be paid for voluntary services, a blood donor may refuse payment for his donation, or an employee may not feel appreciated in the desired manner, and thus will reduce his performance, when offered monetary compensation by his employer for something he volunteered to do.

Not Just for the Money analyzes the relationships between extrinsic incentives (e.g., monetary compensations) and intrinsic motivations (e.g., morals, civic values), and their implications for economic theory and economic policy. The first part of the book considers plausible crowding effects between the two. A “crowding-out” effect is said to occur when extrinsic incentives displace some or all intrinsic motivations for a given action. A “crowding-in” effect occurs when intrinsic motivations are reinforced by extrinsic incentives. As intrinsic motivations are embedded in preferences as values, morale and the like, changes in these motivations in a particular instance may affect behavior in other instances in which the same values and motivations determine actions. A “spillover effect” therefore derives from changes in the “motivational capital” embedded in preferences.

The second part of the book explores significant applications of the crowding-out and spillover effects. For instance, distrust and displacement of intrinsic motivations is embedded in constitutions, tax laws, and other legal rules when governments are given great supervisory power and the individual is given little room to act upon his own intrinsic motivations. Trust, civic virtues, and voluntary actions may thus be undermined by regulations and by the use of the “stick” for noncompliance, as opposed to the “carrot” for compliance. Environmental morale may be affected negatively if monetary incentives used in some cases hamper individuals’ willingness to take other actions to improve the environment. For instance, compensating a community for accepting an undesired public project, such as an airport or a hazardous waste disposal facility, may induce that and all other communities to ask for compensation in all other cases thereafter.

Frey analyzes volunteer work, crime prevention, regulatory policy, blood donations, and military service under the same premises. He also analyzes how external motivations can crowd out intrinsic motivations for work, pointing to the important role of personal relationships within the firm.

The first two sections, which constitute the core of the book, demonstrate how crowding-out effects and the delicate mixture of incentives of different types can be important. However, crowding-in effects, or even no crowding effects at all (that is, cases where extrinsic and intrinsic incentives simply reinforce each other) seem to occur more often, but are discussed only briefly. In the last part of the work the author considers some implications for economic policy and economic theory.

The volume endeavors to make both a theoretical and an empirical contribution to understanding human behavior. At the theoretical level, however, many readers, especially economists, will feel hungry for an analytical framework. While the underlying thinking is rigorous, there is no formal foundation that allows one to verify the verbal arguments. The analysis is essentially descriptive. An analytical framework can lend precision to theory, uncover inconsistencies, promote intelligibility, and sort out complex interactions. At the empirical level, Frey provides some evidence and mentions much literature in support of these effects.

As intrinsic incentives are embedded in preferences and extrinsic incentives are outside the realm of preferences, the author points to a crucial aspect of the formation of preferences. He is careful and thorough in laying out his arguments, and often challenges the reader, especially the economist, to "admit" the limits of the traditional economic approach to human behavior. The traditional economic approach is, of course, not "ill equipped" to explain the behaviors he discusses, as is repeatedly asserted. Nor do I think the author truly thinks so as, indeed, he contradicts himself when offering an "economic" explanation: "*The resulting Crowding Effect is well compatible with economic reasoning. It can be modeled as . . .*" (p. 121). One also suspects, for instance, that a formulation based upon the insights of Becker and Madrigal (1995) will deliver a good analytical explanation of the different crowding effects discussed in the book.

An important aspect of this work is that although experimental evidence serves as a motivation for his inquiry, Frey attempts to explain real, as opposed to experimental, situations. Many social scientists will appreciate the novel, interdisciplinary effort to understand an important aspect of human behavior: the endogenous relationships between the economic and social environment, on one hand, and individual preferences and motivations on the other.

While the book may generate a healthy degree of skepticism, it will be recognized as a praiseworthy effort and an important source of ideas for researchers and policy makers. The direct, clear, succinct, and lucid style also makes it available to a wide audience of social scientists.

I think this work is best viewed as a glimpse of the promise of theoretical and empirical interdisciplinary inquiry and, most importantly, as an invitation to meet the challenges of the fundamental economic, social, and political forces influencing the formation of preferences. It demonstrates the explanatory power of a broader approach by analyzing a variety of individual and aggregate choices that are crucially affected by the interaction between the economic and non-economic environment and individual preferences. Work driven by real experiences that helps us understand preferences, after all, is bound to contribute significantly to our understanding of economic and social life.

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This volume of edited papers on the level and trend in income and wealth inequality is the result of a working group brought together by the Roundtree Foundation to fill the void left when the Royal Commission on the Distribution of Income and Wealth was abolished in 1979. The fact that inequality of family income started rising just as the Com-