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HARVARD UNIVERSITY

PROJECT ON EFFICIENCY OF DECISION MAKING IN ECONOMIC SYSTEMS

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March 8, 1971

Professor Joshua Lederberg
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Dear Joshua:

In your note of January sixth you asked for some references concerning long-range discounting and a particular discounting for future generations. Oh, a good deal of ink has been spilt on the general question, but it cannot be said there is any definitive statement, not even a good statement, which at least incorporates all alternative viewpoints in a consistent way. You'll get some idea of the field from the book I've written with Mordecai Kurz, Public Investment, The Rate of Return, and Optimal Fiscal Policy. You'll not want to read anything like the entire book, which is basically theoretical. A lot of the issues will be found set forth compactly in the Summary at the beginning of the book. You might also find it worthwhile reading chapter 1, at least as far as page 14. You might also want to look at S. A. Marglin, "The Social Rate of Discount and the Optimal Rate of Investment," Quarterly Journal of Economics 77 (1963): 95-111, and his book, Public Investment Criteria (MIT Press, 1967), pages 47-69; A. K. Sen, "On Optimizing the Rate of Saving," Economic Journal 71 (1961): 479-496; R. C. Lind, "The Social Rate of Discount and the Optimal Rate of Investment: Further Comment," Quarterly Journal of Economics 78 (1964): 336-345; and possibly, J. E. Meade, a book entitled The Growing Economy (Aldine, 1968), chpaters 12 and 13, particularly the latter.

(Unfortunately, Meade's exposition is extremely complex, but in many respects he treats very important matters.)

I don't know quite what you mean by empirical evidence about economic behavior. ~~Due to,~~ We know of course, the amounts saved each year, what ~~this~~ could be taken as an expression of time preference in some indirect way, We believe, on the whole, that savings is relatively insensitive to the current rate of interest, which may prove something; but the matter is not yet definitely settled by any means.

Incidentally, I think it would be a very good idea for you to talk to Bob Lind, in the Department of Engineering-Economics Systems. He's very thoughtful and knows a great deal about matters of this kind.

Perhaps when we are out this summer, we can have some further discussions.

On another matter, the Kennedy School of Government here has a seminar in analytic methods of public policy in which Thomas Schelling and Richard Zeckhauser are perhaps the chief participants. They would very much like to invite you to talk to them at some convenient time during the coming academic year, 1971-2, particularly with regard toward your risk-benefit interests in genetic and other fields. If you find this intriguing, please let me know, and Dick Zeckhauser will get in touch with you.

Sincerely,

Ken

Kenneth J. Arrow
Professor of Economics

KJA:hlw