Burton G. Malkiel

by Richard E. Quandt

I was flattered and pleased to have been asked to speak at this conference honoring Burt on the occasion of his retirement. The quality of the flattery is obvious; the pleasure comes from the fact that Burt has been my friend for a very long time. In fact, it might even be the case that I have known Burt longer than anybody in this room. We met, if I recall correctly, in 1960, when Burt, fresh from Wall Street, arrived in Princeton as a graduate student. That clearly makes my remarks a geriatric encomium; the words “geriatric” coming from the Greek γέροντας, meaning old man (namely me), and the word “encomium” from the Greek εγκώμιό, meaning “glowing and warmly enthusiastic praise”. You should take note of the fact that I have managed to use two Greek words in the first paragraph of what I have to say, thus obviously satisfying substantially more than the minimum standards of scholarship.

From 1960 to the present Burt has been a member of the Princeton faculty, with the exception of the years 1981 to 1988. He left in 1981 to bring the word to the heathen, in other words, to become the Dean of the Yale School of Organization and Management. Which brings me to an important caveat concerning the present occasion. We have already had one farewell celebration for Burt, in 1981; if I recall correctly, it took place in a Chinese restaurant of note (at that time) called A Kitchen. I am emboldened to say, as a warning perhaps, that this present occasion is the positively last farewell celebration this department will hold for Burt. Never again! But apart from this stern warning, let me just say how delighted we all were that
in 1988 Burt had decided to return to us, even though the credit for that has to be accorded not so much to the department but to Nancy Malkiel; bless her heart, even then she knew how to look out for the interests of Princeton.

The first thing one is tempted to note about an academic is his contribution to scholarship. Numbers don’t tell everything, but they do tell a lot. In Burt’s bibliography dated November 2009, I count 12 books and 174 articles, not counting OpEd pieces and the like. His scholarship ranges over the entire field of finance and it would strain my abilities and your patience if I were to try and review it all. There are just two highpoints that I would like to single out for special mention.

The first is *A Random Walk Down Wall Street* and its most recent edition, *A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing*, which is the 9th edition of a work originally published in 1973. You may find it strange that I should single out this work for special mention in this august venue. While it discusses deep and important issues, it is in a very real sense non-technical; at least non-technical for the present audience. Ito’s Lemma is not mentioned even once, nor are martingales, nor any number of other potentially exciting, relevant and technical subjects. But Burt manages to discuss all the ideas in finance that are important from a practical point of view and have endured, and manages to discuss them in a manner that is not only crystal clear to the expert but to the layman as well. If you type into Google the words “reviews of random walk down wall street,” you get about 297,000 hits and most of the reviews that I have looked at (a small subset of the 297,000 hits) refer to it as a classic. Let me also note parenthetically that if you type into Google the words “Burton G. Malkiel,” you get about 97,200 hits, and you may justly wonder how the earlier search term can get more than the latter; but such are
the wonders of Google. Burt has long been known to believe that markets are efficient and has advanced not only excellent reasons for this phenomenon, but also established an effective defense of the proposition that markets are efficient in the face of attacks on pervasive efficiency. Note that this property of markets was by no means obvious in the early days of the debate. Helmut Weymar, an MIT PhD and a student of Samuelson and subsequently a partner of the late Frank Vannerson, who was well known to many of us, in an enterprise called Commodities Corp. is quoted in a recent newsletter by David Warsh (of economicprincipals.com) as having said in the early days, “I thought random walk was bullshit. The whole idea that an individual can’t make serious money with a competitive edge over the rest of the market is wacko.” Burt steadfastly maintained that stock-picking was a losing proposition and that in the long-run a buy-and-hold strategy based on a broadly diversified index fund would beat a managed portfolio. I could never persuade my late step mother of the advantages of such a strategy, and she would always demand that I invest her money in stocks that would have the most extraordinarily high returns, with the additional requirement, on which she always insisted, that they had to be absolutely safe, in the sense that the return should have zero variance, not that she knew what zero variance meant. When I protested that I was not able to do that, she would invariably reply, “Oh dear, you are so clever, I am sure you will figure out a way to do it!” Which convinced me that there definitely was a huge market for Burt’s book. Of course, there were no index funds back in 1973, when the first edition of the book appeared, and much of what has become conventional wisdom by today’s standards was highly debatable or unknown back then. As Jim Litvack noted in a review of an earlier version of Random
Walk, it is amazing how much the profession of investing has conformed to Burt’s recommendations.

The second area of Burt’s research that I would like to mention is one in which I have been privileged to work with him and one in which we were required to do practical field research (of course at the expense of the National Science Foundation or some other such funding agency), namely race track betting. We would typically go the race track on a lovely spring day, have a leisurely lunch and be in time for the first race.

In American-style, pari-mutual betting, individuals bet on horses, of which there are on average perhaps six to ten in a race, and the entire amount bet on all horses, minus the so-called track take, is distributed to the bettors holding a ticket on the winning horse. We will ignore for the moment other types of bets, i.e., for horses to come in first or second (place bets) or first, second or third (show bets). The basic fact is that a $2 ticket to win is an investment, but unlike an investment on Wall Street, the uncertainty about the investment is resolved within minutes. This fact generates an enormous amount of data that are “clean” in the sense that you never have to adjust for stock splits or stock dividends, and there is very rarely a survivorship problem. For example, in my modest experience, I have never encountered a case in which a horse expired between the time I bet on it and the time that the race ended. In order to predict the winner, as in stock analysis, one can do fundamental research on the horses and analyze their previous record, the competition, the conditions of the track and perhaps their ancestry, or one can do technical analysis and pay attention to nothing more than the evolution of the odds on the horse in question. (For the uninitiated, let me just say that the odds on a horse are the net payoff per dollar bet minus one.) There is even an analogue to the weak, semi-strong
and strong forms of efficient market theory: the semi-strong form would say that we cannot pick winners even if we use the kind of publicly available information mentioned above, and the strong form would say that even knowledge of non-public information (i.e., which horse might have been illegally doped) would help in predicting the winner.

What is the real issue of efficiency in the horse race betting market? Because the fee imposed by the track on all bets, the so-called track take, which is an average of about 18 percent at U.S. racetracks, the aggregate of all bettors has to lose money. Information about the horses makes bettors bet more or less on particular horses, and just as information about stocks gets impounded into the stock price, so information about horses gets impounded into the odds. Can the odds be used consistently to make above average returns? The ratio of the amount bet on a horse to the total bet on all horses may be called its subjective probability of winning. If this subjective probability is the same as its objective probability of winning, the return is minus 0.18, the track take. We have estimated these probabilities in a very large number of races for a huge number of horses and two conclusions emerge: first, that the subjective probabilities, which depend purely on betting behavior, are on the whole excellent estimates of the independently measured objective winning probabilities, but secondly, there is an important departure from efficiency in that the subjective probabilities of those horses that are objectively highly probable to be victorious are too small (that is, these horses are “underbet”) and a very modest profit can be made by betting on these horses. This very modest profit, being above the average profit, suggests a departure from efficiency. You will have to ask Burt whether his long-run record of going to the race track indicates that he has succeeded in beating this market. In any event, it would not be possible to take advantage
of this feature in a big way, because that would automatically adjust the odds so that the advantage would tend to disappear. As for myself, I have no secrets: I guess that I am down about 10%, which is certainly better than the expected minus 18%, but nothing to write home about. But I have to say that such minor losses were well worth the pleasure of having Burt’s company at a beautiful race track watching sleek horses run around the oval.

Burt is not only a distinguished scholar but also a master teacher whose example inspired countless young people who came to Princeton for their first teaching jobs. While I was too old to have been his student, I nevertheless learned a great deal from him, specifically about options, like put and call options and straddles; that was some time before Black and Scholes, as a result of which whatever work we did on the subject may have been largely forgettable, but the experience of learning from Burt was not. Working with Burt was a pleasure, which others who have worked with him on research will readily attest to. I remember a few years ago my niece and her then about 9-year old daughter were visiting at a time when Burt had to come over to my house for a meeting. It was a hot summer evening and after our business was done we enjoyed looking at the fireflies that were lighting up the back yard. My niece’s daughter seemed to think that fireflies light up only when their flight path is ascending. Burt used this casual observation to explain to her what a scientific hypothesis was and how you might go about testing it — a conversation that she remembers to this day. Perhaps he honed his skills as a teacher by being an actor: he used to perform, if I recall correctly, with a now defunct theater company called Princeton Community Players. With a little prompting, and I encourage you to do so after I am finished here, he is likely to burst into speeches from Ibsen’s Masterbuilder or just about anything from Shakespeare. That experience also prepared him
well for becoming a frequent member of the faculty troop that created immortal Christmas skits.

And we should remember his stints as department chairman. As chairman, he was solicitous, reasonable and effective; this latter quality is attested to by the fact that he was the chair who acquired Joe Stiglitz for this department. And while we are at it, I might as well admit that I was the department chairman who had the distinction of losing Stiglitz, and to boot, also losing Hugo Sonnenschein and Sandy Grossman, and as you well know, three strikes and you’re out! But you will all appreciate the personal qualities that you must have to be an effective chairman — Burt was the antithesis of one chairman, long gone from Princeton, whose term was described by some colleagues as the “reign of random terror.” He was also decisive at crucial moments. One episode comes to mind. I happened to be the Director of Graduate Studies one year and it came to my attention that the newly appointed Dean of the Graduate School (long gone from and unremembered in Princeton) had decided to reduce the size of our entering graduate class by about 60%. My pleadings with the Dean were to no avail and it was obvious that our graduate program would not survive with such a small class. I acquainted Burt with these facts and he wrote to then President Bill Bowen, and our graduate class size was restored (and, parenthetically speaking, within a year or so the Dean in question was gone).

Burt loves to travel and he has particularly been fond of traveling to France. He probably knows more restaurants and bistrots in Paris than in New York. You may recall that between 2002 and 2004 the French foreign minister, Dominique de Villepin, was very critical of U.S. policy and a wave of anti-French feeling seemed to pass through America, so much so that French fries were being renamed “freedom fries,” and one importer of wines
was reported in the press as having flushed his French champagnes down the toilet as a protest. (Parenthetically I should note that I learned this only after the fact, or else I would have been willing to take the offensive champagne off his hands and disposed of it at no charge to him!) I asked Burt whether out of sheer patriotism he would give up taking vacations in France, and while I do not recall exactly what he said, it was something like Samuel Johnson’s immortal line that “Patriotism is the last refuge of the scoundrel.” His frequent visits to France must have been the source of one of his more endearing habits, which I will explain presently. Burt and I both belong to a group of eight people who get together once a month for the express and sole purpose of drinking, tasting and then rating wine. The way this works is as follows: toward the end of the evening, when several bottles have been consumed by the assembled oenophiles (from the Greek οίνος), we go around the table and have the participants rank the wines as being first or second or third or whatever. At this stage of the proceedings, for reasons that are not completely clear but may have to do with the amount of wine consumed, Burt insists on speaking French, so that he may rank wine A “trois,” and wine B as “un,” etcetera. From episodes such as this you might infer that Burt speaks excellent French, which reminds me of a story that Alan Blinder told me about. Burt and the Blinders were together in Paris, as was our late friend and colleague, Bill Branson, who was actually living there for a year. Bill gave them the key to his apartment and promised to meet them there later in the day. Burt and the Blinders found Branson’s apartment, but no matter how hard they worked at this, the key did not open his front door: it just didn’t work. Of course they all, should I say soi disant, speak French, and Madeline and Burt rehearsed at length in the hallway what they were going to say to the concierge. Finally, they were satisfied
and Burt rehearsed the whole spiel to Madeline and at the end asked her, “How was that?” to which Madeline replied “Good, I understood you perfectly,” whereupon Burt replied “That’s just the problem. When I speak French, only Americans understand what I say. The French don’t get a single word.” Let me just add that his linguistic abilities go far beyond French, and you might ask him to amaze you with his knowledge of Hungarian and possibly other languages that I am not aware of. I, too, had the good fortune of traveling with Burt in France — in the fairly dim past we went together to the Econometrics Society summer meetings in Grenoble, whence we made memorable gastronomic side trips to La Pyramide in Vienne and to the Auberge du Père Bise in Talloires. Burt was unfazed by the cattle that obstructed the road at one point but he went positively hysterical at not being able to get Elf key rings which were allegedly being peddled at the Elf gas stations at which he forced us to stop.

Most of all, Burt is distinguished by the many friends he has who appreciate his good but weird humor. One of these is Nevins Baxter, who was a graduate student here at the same time as Burt, and who provided me with a poem which he claimed to have received from a mythical friend of Burt’s by the name of David Minhas. Don’t let it bother you that it contains allusions that only Burt and his mythical friends will understand; so here it is:

If I, David Minhas, could speak like Dr Seuss,
Then I would set my tongue a loose.
I’d tell you this; one thing is certain;
I would speak of my friend Burton.

I follow him around you see,
So I can eat and sleep for free
And when things go right, or things go wrong,
They may be captured in verse or song.
Almost daily Burt will choose
To repeat an oldie that can amuse.
He’ll tell you this; he’ll tell you that;
He’ll tell you of corned beef with extra fat

And he’ll tell you once;
He’ll tell you twice;
And then, again, he’ll tell you thrice
Of college days eating flied lice.

Burt’s known to sing a favorite ballad
About the sand in a green salad.
He orders his sole off the bone
And tells of a blueberry, on a plate alone.

When it snows on Dexter Street,
He’ll see a beach beneath his feet.
And in Parigi, where we like to meet.
Because the food’s so good to eat,
You may hear Burt scream and holler
About the bird doo on his collar.
And then, alas, he’ll begin to chant
Of the evil effects of bain de moussant.

He’ll laugh about the time he sold his suit,
And of Supercortemaggiore on the Autoroute.
And how his fingers were cut and sore
From counting money in the Finance corps.
And then he’ll really begin to roar
About the good Doctor, who had to close the door.

For the fiftieth time, he’ll begin to recite
The sermon from your wedding night
And then he’ll report on a recent flight.

He’ll tell you that, there was no rat,
And also that, there was no cat,
There was no snake, there was no crane
But there was a DAWG upon the plane.

Regardless,

Dave