Munich Lectures 2000 Laudatio for Peter Diamond

James A Mirrlees, Cambridge University, 14 November 2000

Minister, Rector, Professor Sinn, Ladies and Gentlemen, It is my privilege to introduce to you Peter Diamond, this year's CES Distinguished Fellow.

Many years ago, in fact in the summer of 1962, I first visited M.I.T.; but I missed Peter, which was a shame. He was spending the summer at RAND, an American Government research centre, where they studied military strategy, game theory, and all that. He already had a reputation at M.I.T., although he had arrived there only in 1960, to do an economics Ph.D.. That followed a mathematics degree with highest honours at Yale, completed at the early age of 20. Certainly his game-theory interlude, if one could call it that, did not hold him back, though game theory had little part in his publications over the years.

Rumour has it that early in 1963 he asked Bob Solow, one of his supervisors, how he was doing with the two papers he had already written. When Bob told him that he needed another one to complete his thesis, he produced one in a week or so. It would be nice if all doctoral students proceeded with such speed and decisiveness. Few would hope to publish all three papers in top journals. They are crisp, elegant, and a joy to read.

This was Peter's first period, when he worked on economic growth models. His interest was already in optimality, in welfare judgments about the growing economy. His first papers added to the unfortunately large stock of impossibility results in economics. Following Tjalling Koopmans, that fine economist, who had already influencyed him at Yale, he showed decisively and in great generality how it was impossible to establish principles for making welfare judgments that treated all generations equally, and at the same time allowed comparison of any two growth paths.

Peter had great teachers: Koopmans, and his three supervisors, Samuelson, Solow, and Frank Fisher. Following Solow he wrote about technical progress and growth; following Fisher he wrote about aggregation. Most significantly, he took Paul Samuelson's finest paper, with the overlapping-generations model, and used it as the basis for a paper about the National Debt in a growing economy, a paper that is a classic. From general ideas about welfare, he had come closer to studying economic policy. Much of what he has done since has been about economic

Munich Lectures 2000

policy, and in recent years he has immersed himself in details of law and implementation, without ever losing the theoretical core. Indeed theoretical analysis remains central to his work, and powerful analysis it is too, as you will find in the lectures he is about to give in Munich.

The next paper of special note was not directly about economic policy. The subject was the stock market. It was work of great originality, opening up a theory of economies with incomplete markets. All economies have incomplete markets, as compared with the idealized picture of a general economic equilibrium, where everything has demand and supply, and prices allow demands and supplies to be equal. In particular, we lack anything like a full set of insurance markets. The stock market, as Peter modelled it, provides an imperfect and partial substitute. He made the first big step to identifying and characterizing the imperfection; and at the same time demonstrated a whole new set of problems in properly describing the real market system.

This stock market paper has given rise, directly and indirectly, to a great deal of economics. So has his 1971 paper, modestly entitled "A Model of Price Adjustment". I jump ahead to that paper because, like the stock market paper, it represents Peter's long-standing interest in the economics of uncertainty, particularly the effect of uncertainty on the functioning of the market economy. This paper established rigorously, and in a particularly interesting way, the economics of search. In that paper, the notable result is that many independent firms in a market with search may behave like a single monopolist. It is a somewhat misleading result, but it highlights the importance of uncertainty. The idea of equilibrium as the outcome of a process where buyers and sellers search for one another is a fundamental one. Non-economists may be surprised that economists have not always regarded the market economy in that light; but neither they, nor most economists, appreciated how great a difference the search account could make to economic outcomes.

Peter has developed the theory of search equilibria in many papers. They provide a persuasive basis for understanding macro-economics, which is to say unemployment and inflation. It is a subject that rapidly becomes very difficult; and one is amazed how far he has been able to carry it.

Munich Lectures 2000

Uncertainty is not Peter's only field. He has written more in public economics. It has been my great good fortune to share in that work -- not all of it, but we have written many papers together, starting more than thirty years ago, first on optimal taxation, then on externalities, on shadow prices, and on social security. Looking back at them now, I find I rather like them, and I hope Peter does too. Collaboration in economics, which is amazingly common, can be either between complements or between substitutes, to use economic jargon. I have done both, as has Peter. Surprisingly, both kinds of collaboration can be fruitful as well as enjoyable. Certainly Peter and I are not perfect substitutes, but we are closer to that end of the spectrum. I hasten to insist that, as any economist will understand, being a substitute does not imply being just as good. This collaboration has been one of the three best things in my life. I do not know whether great minds think alike, but this is the way to have a great mind to think with.

Peter has done much that there is no time to tell you about. His major work for many years now has been on social security, and he will be talking about that here. No-one does it better. Before I close, I should tell you about his abiding interest in other disciplines related to economics -- for many years, he taught a course on law and economics. He has always been interested in psychology, and has written a paper with Tversky, the psychologist. He has a number of deeply interesting pieces, on social choice and methodology, that are philosophically sophisticated. Even someone who gets up as early in the morning as Peter cannot do everything he would like to do. But he has also, wise man, found time to see the world.

A good friend, and a good judge, once remarked that Peter Diamond's papers were like good poetry. He may also have said something about pearls before swine. Good poetry needs to be read and read again. It is worth it. It changes the way we see the world. It is with delight and pleasure that I introduce one of the finest economists I know, Peter Diamond.

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