



For those on the inside, it is hard to ignore the sense that the economics profession is in a state of intellectual crisis.

The sense is not unanimous, mind you, or probably even the majority view. But there is the uncomfortable fact that the profession was largely surprised by the largest economic event in several generations. Some have taken it as a sign that economists are, decidedly, studying the wrong things.

The specific complaints are varied: Economists were so

generally can't conduct controlled experiments. An exception is the experiments conducted by the likes of Nobel Prize-winning economist Vernon Smith, but those typically deal with how people interact in different market settings and often do not have broad applicable policy implications. As a practical matter, one can't raise taxes on one segment of

What Drives Changes

Why economists study what they do — and how the crisis might change it

BY RENEE COURTOIS HALTOM

focused on unrealistic, highly mathematical models that they missed the problems developing before their very eyes. They were so complacent with the idea that markets usually get things right that they ignored a housing bubble and securitization mess in the process. Overall, critics say, policymakers shouldn't listen to a profession so lacking in consensus and out of touch with reality.

Did the research and beliefs of economists leave them ill-equipped to foresee the possibility of a major financial crisis? And if so, what drove the profession to such a myopic position?

Is Economics a Science?

The recent criticisms are interesting in historical perspective because states of intellectual crisis tend to spur new theories in the sciences. One might expect the evolution of thought to be slow and steady, but physicist Thomas Kuhn paints a more dramatic picture in his 1962 book *The Structure of Scientific Revolutions*: It is a “series of peaceful interludes punctuated by intellectually violent revolutions.”

What triggers a revolution, he writes, is that researchers identify something at odds with the dominant theory. One of three outcomes occur: The dominant paradigm explains it satisfactorily; the field determines it is something we are unable to study with existing tools, putting it off for future generations; or a new candidate paradigm emerges. But after a revolution, only one end is possible: The worldviews cannot coexist; one replaces the other.

Evolution is a bit choppier in economics than natural sciences. It is much harder to disprove theories of human behavior than the mechanistic functionings of, say, physics or chemistry. People are subject to change, and economists

the population to analyze effects on the taxed and untaxed — not even in the name of science. Instead, economics experiments take place in models, or systems of equations designed to simulate real-world behavior.

Science-like tools such as statistics and equations weren't always a part of economics. Most people recognize Scottish philosopher Adam Smith as the “father” of economics, who delivered some of the most basic economic principles. But economics as a technique was invented by economist David Ricardo, writes economic historian Mark Blaug in his book *Economic Theory in Retrospect*, one of the leading texts on the history of economic thought. Ricardo is most famous for showing in 1817 that two nations can benefit mutually from trade even if one is better than the other at producing every single good. This idea of comparative advantage is perhaps one of the least intuitive concepts in all of economics, which Ricardo made profoundly clear through a simple story problem involving two countries that produce the same two goods.

His approach was deductive reasoning: drawing specific conclusions based on a much more general, simplified example, the benefit of which is that it can be solved through logic. Not everyone agreed with that approach. Twentieth century economist Joseph Schumpeter coined the phrase “Ricardian vice” as the faulty practice of using overly simplistic assumptions to guide real-world policy. Nonetheless, the value of objective reasoning caught on and distinguished economics from other “moral” sciences like sociology and philosophy.

Math became a big part of economics after the “marginal revolution” of the late 1800s. Previously, the “classical” economists — as they are now generally dubbed — spent their

time studying the aggregate economy. But a desire to understand market-level issues, like why an egg costs more than a cup of tea, narrowed their attention to the margin: the last unit bought, sold, traded, or produced. The new nucleus of study was incentives, opportunity costs, and marginal choices. The marginal revolution was the birth of neoclassical economics, which looks a lot like the microeconomics of today. Calculus was required to study incremental decision-making at the margin, and math became a permanent mainstay in economics.

The use of math in this context fit well with Ricardo's logical technique for analyzing policy problems. The combination enabled economists to make objective policy prescriptions free of moral or ideological axes to grind. Anyone could plainly see the assumptions behind an economic model; one could accept or reject the policy

wages would eventually adjust to bring supply and demand back in balance. More than a decade of severe unemployment seemed to prove that prediction false.

They were looking in the wrong place, Keynes said. The Depression was a shortfall in demand at the aggregate level. While the neoclassicals might have been more concerned with the specific source of the shock through the lens of individual decisionmaking, to Keynes that wasn't the point — in fact, people can randomly and without cause shift demand due to “animal spirits,” he said. The policy implication was simple: The government can avoid recessions by stepping in to consume when flesh-and-blood consumers refuse.

For decades, circumstance seemed to confirm Keynes's theory, and that kept it in favor. Unemployment virtually disappeared after military spending was ramped up for World War II. (Those who are rightfully concerned about

in Economic Thought?

implications on their merit. The notion that economics could, and should, be objective was how it became thought of as a science. Marginalism, for its part, refocused the discipline's purpose: Economics was about how people behave as they allocate scarce resources to make their lives better.

With its new branding as an independent science, economics also became more academic and less accessible to laypeople. Gone were the days of amateur economists like Smith and the brilliant but virtually untrained Ricardo. It is no surprise that many of today's leading economics journals were established around the turn of the 20th century.

Upheaval in Economics

A recurring theme in economics since the marginal revolution has been that major economic events — especially when they are painful — are the primary catalysts for new modes of thought.

No economic event was larger, or more painful, than the Great Depression. As revolutions go, marginalism was adopted at a glacial pace — five or six decades from first inklings to the formal codification of supply and demand in 1890 — compared to the upheaval that followed when John Maynard Keynes published the *General Theory of Employment, Interest and Money* in 1936. In the history of economics, the Keynesian revolution comes closest to being one of Kuhn's dramatic paradigm shifts in thought. His theory made its way into economics textbooks after a decade, and visibly into policy within five or six years. The reign of his ideas lasted decades.

No existing theory could explain the Depression. Neoclassicals could explain unemployment: If real wages were held above market-clearing levels by any number of situations — monopolies, tariffs, or price rigidity in general — unemployment would result. But they could not explain protracted unemployment. They predicted that prices and

9 percent or 10 percent unemployment over the past few years will understand how monumental it seemed when unemployment that topped 15 percent or 20 percent for the better part of a decade simply evaporated and never returned.) The 1950s were mild and the 1960s boomed. By the late 1960s, many economists believed the government could “fine tune” the economy to keep it at full employment. Booms and busts were a thing of the past.

Keynesianism seemed to work, but other factors also kept it dominant, says UCLA economist Lee Ohanian. Keynesianism was a fertile area of study, so that's what received the attention of economists. *The General Theory* was nontechnical, even a tad rambling. Economists got much better at econometrics in the 1940s and 1950s, and that created the opportunity to develop Keynes's broad ideas into a full-fledged Keynesian toolkit for the economy, Ohanian says.

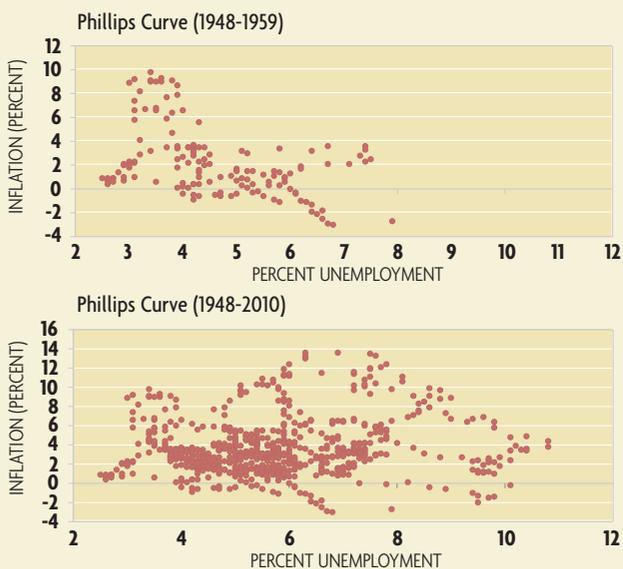
Economists at universities, the Federal Reserve, and other agencies spent much of the 1950s and 1960s constructing enormous models of the economy that included hundreds of equations, each representing supply and demand behavior in some specific sector. Chances are, Ohanian says, if you ask economists who received their Ph.D. in the 1960s the topic of their dissertation, it was one of those equations. With the new models economists could tweak a policy variable and calculate the precise expected results on employment, consumption, wages, and a variety of other variables of interest. “These econometric developments elevated Keynesianism to a quantitative enterprise.”

A Model Breaks Down

Between an economy that conformed and conveniently timed econometric advances, “Keynes' idea was in the right place at the right time,” Ohanian says. He explores in a recent paper with UCLA colleague Matthew Luzzetti the

Right Place, Right Time

The Phillips curve was a truly revolutionary idea: It appears in some form in virtually all macroeconomic research. It was also possibly in the right place at the right time, according to University of Chicago economist Harald Uhlig. If Phillips had plotted the relationship between inflation and unemployment today instead of in 1958 he'd have seen little of obvious interest — or, potentially, publishable certainty.



SOURCE: Both inflation and unemployment data from the Bureau of Labor Statistics. Charts originally appear in "Economics and Reality," Harald Uhlig, NBER working paper no. 16416, September 2010.

reasons behind the rise of Keynesianism — and its eventual decline. "What's interesting is that after 1970 the economy evolved in ways that were as pathological to the Keynesian model as the Great Depression was to the market clearing models of the 1920s," he says. "It was really a case of what goes around comes around. And I think a lot of science proceeds that way."

The first problem was the breakdown in the Phillips curve. The Phillips curve is the famous inverse relationship between inflation and unemployment identified in 1958 and quickly enveloped in the Keynesian rubric: In practice, it was believed, policymakers could orchestrate lower unemployment by producing inflation, which would cause producers to think that demand for their goods had increased, causing them to hire more workers. When inflation later flared up, they could employ tighter monetary or fiscal policy, which would slow the economy a bit but would stabilize prices. In short, government officials could effectively fine-tune the economy as needed.

It worked well for about a decade. But in the late 1960s some countries experienced rising inflation with little or no improvement in unemployment. Through much of the 1970s, both inflation and unemployment rose at once — stagflation. The Phillips curve's menu of choices suddenly seemed unavailable.

Economists jumped at the chance to explain the puzzle, much like Keynes had done 40 years earlier. Robert Lucas offered the famous "Lucas critique" in the 1970s: People simply caught on to the government's strategy. In general,

Lucas said, people's past behavior is a poor guide for future policy because that strategy will, in fact, change the very behavior it is based on, neutralizing systematic attempts to manipulate the economy. This was a decidedly anti-Keynesian proposition. (The Phillips curve may be another example of an idea that was in the right place at the right time. See chart.) Lucas and others helped launch the "rational expectations" movement, which provided a formal model for how people's expectations affect macroeconomic outcomes. No longer satisfied with the notion of mysterious animal spirits, economists took a closer look at the causes of shifts in demand. Further econometric advances allowed them to develop specific theories — called "microfoundations" — about what caused consumption and other aggregates to change at the individual and firm level.

There were other gradual shifts that led economists away from Keynes. The Lucas critique also applied to the complex systems of equations economists had spent two decades developing. The equations were based on past behavior; there was no reason to expect them to be stable. Sure enough, a series of studies starting in the early 1970s showed that simple statistical models which included no theory whatsoever were often better at forecasting the economy than the complex models the profession had spent two decades producing.

But it was that real-world events blatantly conflicted with the theory that really caused the profession to move on from Keynes. "[T]he inflation and the stagflation of the 1970s did more to persuade economists that there was something wrong with Keynesian economics — that you needed supply-side policies and all that — than all the empirical evidence on the econometric studies against Keynesian economics," Blaug said in a 1998 interview with *Challenge* magazine. "Sometimes you have to be hit over the head with a hammer before you give up a beloved theory."

Math as Not Just a Servant, But a Master?

As MIT economist Olivier Blanchard describes it, if Keynesianism was a revolution, macroeconomics since rational expectations has been a drawn-out battle with gradual movement toward peace.

Two, not one, replacement paradigms emerged, both emphasizing microfoundations. First, the new classicals, whose models included fewer market imperfections, were able to incorporate a "general equilibrium" view that demonstrated how separate markets affect each other as they might in the actual macroeconomy. Their brand of macroeconomics looked more like microeconomics, with a focus on the power of markets to allocate resources most efficiently. Second were the new Keynesians, who wanted to tweak, not replace, the Keynesian models by using microfoundations to explain aggregate imperfections that the government might be able to fix via judicious monetary and fiscal policy. The models generally were unable to study more than one market at a time, a "partial equilibrium" perspective.

This is the famous "freshwater" and "saltwater" divide

that has caused much controversy (and occasional name calling) within the economics profession. The monikers describe the geographic locations where the economists in those camps have tended to be located. Saltwater economists (centered at universities around the two coasts) have been accused of assuming policymaker omniscience and ignoring the bad incentives that government intervention can create, while freshwater economists (centered at universities around the Great Lakes) have been accused of operating with blind faith in the unfailing power of markets to self-regulate.

Those caricatures still exist, but for the most part the camps have converged over time to create a hybrid of general equilibrium, microfoundational models that include imperfections and a potential role for government intervention. “The new tools developed by the new classicals came to dominate. The facts emphasized by the new Keynesians forced imperfections back into the benchmark model,” wrote Blanchard in 2008. *The Economist* magazine described the convergence in vision as “brackish” macroeconomics.

Even more striking has been the convergence in methodology. Because of advancements in econometrics and computer power, economists today can combine the strengths of various theories better than before. What models today have in common is not so much any one school of thought, but the type of mathematical tools that are used — so, in a way, mathematics is the new reigning paradigm of economics. The quintessential example are DSGE models, which stands for “dynamic stochastic general equilibrium” (a fancy way of saying they include decisions made over time and under uncertainty, and that the decisions made by policymakers, consumers, and firms affect each other).

DSGE models are the dominant workhorse in macroeconomics today, especially at policy institutions like the Fed. They consist of a small handful of equations that tell economists how much households are likely to consume and work, and how much firms are likely to produce and invest, as the result of some policy or shock the economist imposes. Such models are used to ask specific hypothetical questions, the results of which are interpreted with a good amount of judgment (see page 17). But they’re solved using math so complex that one of the biggest constraints on their size is sheer computer memory.

One result of increasing reliance on math — critics pejoratively refer to it as “formalism,” or math for math’s sake — is that the profession has become very specialized. Economic historian Robert Whaples of Wake Forest University puts this in characteristically economic terms: “Fixed costs of switching fields of study may be higher in economics than in other sciences, especially social sciences, because you do have to learn a lot of rigorous techniques.”

Increasing specialization may be one reason the crisis caught economists by surprise. To truly see the complex web of securitizations — that, when unwound, was the crisis — one would have needed knowledge about multiple fields like financial and real estate economics, argues University of

Even the most inclusive models cannot be used as a “theory of everything,” to borrow a phrase from physics, that merges a large number of fields and sounds an alarm when events like crises are imminent.

Chicago economist Raghuram Rajan in a recent blog posting. “[Y]ou had to know something about each of these areas, just like it takes a good general practitioner to recognize an exotic disease. Because the profession rewards only careful, well-supported, but necessarily narrow analysis, few economists try to span sub-fields,” he writes.

Fed Chairman Ben Bernanke argues that even economists who warned of instability saw only very limited portions compared to what actually transpired. “[T]hose few who issued early warnings generally identified only isolated weaknesses in the system, not anything approaching the full set of complex linkages and mechanisms that amplified the initial shocks and ultimately resulted in a devastating global crisis and recession,” Bernanke said in a September 2010 speech on implications of the crisis for the field of economics.

There are limits to how much that interdisciplinary perspective can be modeled quantitatively. Even the most inclusive models cannot be used as a “theory of everything,” to borrow a phrase from physics, that merges a large number of fields and sounds an alarm when events like crises are imminent. Even if computers and math could handle such a feat, the result would risk taking historical relationships for granted, much like the Keynesian equations of the 1950s and 1960s. “We’ve got hundreds of millions of people interacting,” says Whaples. “They’re real people, and they’re complex in their behaviors, their motivations, and their interactions. And there are some really smart ones out there who have seen how the system works and that there’s a little way they can make it work to their advantage,” he says. “You will never be able to model the economy the way my physicist friends want you to.”

Even if such a model existed, forecasting crises is, to most economists, a nonstarter. Markets tend to uncover information on crises and turning points before economists can forecast them with models.

But the professional rewards for taking a *qualitative* interdisciplinary perspective are also lower. Using prose instead of math is less likely to get an economist published and is harder to garner attention. Rajan would know; he warned of instabilities with surprising accuracy in a 2005 Federal Reserve conference, when he was chief economist at the International Monetary Fund, and even with his stature he was largely dismissed by the economics profession, including his own colleagues, the IMF said in a recent report. But even with the benefit of hindsight, it is hard to see how it could be any other way: Those who spend their careers predicting unlikely events like large crises and crashes are destined to be wrong a lot of the time. Many economists

quite rationally stick to chipping away at outstanding research questions.

Arguably, it is regulators who should have been aware of the hidden risks, but the financial system appears to have innovated out of their view. Almost no one appreciated its susceptibility to bank-like runs, Bernanke argued. He described the crisis as a flaw in the administration of economic knowledge — for example, the design of regulations in the public sector, and the design of risk-management systems in the private sector — not so much in the science or theory of economics. The flurry of regulatory overhauls since the crisis — which, economists argue, should emphasize information gathering and better, not simply more, regulation — are intended to fix that problem.

In fact, Ohanian predicts the crisis will change regulatory economics more than theories of macroeconomic issues like business cycles and growth. “I think what will come out of the last couple of years is a focus, ironically, more on the ‘micro’ side of macroeconomics, meaning how should you pursue regulation of financial institutions, how do we deal with the problem of too-big-to-fail, what type of accounting standards should be used, how should we move things off the balance sheet back onto the balance sheet,” he says. “I think we learned a lot that bad policies are ones that create bad incentives.”

A Caveat, Not a Revolution

For better or for worse, most economists don’t seem to predict wholesale changes in what economists study. In addition to forecasting, theory is used to understand how the world works. While there are features that models will inevitably be made to include in order to better study the crisis, like a stronger role for the financial intermediation sector that was the epicenter, many aspects of the crisis were already well-represented in models. Economists had been formally modeling financial market characteristics like runs, illiquidity, risk, and leverage for years, Bernanke said in his speech. It’s that they — and regulators and indeed many market participants — weren’t aware of the specific corners where some of those potential problems existed. Once those corners were revealed, Bernanke said, existing models proved exceedingly helpful in determining how to treat them.

The methodological consensus that Blanchard described may have been damaged somewhat by the crisis. Many people viewed dominant methods like DSGE modeling as increasingly useful tools and believed that efforts should be devoted to refining them. But those models couldn’t fully make “sense out of the 2008 financial crisis” says Harald Uhlig, chair of the department of economics at the University of Chicago. Many “Ph.D. students and researchers alike these days want to contribute to the new debates that have emerged rather than fixing these models. That could be a good thing, if alternative, quantitatively useful models eventually emerge,” he says, but it would be a shame if the value of existing models is forgotten in the process.

Instead of a revolution, many see the profession, policy-makers, and the public adopting a much humbler view of what economics can tell us about the world. For one thing, the economy is dynamic — what economists believe to be true can change. Economists just got complacent, argues John Quiggin of the University of Queensland in Australia. The “Great Moderation” of the last 30 years, in which recessions were generally mild, made economists and policy-makers a bit too comfortable with their apparent past success, he says. We also saw this in the 1920s and late 1960s, he says, in the events that ushered Keynesianism into and out of fashion. “You heard that we had it under control, or as controllable as it might be. Those claims have been proven false, so I guess we have to accept that our knowledge about the macroeconomy is fairly provisional.”

Quiggin organized a session at the 2011 annual meeting of the American Economics Association, the professional organization of economists, titled, “What’s wrong (and right) with economics.” Part of his impression from the session was that with economic recovery apparently under way, complacency is probably on its way back. While he concedes that “we may just be too close to the action to see what new ideas are emerging,” he argues that it appears “there was a lot more soul-searching on the part of the Keynesian establishment and a lot more creative stuff happening than there is this time.”

It may partially be the quantitative nature of modern economics that causes it to be mistaken for the certainty and precision that natural sciences can offer, George Mason University economist Russ Roberts wrote recently on his blog, Café Hayek. He argues macroeconomics should be viewed more like biology than physics. “We do not expect a biologist to forecast how many squirrels will be alive in 10 years if we increase the number of trees in the United States by 20 percent. A biologist would laugh at you. But that is what people ask of economists all the time.”

But the economics profession is relied upon to provide clear policy guidance. The ability to provide it can affect how much attention a theory gets, Ohanian says. “During any kind of crisis or recession there are always many calls from many quarters for government to ‘do something.’ It’s really inconceivable that policymakers might say, ‘You know what, we don’t see that there’s anything we can do that we’re convinced is going to make things considerably better, so we’re going to sit in the sidelines,’” Ohanian says.

That means there are rewards of influence to those willing to overstate the certainty of their predictions, says David Colander of Middlebury College, a long-time critic of excess formalism in economics. “A lot of economists don’t do that, but unfortunately they’re not the ones who get reported in the newspaper and whose views get discussed,” he says. “My complaint about economics is that too often some groups of economists let other people think that we fully understand things that I don’t think we do. The honest economic scientist should be willing to say, ‘Scientifically we

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Does Math Make Fed Policy?

One doesn't often hear the complaint that economics is too heavy on math and theory coming from within policymaking bodies such as the Fed. A cynic could argue that's a matter of self-preservation. But those on the inside say it's because math and theory have an important, though measured, role in policy.

Economic models are used to run hypothetical policy experiments — analogous to what physicists do in a lab — the results of which provide some input on the likely path of important indicators like GDP, consumption, or employment in response to the question being asked.

How can models that rely on often unrealistic, simplified assumptions possibly be useful for real-world policy? With a fair amount of judgment. Briefings for Fed policy meetings entail many hours of discussion; if they were just about the output of models, they would be over quickly.

But judgment doesn't enter in where one might expect. The math that solves a model isn't much of a topic for debate since the tools are common and economists are generally confident in the algebraic abilities of their colleagues. The real action is in the base assumptions: the nature of constraints and trading opportunities facing consumers, producers, and policymakers in the simulated economy being represented by a model.

Economists ask whether the assumptions behind the model pass the "smell" test, and where a bit of homegrown judgment can fill in holes. That judgment is enlightened by real-world data; anecdotal insights from the Fed's business contacts (including labor and production decisions they face); bank examiners; discussions with other policymakers; and still other models, including types that rely more on mere data and less on theory and math. Those alternative sources help form opinions about which assumptions, and thus which models, are most likely to reflect how the economy currently functions in the unique situation being considered. When multiple models with believable assumptions start to produce comparable quantitative results, then economists become more confident in their predictions.

Why the need for simplifying assumptions at all? The U.S. economy consists of hundreds of millions of people, each with unique circumstances and motivations. Economists will never be able to capture that complexity in a single model. Yet if we thought there were no commonalities between people or across businesses, or that they made decisions randomly, there would not be much to study or explain. So right away economists have to assume some basic rules to get behind the "whys" of human behavior.

That's why many models — particularly ones that include the "microfoundations" of human behavior that are required to evaluate the effects of policy on individuals — get more mathematical as they include more real-world complexity. Math is the only language that is unambiguous. It is the only way to be clear to one's colleagues what complex

behaviors are being assumed, which is how they understand what drives the model's results and decide whether that is believable.

In 2001, economist Robert Lucas described working with Edward C. Prescott in the early 1970s on research that applied the rational expectations concept that would eventually win him a Nobel Prize. (Prescott would also become a Nobel Prize winner for related ideas.) The two economists were struggling to crack how labor markets are likely to respond to monetary policy. Lucas said:

Some days, perhaps weeks, later I arrived at the office around 9 and found a note from Ed in my mailbox. The full text was as follows:

"Bob, This is the way labor markets work:

$$v(s,y,\lambda) = \max \{ \lambda, R(s,y) + \min[\lambda, \beta] \int v(s',y,\lambda) f(s',s) ds' \}$$
. Ed"

The normal response to such note, I suppose, would have been to go upstairs to Ed's office and ask for some kind of explanation. But theoretical economists are not normal, and we do not ask for words that "explain" what equations mean. We ask for equations that explain what words mean.

From there, any difference of opinion between Lucas and Prescott could only lie in what either believed reasonable to assume about labor markets — not what "might" be true through the lens of ideology or bias. If they could agree on the structure of labor markets — agreement made possible by the clarity math provides — they could agree on the output of the model.

Because the public does not converse in this way, the nature of the often subtle debates between research economists rarely translates well to the public. For instance, the public discussion of many policies of the last few years, from quantitative easing to fiscal stimulus, was littered with estimates from economists of various stripes about the likely impacts on jobs and GDP, but with relatively little discussion of what each was assuming en route to their conclusions.

It's no wonder it can appear to outsiders as if economists could be laid end to end and still never reach a conclusion, as George Bernard Shaw allegedly quipped. Economists disagree on many policies, but would agree much more than laypeople might assume if they could first agree on starting assumptions, which, admittedly, is very difficult to do.

In that light, it is easy to see why new techniques are readily added to policymakers' broad toolkit, but new theories take much longer to be embraced. Policymakers tend to wait until an idea is well-established before using it as the basis for policy. In many ways, economist David Colander of Middlebury College says, actual policy today reflects innovations of a generation ago. "The younger people are pushing ... new models. But the policy that is used really reflects ... some Friedman, some Keynes, a whole variety of ideas," he says. "There's judgment."

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don't know, we're dealing with unfamiliar territory here.”

Unfortunately, he says, it would take a discipline-wide commitment to turn that around. The AEA recently considered adopting a code of ethics to induce economists to disclose any paid consultancies that could potentially sway their research conclusions. A better move, Colander says, would be for economists to have a culture that discourages people from purporting undue certainty in their predictions and explanations.

If there's a bottom line to recent criticisms of what economists study, Whaples says, it is that the fundamental dispute dates back at least a century. The consensus vacillates between those who say markets don't work well and that we need to put regulations on them, and those who point out the unintended side effects of government intervention and the fact that smart people will exploit

regulations. “That basic argument goes back and forth, around in a circle, forever,” Whaples says. “When we haven't had any crises for a while, the ‘markets work’ group will get stronger. And when we have a crisis the ‘markets don't work so well’ group will get stronger.”

Nobody can say which is right, he says; there are valid points to be made on both sides. “But there's always going to be that middle ground. The problem is, it's kind of wide.” The crisis may have helped narrow the question some: In what situations do markets work, and how does policy affect how markets function?

Economics is about the journey, not the destination; economists will never be “done” understanding the economy and human behavior. But the constant drive toward better understanding can only be a good thing for future economic thought. **RF**

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new normal. “I don't know — I'm waiting to see,” he says.

Temp work is an important part of the flexibility that is one of the U.S. economy's great strengths. “In the long run, this flexibility helps make our country more competitive, it

increases living standards, it lowers prices for goods,” Groshen says. “But in the short run, there can be high costs to the workers involved — the costs are very concentrated, while the benefits are diffuse.” **RF**

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