A General Economics and Teaching


In the days before high school football coaches were shanghaied into teaching high school economics, students of my vintage were introduced to economics by Robert Heilbroner’s The Worldly Philosophers. Heilbroner accomplished for economics what Perry Mason did for a career in the law, motivating generations to want to be a part of something large and noble.

(The particular coaches forced to teach economics were those coaches whose valiant efforts make it possible for other coaches to be described by the term “winning,” but more on them below.)

Perry Mason gave way to shows about venal lawyers lying to judges and bilking their clients, shows where “legal ethics” has turned into an oxymoron like jumbo shrimp, stationary orbit, political science, or normative analysis. So perhaps it is appropriate that Heilbroner gave way to a book grousing about the price of cappuccinos—is it possible to be
more decadent?—and spouting platitudes about poverty.

It was with the enthusiasm of a frat boy on spring break that I purchased *The Undercover Economist* by Tim Harford. The cover suggests a certain droll humor noir and the introduction builds those expectations higher than Taipei 101. While I didn’t expect that Mr. Harford would prove to be the Sam Spade of the economics profession, there was hope he might be the David Spade.

The design of the book is ideal for both the high school student and coach. There are ten chapters, each of which develops a single important idea. These ideas are

1. Marginal value
2. Monopolistic pricing
3. General equilibrium
4. Externalities
5. Asymmetric information
6. Stock market
7. Auction theory
8. Poverty
9. Trade
10. China

The first chapter begins auspiciously, like a clear dawn after a violent thunderstorm. The writing is crisp like newly printed money or chilled iceberg lettuce, and the insights sensibly applied. It is perhaps unfortunate that the primary metaphor for the output of the economic system—the role played by the pencil in Milton Friedman’s *Free to Choose*—is a cappuccino, because those football coaches and their recalcitrant pupils, the prime audience for this book, will relate to cappuccinos about as well as they relate to quantum chromodynamics or Fermat’s last theorem. Goal posts or cell phones would have made superior choices for this audience.

In a fluid discourse, the determination of the rents of cappuccino stands is explained by the flow of potential customers. More customers generate higher sales, which in turn generate higher profits; competition for more desirable locations generates higher rents, leading to most of the proceeds—the value of that swirling miasma of cappuccinos—flowing to the landowners. The story is told well by discussion of David Ricardo’s corn economy and Mr. Harford avoids the whole untidy mess of Ricardo’s labor theory of value. There is a brief discussion of the value of oil-laden land by comparison to corn-growing land, which will likely confuse any reader who is aware that oil is not cultivated, unless perhaps Mr. Harford meant olive or canola oil.

While a surprising choice for the second chapter, pricing is important. Moreover, it is a wonderful opportunity to follow the theme of the book, since pricing often appears mysterious on the surface, but in fact is consistent with simple models. Mr. Harford explains price discrimination (charging different markups to different buyers) and, unlike many authors, distinguishes it correctly from price dispersion (charging different prices at different times). Cappuccinos feature prominently here as well, the idea being that caramel or powdered chocolate is used as a discriminating factor, with a few cents worth of flavoring producing an extra $1 charge. Overall, this is an illuminating chapter, but Mr. Harford is as glib as a New York politician and his accounts are as cautious as Evel Knievel. The reader hoping for Steve Levitt’s empirical prowess finds instead a comparison of Safeway and Whole Foods prices based on six items, and not even all standardized items at that! While some of the examples provided are correctly analyzed (e.g., the examples Ray Deneckere and I developed, although these are misattributed, alas), some of the accounts are problematic. For example, airline pricing shows many of the same patterns as grocery store sales, but cannot have the same explanation. Price dispersion theories require the prices to persist, but airlines can and do react rapidly to each other. Consequently the theory (attributed to Hal Varian, but due originally to Gerard Butters, alas) is not a satisfactory account of much of the behavior. Unfortunately, the reader is left with the impression that there are no remaining puzzles, when in fact much of pricing is puzzling even in light of the theories.

Chapter 3 introduces an idea that the price system is truth. The concept of truth used here is the “money where the mouth is” notion—if you actually pay $3 for a cappuccino, you demonstrate that you obtained three simoleons’ worth of value. The comparison of the “world of truth” is to a command economy being an economy of lies, with apparatchiks performing self-serving calculations that have nothing to do with values and costs, and resulting in a free, three-martini lunch for some government functionary and smothering taxes for the rest of us. In this story, taxes are “lies” because they distort away from the actual
costs. This is an interesting idea, especially when elaborated into general equilibrium, although I wish Mr. Harford could be a bit more truthful in his discussion. For instance, we are told that it has been proven that a frost in Brazil causes the price of roofing to rise in Kenya. The general equilibrium reason would be that frost in Brazil reduces Brazilian coffee output, raising world coffee prices, raising incomes in coffee-producing Kenya, causing an increase in the demand for roofing in Kenya, increasing the price of roofing. It isn’t implausible, but proven?

Worse still, Mr. Harford claims 25,000 senior citizens die annually from inadequate heating in the United Kingdom (p. 76). This number is as reliable as a Kansas science education. While 25,000 is not the largest number one can find—there are several reports of 50,000 annually—analogous numbers for the United States and Russia are much smaller. Mr. Harford’s statistic (which works out to be about 1 in 400 old people annually) should be as horrifying as the Federal Emergency Management Agency, until one performs a modicum of research. It appears Mr. Harford’s number represents the difference in death rates between the winter and summer. This presents a wonderful economics lesson on causation. Winter does kill people, although surprisingly many cold weather deaths are attributed to the combination of freezing and alcohol. Winter also brings influenza, which disproportionately kills the elderly, but keeping Scottish flats warm is hardly going to stop the flu. Unfortunately, Mr. Harford often has the same relationship with facts that Bill Clinton had with Monica—one intended to be kept undercover and not exposed to scrutiny.

Mr. Harford’s account of the welfare theorems—the price system leads to pareto efficiency and efficient allocations can be induced by the price system and a change in endowments—is very nice indeed. (Mr. Harford knows about inefficiency firsthand: he grew up in England and worked for the World Bank.) Mr. Harford would then solve many of the world’s problems with that change in endowments, solutions as convincing as a Donald Rumsfeld press conference. Economists love the efficiency properties of lump-sum taxation, and the real mystery is why the rest of the world does not.

Appropriately, chapter four emphasizes market solutions to externalities. Here again, Mr. Harford overreaches, citing Los Angeles’ SO$_2$ permit auction as proof of the importance of the “world of truth.” Estimates suggested it would cost from $250 to $1,000 per ton to restrict SO$_2$ emissions (p. 99), and Mr. Harford correctly notes that such claims should be viewed as cheap talk, since the polluters have an incentive to lobby against restrictions. (Actually, that isn’t always the case, since such restrictions can serve as an entry barrier, but never mind.) Auction prices, he says, were $70/ton (p. 99), so that the polluters’ claims were hogwash. When I looked up the prices, however, $70 turns out to be about the minimum ever reached and usually the prices are over $200. Not nearly so impressive a demonstration of the concept of the world of truth, but that is the nature of truth. Moreover, auctions also permit exchange, and some polluters may have avoided $1000/ton abatement costs, just not the marginal polluters.

The effects of informational asymmetries represent an important theme in the past thirty years. With health care comprising a large fraction of GDP, studying health care in light of our understanding of information is sensible. But is information the “whole story” explaining our discontent with health care? Mr. Harford attributes problems with the provision of medical care to the fact that people are better informed about their health than providers, creating an Akerlof-style market failure. Some studies do find asymmetric information to be a problem, but few researchers think it is the only problem, and consequently chapter five does to the sound economic analysis of health care what tornados do to mobile homes. It’s like telling students that airplanes fly because they are lighter than air—the truth is complicated so it’s OK to oversimplify.

Mr. Harford provides the textbook wisdom on the stock market, considering the comparison between risky stocks and interest on safe bank accounts, and certainly these are essential ideas for understanding the behavior of markets. It is also essential to know that most investment advisors are as unbiased as tobacco institute research scientists, and provide advice as useful as a screen door on a submarine. Again, Mr. Harford’s failure is not in communicating basic theory, but in considering what we don’t know, and in particular he fails to mention the equity premium puzzle. But given the state of the personal finance industry—all foam, no beer—Mr. Harford seems sensible indeed.
Mr. Harford doesn’t just hold the opinion that John Maynard Keynes was the most influential economist of the twentieth century; he thinks it is a fact. But shouldn’t that title belong to Paul Samuelson, who changed the toolkit of the profession? Kenneth Arrow—through both general equilibrium and social choice—was influential in a lasting way. Milton Friedman also left a strong imprint on the profession. Has Keynes? Picking Keynes as the most influential economist of the twentieth century is like picking Bobby Riggs as the most influential tennis star, confusing notoriety with influence.

I like auctions and was pleased to see a chapter devoted to auctions, at least until I read the chapter, which contains an analysis as deep as a puddle after a drizzle. Mr. Harford has swallowed Paul Klemperer’s revisionist history of auctions hook, line, and fishing pole, and describes the U.S. auctions as “failed.” These are the same auctions that Klemperer, in advising the British authorities, copied down to the last detail, including the “crucial missing detail” of preventing communication via trailing digits. As early as 1995, bidders in the airwaves auctions communicated using the trailing digits of a bid, so that a bid of $47,000,0288 might be interpreted as a bid by AT&T, since ATT becomes 288 on a telephone keypad. It was not surprising in retrospect that the telephone companies communicated this way, since they know their way around a telephone keypad. The same “failed” auctioneers (I’m one of them and darn proud of it) designed and ran auctions in Mexico as far back as 1997 that involved a “yes/no” acceptance of fixed bid increments, which prevented such communication and had other desirable properties as well. No one who has researched the matter thinks that collusion was the reason for the overall low prices in a few of the U.S. auctions. In those auctions, there were few registered bidders relative to the volume of available licenses, and that surely accounts for the low prices. If the bidders colluded, they did so prior to the auction. As Professor Sidney Coleman said, the problem with the global village is all the global village idiots.

There can be little doubt, as Mr. Harford suggests, that institutions matter and government corruption perpetuates poverty. There is even some reason to believe in the vicious cycle developed in chapter 8, that government theft reduces the incentives to invest, keeping output low, and encouraging a government that specializes in extortion and theft, a government willing to kill the golden-egg-laying goose. This cycle is well-illustrated using Cameroon. Unfortunately, however, “government corruption causes poverty” is not an explanation—why wasn’t the government of Singapore (perhaps the least corrupt place on earth) corrupt before Singapore became wealthy? What can anyone do about corruption? These are important unresolved questions, and the glib assurance that economists know the answers to these questions is a disservice to the reader. But now that we know that cold is killing so many British senior citizens, we have a business proposal for the sweltering Cameroonians, involving retirement communities.

The high school football coach, now forced to teach economics, can probably benefit from an explanation that the Made in the USA label on his state college sweatshirt is harmful both to Iowa farmers (whose grain exports are no longer needed to pay for imported shirts) and to Haitian workers laid off from their job and forced to take a worse job. (Is just the label, not the shirt, made in the USA?) In this chapter, which sprawls like a cat sleeping in a sunbeam or like Phoenix sprawls over the desert, Mr. Harford not only confronts sweatshops but environmentalism, taking the position that environmentalists should like global trade. The argument, from an environmental perspective, is that trade lets us do more things with fewer resources by exploiting comparative advantage, thereby reducing waste. The higher use of fertilizers in Japan and Switzerland is a compelling example provided here. The environmental argument against trade is that we do more things, creating more pollution and waste. Mr. Harford presents an argument that outsourcing to developing nations is not a consequence of seeking lax environmental laws but instead seeking lower wages, primarily because the cost of environmental compliance in the United States is 2 percent of costs, while wages are about two-thirds of costs. This is a lively and entertaining chapter. It is presented in terms of Ricardian theory of comparative advantage. Comparative advantage is the prevailing theory of international trade, but unfortunately it isn’t a very good theory empirically, since it predicts greater gains from trade between dissimilar nations. Even within NAFTA, the United States and Canada are larger trading partners than the United States...
and Mexico. If the theory were to have any bite, this would be the place. Moreover, Canada doesn't even export many ice-based items, in spite of the abject failure of the United States to protect its domestic ice sculpture industry.

The book finishes with a consideration of China's growth. There is little doubt that China has done well in the transition from a centrally planned economy to a decentralized, market economy, especially when compared to Russia. China is a puzzle: it has grown spectacularly without much privatization, it has bizarre financial markets, no laws of contract and no formal protection of property rights, and it is run by a government that calls itself communist. It is a challenge to understand the economics of China and Mr. Harford's account of China, which is otherwise reasonable though glib, lacks the most important reason for China's success: China ignored the advice of Harvard economists, Russia did not.

The Undercover Economist is an inappropriate title for this book; little attempt was made after the first two chapters to actually understand puzzling phenomena. One can forgive Mr. Harford his choice of title because the right title—the armchair economist—is already taken. And make no mistake: this book is nothing like Freakonomics, which lives close to both the edge and the curiosities of economic science, and in that way offers much more in the "whodunit" line of mysteries.

On the other hand, Mr. Harford doesn't have the "on the other hand" problem so archetypal of economists. And "attack the problem directly, not indirectly," a refrain posed in several contexts, is uncommonly sound advice.

So how does the book stack up? This is a book to make a bishop throw a silver chalice through a stained-glass window. When it's good, it is very good, but other times it is awful. It is often entertaining and whimsical. The selection of topics is superb. As should now be obvious to even the most casual observer, the facts often take a beating. Like most partisans, Mr. Harford has a gullible willingness to believe anything written that supports his viewpoint, and then presents only evidence consistent with his viewpoint, leading him to conclude that his perspective is a proven fact. It is this blind belief in the theory that often causes economists to be viewed with derision.

As a reader for high school students, Mr. Harford's book is preferable to those weighty tomes sold as college economics texts. Modern textbooks have ballooned to a thousand pages of inane drivel illustrated with beautiful graphics that wouldn't look out of place in a modern art museum. These texts have replaced analysis with photographs of economists, and are to economic analysis what British tabloids are to news. Introductory textbooks now seem more appropriate for physically beating the students into submission, or perhaps being thrown like a discus at somnambulant tardy students, and it takes a football coach just to lift one. Compared to these miserable doorstops, The Undercover Economist (AKA Economics Undercovered) offers a more appealing paradigm.

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C Mathematical and Quantitative Methods


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It has taken quite a while, but in the course of more than a decade the experimental method has become firmly established in economics. Experiments are no longer simply a topic of discussion for economists, they are a well-established tool. Given the rapid development of the experimental branch of economic science, the methodological basis of experiments is surprisingly weak. Of course, there are some golden rules to be followed for those who want to publish an experimental paper in a highly ranked economics journal. "Never manipulate subjects!" is one of these rules and "The number of independent observations has to be large enough!" is another. But beyond these more-or-less self-evident rules the deeper question of what we really can learn by doing experiments is seldom discussed. If we look at this fundamental question, two distinct issues can easily be identified as the core problems of experimental methodology. The first concerns the question of what a particular experiment tells us