

G.S. Maddala Memoir

G.S. Maddala was one of my oldest friends in economics and I am especially honored to give the first Maddala Lecture at Ohio State University. G.S. and I met in September, 1960, when we began graduate studies in Economics at the University of Chicago. We were kindred spirits in some ways: I had come into economics late in my college career as a rather indifferent engineer, he had come by way of statistics, though hardly indifferently. I discovered much later that he had been an outstanding student in India. He received the highest score ever recorded on the M.A. examinations at Bombay, a record that stood for almost 20 years. Incredibly, his own cousin eventually broke his record and went on to become an economist himself. I knew that G.S. came from South India and that he managed to send some money home out of a very meager fellowship that was available to grad students in those days.

We were pretty close friends in graduate school, but most of my school friendships were largely wrapped up in trying to learn economics. I recall intense free wheeling discussions of economics with both G.S. and many other students (and some young faculty like Belton Fleisher), who also turned out to be very good economists. No one in that group had the slightest airs or expectations about what would happen to us later (including the faculty, who thought we were a mediocre lot and that the best students were at MIT). I must say that none of those who became successful ever acquired those kinds of airs (though I felt a fair number of ex-MIT students did!). G.S. was among the elite of what turned out to be a distinguished group, and probably the most humble and self-effacing of all of us.

My fondest recollection of that era at Chicago was a spirit of intense optimism about the prospects for economics to solve all of the World's problems. A major part of that program was the prospects that econometrics and the structural estimation of behavior models would set a sound scientific basis for the field. Econometrics was a very intensive part of our training, and in this G.S. was and forever remained way ahead of everybody.

There is a well-traveled story among Chicago students of that era about how Maddala learned how

to drive a car. Everyone claims to have partaken of the famous ride down the Outer Drive at 15 miles an hour, including yours truly, but I think it was mostly Georgio Basevi (now at Bologna) who actually lived through that experience. There's another story about his thesis defense. G.S. wrote a very sophisticated empirical thesis on production functions in coal mining. A faculty member who came from Kentucky, perhaps indignant at the analytical style and abstract, ivory-tower quality of the work, asked if he had ever seen a coal mine. Upon reporting that he hadn't, his committee made him go down to Kentucky and have a look. I suggested that it would be cheaper to go to the Museum of Science and Industry next door, which had a working model of an underground mine, but he dutifully went down there anyway. He was the only productivity economist of that era who ever saw the subject of his work on line, as it were. After school, G.S. took a job at Stanford and I went to Rochester. We lost touch for a few years, but our paths crossed again when we were very close colleagues in the 1970s at the University of Rochester.

When I think of Maddala the economist, I naturally think of his extraordinary and pioneering contributions to the analysis of pooled time-series and cross-section data, panel data, discrete choice analysis and selection, Bayesian Analysis and many other areas of econometrics in which his work was essential, including time-series. The span of his work was immense, surely among the largest of any person working in the field. It is notable that G.S. can even claim half of a statistical distribution (the Singh-Maddala distribution—a much better name than the Burr type 12 distribution to which it is related). Coase may have his Theorem, Stigler his Laws, Black and Scholes their Formula, and Lucas his Critique, but what economist aside from Pareto (who was just as much a sociologist and political scientist and only one-third economist) has half ownership of a distribution? And what an elegant economic derivation it has.

When I think of Maddala the colleague, I think primarily of a teacher of the highest order. G.S. had one of the clearest minds of any economist I have ever encountered. It was a rare gift. He once told me that his teachers in India marked examination answers wrong if they involved any unnecessary steps. Throughout his life he bemoaned the pompousness and tedium of a lot of the work he saw. When we were

colleagues at Rochester, I would prey upon him with endless questions about the latest statistical gizmos and gadgets that were advertised as sure fire routes to Truth. Knowing my limitations, he would bring the problem down to a very primitive level without an ounce of condescension, and explain the essence of what was going on in the simplest and most basic possible terms. There was magic in how he could cut to the core, strip away all the irrelevant details and illuminate the essence of the issue.

G.S. had many outstanding students over the years. He was quick to see what was important on the frontier and what was just window dressing. He directed many of his students to work on major problems and several made important innovations to them. But G.S. had a huge number of impersonal students through his remarkable and enduring textbooks, which in their directness and accessibility have taught several generations of students all over the world essential tools of our trade. He was without peer in those endeavors.

Finally, G.S. was a great friend. He had great instincts and well-reasoned judgements about people, at least most of the time. He stood up for his friends and was a person one could count on, though a few tragically took advantage of him. He was a bit shy and lonely in his bachelor days and his marriage to Kay in the Rochester years brought immense love, satisfaction and fulfillment into his life. He was extremely fond of his family and would brag about his children every time I saw him. But a mystical side of him became increasingly apparent to me when we were together at Rochester. He openly expressed interest, unusual for a person of his great analytical bent and talent, in activities connected with fortune-telling. He acquired books on handwriting analysis, the shapes of skulls, and especially palmistry (he had a very unusual hand, and was fond of pointing that out to me while at the same time belittling mine as dull and rather featureless). He half-seriously spoke of Swamis and Gurus.

I suppose it is natural for a statistician to take a very broad interest in forecasting. Heaven knows that statistical methods alone have great limitations. And he was furthermore starting to speculate in the stock market at that time, especially in activities having something to do with precious metals like gold and

palladium. But palms don't yield much information about such things, and the Gurus who claim to have an inside track on markets don't come from India. G.S. had been seriously ill as a child and also developed diabetes and other maladies (especially aversion to the cold weather!) at Rochester. He was reluctant to take the advice of doctors, though he did consent to insulin treatment at least and remained with it for the rest of his life. I think he was seeking signs in these endeavors of what the future held in store for his health. Somehow, I have the nagging feeling that he saw ominous signs in some of them. I wonder how it affected his views of the medical profession and his life style.

I am proud to have been a friend and colleague of G.S. Maddala. He was an important person in my life, a joy to be around and one who brought enlightenment and good cheer to everybody. He made life a little more worth living. I wish he could have stayed with us a good bit longer.

Sherwin Rosen, 4/26/00.