# Mainstream versus Old-Time Economics

There's no one left in economics to argue that the emperor has no clothes.

—economist David Colander, writing about his surveys of economics graduate students. In response to a question about what would put them on the "fast track," only 33% of graduate students cited "having a thorough knowledge of the economy," whereas 82% cited "excellence in mathematics" and 73% included "making connections with prominent professors."

HISTORY SHOWS that economic theories can persist for many years without evidence to validate them. Yet sometimes they fall so far afoul of real life that people take notice, as during the Global Financial Crisis. The *Economist* magazine described the events of 2008–9 like this: "Of all the economic bubbles that have been pricked, few have burst more spectacularly than the reputation of economics itself."

Alas, the editors at the *Economist* may have exaggerated. As of this writing, the profession's reputational damage was neither spectacular nor lasting. Economists only needed to close ranks after the crisis and then wait for people to forget that their key theories and models were wholly discredited. In the meantime, they turned to a time-honored defense—minimize your mistakes and recast them as signs of progress. They now claim to be smarter than before, thanks to their missteps. They've used the

additional data produced by the crisis to tweak their models and ensure a better result next time. Economist Todd Knoop compares this incremental approach to a child falling down as he learns to walk.

But the flaw in their story, as reasonable as it may sound, is that the problems are too deep-rooted to be fixable with minor adjustments. Critics, like me, see economists doing the same things and expecting different results. In place of Knoop's toddler, think of an older delinquent repeatedly causing trouble without showing any remorse.

# The Simplified World of Professional Modelers

What exactly is it that economists get wrong, again and again? It depends on whom you ask. Here are six separate charges that critics aim at the standard, model-centric approach:

- There's no role for banks, which don't exist in standard models.
   Moreover, modelers fail to see that bank lending injects spending
   power directly into the economy. They argue incorrectly that every
   dollar lent is matched by a dollar that was already saved *before* the act
   of lending. (I discuss the mechanics of bank lending in chapter 3.)
- Models don't include balance sheets, either. Together with the absence of banks, these omissions cause economists to overlook the importance of credit cycles and asset prices.
- Modelers rely too much on rational expectations theory, which requires
  people to think like robots. Worse, the robotic humans of standard
  models are preprogrammed with the faulty logic that's embedded
  in those same models.
- Modelers don't allow for the challenges producers face, such as finding
  enough customers to establish and sustain a business. Instead, they
  assume that all goods and services are produced instantaneously and
  sold successfully. Therefore they argue that businesses (and policy
  makers) can ramp production toward full employment just as easily
  as we fill a bathtub.
- The perfect and unchanging economy of standard models is a lousy guide to the imperfect and dynamic real-world economy. In reality, we're constantly adjusting to entrepreneurial innovation, new business formation, and old business failures, within a world of ceaseless institutional, social, and technological change. This "perennial gale

of creative destruction," studied and taught by Joseph Schumpeter in the first half of the twentieth century, is mostly ignored by presentday economists.

 Modelers fail to connect the phases of the business cycle. They don't accept that the causes of recessions are often found in the excesses of earlier expansions.

These shortcomings apply to the macroeconomic models taught in graduate programs especially, but also at the undergraduate level. We need to understand the shortcomings before building a better approach, and we'll take a closer look over the next few chapters. We'll weed before we seed. As a starting point, we should recognize that all six shortcomings share the same parents. They're all products of the marriage of abstract theory and mathematics that defines modern economics.

As some people put it, economists suffer from physics envy, referring to a conscious decision to imitate physicists and other "hard" scientists. Physics is the study of natural objects, motion, and forces, which are consistent and easily predicted by equations. Economics is concerned with interactions between people, which are neither consistent nor easily predicted. This is a classic catch-22. On one hand, you can't model the economy mathematically without mathematical assumptions about the behaviors of businesspeople, employees, consumers, investors, lenders, borrowers, and job seekers. On the other hand, those behaviors are complex, are constantly changing, and can't be explained through math. Similarly, the dynamics of bank lending and balance sheets aren't easily captured in mathematical models. Nor is there a set of equations that describes the chaos of creative destruction or the challenges of building sustainable businesses. Trying to fit economic phenomena into a physics-like framework is like trying to squeeze ten pounds of stuff into a two-pound bag.

Economists respond to this dilemma by pretending the world is much simpler than it really is. They forge ahead with their models, despite a lack of evidence to support them. To do otherwise would mean walking away from years of schooling controlled by educators who require a mathematical approach. And once that education is complete, up-and-coming economists are expected to link their research to models their predecessors developed. Economists discovering new variations on established models can impress their peers and achieve lasting fame. And researchers who don't use the same mathematical methods? They're as welcome as the guy who shows

up at a swanky wine tasting with two six-packs of beer after having just guzzled the other half of the case.

Evidently most economists blithely accept the standard methodology—if they weren't satisfied with it, they wouldn't have decided to study economics in the first place. That was the message of David Colander's graduate student surveys, conducted for the first time in the mid-1980s and most recently in the early 2000s. According to those surveys, students care much less about acquiring "knowledge of the economy" than they do about mastering advanced mathematics. Their single-mindedness raises the alarming possibility that the field may be incapable of self-correction, leading Colander to complain about "intellectual inbreeding" and "naked emperors" (as in the excerpt at the beginning of the chapter). His collaborator Arjo Klamer put it like this:

Even though the relevance of economics is beyond doubt, . . . these students do not seem to have a clue why that is. It is even doubtful that their faculty has a clue. By continuing to pursue the discipline of economics mindlessly, without capacity for serious reflection on the nature and history of the discipline, the economic[s] profession is at risk.

Considering the way they organize their profession, it shouldn't be surprising that economists often award their greatest accolade (the Nobel Memorial Prize) for research that's elegant in theory but disastrous in practice.

### The Nebulous "Demand Shortfall"

Cynical folks might take the critique further by describing the methodology as a deliberate strategy for securing influence and prestige. Abstract models make the language of economics inscrutable to the layperson. They're like the screen that separates the Wizard of Oz from his visitors—they thwart public inquiry while casting an aura of ingeniousness and mastery. They also mask deficiencies in areas like economic history and real-world business practices. Thanks to their models, economists don't need to master such topics. They can become "wizards" with mathematics alone, and more quickly than they would if they needed a deeper understanding of how the economy actually works. Of course, that last statement is hardly controversial—it fits perfectly with the beliefs of most graduate students, as shown by their responses to Colander's surveys.

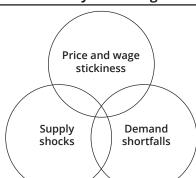


FIGURE 1.1 Causes of economic volatility according to mainstream theory

Worse, the profession's opacity tempts economists to produce dishonest research when that suits their purposes, as many admit. Take Nariman Behravesh, who criticized his peers in his book *Spin-Free Economics*. He said,

[Economists] often hide their value judgments behind complex models and research, with the structure and assumptions of the study often leading to the conclusions that the research favors. More upfront honesty about values would probably lead to more productive discussion and less confusion on the part of the public.

Whatever the motivations behind physics envy, Behravesh was right to point out value judgments lurking within economics research. The very structure of economic theory is designed to accommodate ideologies. Let's take a quick look at that structure, and then we'll circle back to its ideological origins. As shown in figure 1.1, mainstream theory allows three causes of economic volatility: *supply shocks, demand shortfalls*, and *price and wage stickiness*.

Supply shocks are unwelcome changes on the production side, such as a drop in labor productivity. Holding everything else equal, businesses are unable to produce as many goods and services after a supply shock as they did before. Economists tweak their input assumptions to mimic supply shocks in mainstream models.

Prices and wages enter the picture because economists expect them to adjust upward or downward to ensure that markets "clear." Think of a company slashing prices in a downturn to sustain sales volumes and then slashing wages to prevent layoffs. When prices and wages fall quickly

enough, theory holds that the economy mends rapidly after a setback, restoring full employment. Underemployment persists, however, if prices and wages are "sticky." Although economists disagree on the importance of stickiness, all mainstream models pivot on price and wage adjustments as the mechanism for achieving full employment.

So far, so good. Supply shocks and stickiness often contribute to recessions, depressions, and crises, although usually not as driving factors. But here's the rub: mainstreamers lump virtually every other possible cause of a weak economy under the catch-all category of *demand shortfall*. Their *User's Guide to the Economy* reads like this:

- 1. If the economy isn't performing well, check for problems with productive capacity (supply shocks and constraints).
- 2. If there are none, the problem must be a demand shortfall, which hasn't yet corrected because of sticky prices and wages.

When economists claim "demand shortfall," what they really mean is that they applied these two steps from the *User's Guide*. (Understand that I'm simplifying, but not by much. For example, if you're wondering about the role of interest rates, think of them as another sticky price for our purposes here.) Standard models offer no clues about the nature of a shortfall, and how could they? Thanks to the catch-22, they can't accommodate real-world risks. "Demand shortfall" is far too vague and the models too hollow to shed much light on the economic process.

To see why economists are drawn to such an amorphous category, we need to look at how they use their models. Consider that the profession separates loosely into those who advocate active demand management (generally, Keynesians) and those who favor a more *laissez-faire* approach of limited state interference. Is it any wonder that models devised by wannabe demand managers diagnose recessions as demand failures? That laissez-faire proponents push back with supply-based models? It's no coincidence that the language of economics aligns closely with ideologies, nor is it a secret that the models are designed to support policy preferences. Keynesians may believe that the man who made the demand-shortfall diagnosis respectable, John Maynard Keynes, hung the moon, but they also acknowledge that he began his work knowing exactly where he wanted it to end. His primary and perhaps only objective was to support the case for aggressive government intervention.

To be sure, the framework depicted in figure 1.1 is perfectly fine *in theory*. If you study macroeconomics and embrace its underlying assumptions, it may seem enlightening to separate supply-side from demand-side deficiencies. In a limited sense, it can move the discussion along. But economists are too trusting of their assumptions—and many of them too eager to propose solutions—and as a result, they push the framework beyond its limits.

## If Not Mainstream Theory, Then What?

There's an expression from *Monty Python and the Holy Grail* that describes one of our key challenges as economic analysts. In a scene called "Bring Out Your Dead," a horseman in a sparkling white uniform rides through a dirty and disease-stricken medieval village. He draws the attention of a mortician bargaining with a customer:

CUSTOMER: Who's that, then? MORTICIAN: Must be a king.

CUSTOMER: Why?

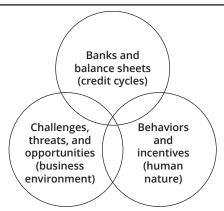
MORTICIAN: He hasn't got s\*\*t all over him.

Economics is similarly mired in muck. It's governed by ulterior motives and bogged down by methods that are out of touch with reality. But there's also a glass-half-full view. As in *Monty Python*'s village—and notwithstanding Colander's surveys—we can find economists who've kept themselves clean and discover new kings, and that's our challenge. (The expression is to find the folks who don't have s\*\*t on them.)

By leaning on the profession's true kings—those with the courage to defy standard thinking—we'll escape the mosh pit of supply theories versus demand theories. We'll develop a different way of thinking by blending *credit cycles*, *human nature*, and the *business environment* (C–H–B, for short), as in figure 1.2. Our new diagram casts a broad net on the causes of economic volatility, which we'll treat as essential areas of analysis, not competing ideologies. This approach would never fly in academia, where eclecticism gets you nowhere, but it's essential for the more pragmatic goal of improving our understanding of economic risks.

In the next three chapters, I link the new diagram to a motley assortment of nonconforming economists. I show that you need to venture outside the mainstream for research on the economy's three crucial elements.

FIGURE 1.2 Alternative view: the C-H-B triad



Remarkably, mainstream modelers fail to properly account for any of the three. But first, let's take a quick look at leading theories from the nineteenth and early twentieth centuries.

Why look back that far? Do I have a nostalgic obsession with elegant clipper ships, powerful steam engines, and seductive Gibson Girls with their curled bouffants and curved corsets? No, that's not it. The main benefit of drawing on economists from long ago is that they weren't bound by current methodology. After Keynes published *The General Theory of Employment, Interest, and Money* in 1936, abstract modeling within the supply–demand paradigm emerged as the language of macroeconomic theory.\* Before then, economists could safely record what really happens as the economy expands and contracts, without first making a tangle of unrealistic assumptions. Their observations often led to something equivalent to figure 1.2. Notably, they found the origins of recessions in the excesses of previous expansions.

I'll share four examples: John Stuart Mill (1806–73), Alfred Marshall (1842–1924), Walter Bagehot (1826–77), and Arthur Cecil

<sup>\*</sup> I say this in the same way that you might attribute World War I to Gavrilo Princip, the Serbian assassin, and gloss over the complex web of national ambitions and alliances. Notwith-standing the ideas Keynes popularized, such as demand shortfalls, his book was too muddled to offer a precise blueprint for the Keynesian revolution. I recommend two books, apart from the *General Theory*, on Keynes's particular contribution and how it differed from Keynesianism. Hyman Minsky offered his version of "what Keynes really meant" in *John Maynard Keynes*. We'll look at Minsky's unorthodox economics in chapter 3. The other book is *Where Keynes Went Wrong* by Hunter Lewis.

# FIGURE 1.3 John Stuart Mill described the origins of commercial crises

#### The business environment improves.

"Some accident, which excites expectations of rising prices, such as the opening of a new foreign market, or simultaneous indications of a short supply of several great articles of commerce, sets speculation at work in several leading departments at once. The prices rise, and the holders realize, or appear to have the power of realizing, great gains."

#### Human nature being what it is, speculation goes too far.

"In certain states of the public mind, such examples of rapid increase of fortune call forth numerous imitators, and speculation not only goes much beyond what is justified by the original grounds for expecting rise of price, but extends itself to articles in which there never was any such ground."

#### A credit boom develops.

"A great extension of credit takes place. Not only do all whom the contagion reaches employ their credit much more freely than usual; but they really have more credit, because they seem to be making unusual gains, and because a generally reckless and adventurous feeling prevails, which disposes people to give as well as take credit more largely than at other time."

Pigou (1877–1959). Mill was England's dominant economist in the mid-nineteenth century. He combined economics with a variety of other intellectual interests and a day job at the British East India Company. His 1848 book *Principles of Political Economy* became the go-to textbook in England for the next forty years or so. Figure 1.3 summarizes his discussion of the causes of "commercial crises." Notice that he included credit markets, human nature, and the business environment and that he started with a description of what happens in economic expansions.

Mill's book was eventually supplanted by Marshall's 1890 magnum opus, *Principles of Economics*, as England's dominant text. Marshall established the University of Cambridge as a leading center for economic research, lecturing there for forty years and teaching a handful of the twentieth century's best-known economists. During his long reign as England's economics pooh-bah, Marshall mostly ratified Mill's thinking about the business cycle. He believed that business cycles are synonymous with credit cycles and that recessions persist because of poor confidence. Figure 1.4 shows his perspective, using excerpts from his 1879 text *Economics of Industry* (coauthored with Mary Paley Marshall).

# FIGURE 1.4 Alfred Marshall described the business cycle

#### The business environment improves, perhaps due to good harvests.

"The beginning of a period of rising credit is often a series of good harvests. Less having to be spent in food, there is a better demand for other commodities. Producers find that the demand for their goods is increasing. . . . New public and private companies are started to take advantage of the promising openings which shew themselves among the general activity."

#### A credit boom develops.

"At last an enormous amount of trading is being carried on by credit and with borrowed money. Old firms are borrowing in order to extend their business; new firms are borrowing in order to start their business; and speculators are borrowing in order to buy and hold goods: trade is in a dangerous condition."

#### Human nature explains the eventual bust, for confidence disappears.

"The chief cause of the evil is a want of confidence. The greater part of it could be removed almost in an instant if confidence could return, touch all industries with her magic wand, and make them continue their production and their demand for the wares of others."

In between Mill's and Marshall's textbooks, Bagehot published his 1873 classic, *Lombard Street*. You might call Mill "the philosopher," Marshall "the educator," and Bagehot "the practitioner." He was a particular authority on London's money markets, drawing from experience as a banker, but weighed in on a variety of subjects as editor of the *Economist* magazine. Like the other old-timers, he connected booms and busts to credit cycles, human nature, and the business environment (figure 1.5).

Pigou succeeded Marshall in Cambridge's chair of political economy in 1908. He then worked alongside Keynes, after both had been taught by Marshall. He published the results of his business cycle research in his 1927 book *Industrial Fluctuations*, which described three categories of business cycle "causes." His categories—autonomous monetary causes, psychological causes, and real causes—map precisely to the C-H-B triad. Here are his conclusions on the relative importance of each:

- Without monetary (credit) factors, business cycles would be perhaps half as volatile as they actually are.
- The same conclusion applies to psychological causes—without them, business cycles would be perhaps half as volatile.

# FIGURE 1.5 Walter Bagehot explained "why Lombard Street is often very dull, and sometimes extremely excited"

#### Booms and busts are explained by changes in business productivity . . .

"The country leaps forward as if by magic. But only part of that prosperity has a solid reason. As far as prosperity is based on a greater quantity of production, and that of the right articles, . . . its basis is good. Human industry is more efficient, and therefore there is more to be divided among mankind. . . .

... But that full working is liable to be destroyed by the occurrence of any great misfortune to any considerable industry."

#### ... and also by credit cycles ...

"In so far as the apparent prosperity is caused by an unusual plentifulness of loanable capital and a consequent rise in prices, that prosperity is . . . certain to be exposed to reaction. . . . The loanable capital lay idle in the banks till some trade started into prosperity, and then was lent in order to develope that trade;

. . . An immense new borrowing . . . follows upon the new and great trade . . .

... [which] almost always changes an excess of loanable capital... to a greater deficiency. That deficiency causes... a fall of price that runs through society; that fall causes a decline of activity and a diminution of profits—a painful contraction instead of the previous pleasant expansion."

#### ... and human nature.

"The mercantile community will have been unusually fortunate if during the period of rising prices it has not made great mistakes. Such a period naturally excites the sanguine and the ardent; they fancy that the prosperity they see . . . is only the beginning of a greater prosperity. They altogether over-estimate the demand for the . . . work they do. They all . . . trade far above their means."

• The most important real causes of business cycles are large inventions, wars, and harvest variations. Wars, especially, can dominate the monetary and psychological causes.

The look-back to Mill, Bagehot, Marshall, and Pigou shows that Keynes's predecessors sought to understand the economy's cyclicality. They didn't just stop at "demand shortfall" and call it a day. They wanted to know why businesses revolve through various "states of trade," such as the following progression that Samuel Loyd described in 1837: quiescence, improvement, growing confidence, prosperity, excitement, overtrading, convulsion, pressure, stagnation, distress, and then back to quiescence. (Loyd may have listed a few more "states" than you or I would have thought to include, but you get the idea.)

#### **Different Kinds of Pendulums**

By comparison, Keynesian modelers refuse to account for cyclicality. They abstract away from cycles, as do their counterparts in mainstream theory, the New Classical economists who tout (mostly) supply-based models. Instead of acknowledging the economy's pendulum-like behavior, mainstreamers conjure a magic pendulum that returns directly to its lowest point and then stops cold. That lowest point is the *equilibrium*. The economy uses all available resources at the equilibrium, meaning that no one is voluntarily unemployed. And businesses produce the exact mix of goods and services that consumers and other businesses would like to buy. Production and sales processes are instantaneous, simultaneous, and unerringly profitable. After the magic pendulum snaps back to its equilibrium, the economy reaches and remains "stuck" in a position of full-employment perfection.

Considering those assumptions, it should be obvious why mainstream modelers fail to predict recessions, depressions, and crises. They never look for them! The models tell us that the economy is either in full employment or jumping toward full employment after a setback has already occurred. They don't allow the excesses that build up, either in or out of full employment, before eventually leading to underemployment. Nor do they allow the business losses and insolvencies that go hand in hand with economic downturns. Think of the spoon bender in *The Matrix*, who tells Keanu Reeves's character, Neo, that "there is no spoon." But in this case, the bender works in reverse. Model builders watch as you observe the business cycle, and then they mysteriously straighten it out while declaring that "there is no cycle."

## Our New (and Old) Paradigm

We'll move on from the spoon benders in the rest of part 1, except to highlight points of difference. In their place, we'll hear from economists who operate (or operated) outside the mainstream. We'll use their insights to take two giant steps away from mainstream theory:

 We'll choose a more suitable paradigm—the same one that we traced back to Mill, Marshall, Bagehot, and Pigou. Table 1.1 summarizes the differences between their old-time paradigm and mainstream economics. It shows that there's no middle ground joining the two paradigms; they're dissimilar to the point of being mutually exclusive.

TABLE 1.1 Changing the paradigm

	Paradigm 1: Mainstream economics	Paradigm 2: Old-time economics
The economy is	always pulled toward a static "full-employment equilibrium"	regularly revolving between various "states of trade"
Business people are	omniscient, always knowing the exact mix of products that their cus- tomers would like to buy	mistake-prone and uncertain about what their customers are willing to buy
Recessions are	unrelated to earlier expansions	partly caused by the excesses of earlier expansions
Volatility is best explained by	supply shocks, demand shortfalls, and sticky prices and wages	credit cycles, human nature, and the business environment
The economy is like	a magic pendulum that always stops cold at its lowest point	a real pendulum that swings between expansions and recessions
Textbook descriptions of the economy	continually improve with each model failure, like a child falling down as he learns to walk	were clearest during the days of clipper ships and steam engines, before macroeconomic modeling

2. We'll extend the old-time paradigm using more recent research. In particular, we'll flesh out the effects of credit cycles, human nature, and the business environment. These sources of volatility are closely intertwined, and therefore, we need to account for all three. I'll argue that neglecting just one means you won't grasp the importance of the other two.

Table 1.1 may surprise readers familiar with popular narratives in economics. One such narrative includes the "classical" economists of the nineteenth and early twentieth centuries among those who assume away recessions and depressions. That's what Keynes wrote in the *General Theory*, but it's simply not true. Although his predecessors weren't perfect, they left room for a realistic perspective on economic risks. The only way to claim otherwise is to cherry-pick a few passages from the vast literature and then take them out of context, which is exactly what Keynes did. Fortunately, his more diligent interpreters saw through the ruse while correcting it in certain scholarly works. Ill-informed pundits, though, continue to

misrepresent pre-Keynesian economics to this day. Ironically, it was only after Keynes's book that standard theory almost completely disconnected from real-world risks.

A related narrative holds that economists focused only on the supply side until Keynes stressed the importance of demand shortfalls. This story overlooks the long-standing belief that recessions are triggered by mismatches between supply and demand, an explanation that doesn't fit exclusively in either category. (In Say's Law and the Keynesian Revolution, Steven Kates links a supply—demand mismatch theory to more than a dozen prominent, old-time economists.) The narrative also glosses over changes in terminology. For example, modern economists often call for more business spending to boost demand, whereas the earliest economists normally put business spending in the supply category. We shouldn't superimpose today's language on the debates of the past, but that's exactly what many pundits do. By forcing their interpretations through the shallow waters of figure 1.1, they fail to see that the profession long ago swam in the deeper pools of figure 1.2.

My reasons for taking a poke at folk Keynesian narratives should become clearer as you read further. You'll see that I care about the discoveries of the past, especially those by economists who've been mistreated by their peers. You'll also see how we can use underappreciated ideas to build a better approach. We'll work from the right-hand column of table 1.1, which accurately describes old-time economics. The C–H–B triad provides the structure. Over the next three chapters, we'll cover each of the C–H–B risk sources in turn, although shuffling the order by starting with human nature.