

How did Paul Krugman get it so Wrong?

John H. Cochrane¹

September 16, 2009

Many friends and colleagues have asked me what I think of Paul Krugman's New York Times Magazine article, "[How did Economists get it so wrong?](#)"

Most of all, it's sad. Imagine this weren't economics for a moment. Imagine this were a respected scientist turned popular writer, who says, most basically, that everything everyone has done in his field since the mid 1960s is a complete waste of time. Everything that fills its academic journals, is taught in its PhD programs, presented at its conferences, summarized in its graduate textbooks, and rewarded with the accolades a profession can bestow, including multiple Nobel prizes, is totally wrong. Instead, he calls for a return to the eternal verities of a rather convoluted book written in the 1930s, as taught to our author in his undergraduate introductory courses. If a scientist, he might be a global-warming skeptic, an AIDS-HIV disbeliever, a creationist, a stalwart that maybe continents don't move after all.

It gets worse. Krugman hints at dark conspiracies, claiming "dissenters are marginalized." Most of the article is just a calumnious personal attack on an ever-growing enemies list, which now includes "new Keynesians" such as Olivier Blanchard and Greg Mankiw. Rather than source professional writing, he plays gotcha with out-of-context second-hand quotes from media interviews. He makes stuff up, boldly putting words in people's mouths that run contrary to their written opinions. Even this isn't enough: he adds cartoons to try to make his "enemies" look silly, and puts them in false and embarrassing situations. He accuses us of adopting ideas for pay, selling out for "sabbaticals at the Hoover institution" and fat "Wall street paychecks." It sounds a bit paranoid.

It's annoying to the victims, but we're big boys and girls. It's a disservice to New York Times readers. They depend on Krugman to read real academic literature and digest it, and they get this attack instead. And it's ineffective. Any astute reader knows that personal attacks and innuendo mean the author has run out of ideas.

That's the biggest and saddest news of this piece: Paul Krugman has no interesting ideas whatsoever about what caused our current financial and economic problems, what policies might have prevented it, or what might help us in the future, and he has no contact with people who do. "Irrationality" and advice to spend like a drunken sailor are pretty superficial compared to all the fascinating things economists are writing about it these days.

How sad.

¹ University of Chicago Booth School of Business. Many colleagues and friends helped, but I don't want to name them for obvious reasons. Krugman fans: Please don't bother emailing me to tell me what a jerk I am. I will update this occasionally, so please pass on the link rather than the document, <http://faculty.chicagobooth.edu/john.cochrane/research/Papers/#news>.

That's what I think, but I don't expect you the reader to be convinced by my opinion or my reference to professional consensus. Maybe he is right. Occasionally sciences, especially social sciences, do take a wrong turn for a decade or two. I thought Keynesian economics was such a wrong turn. So let's take a quick look at the ideas.

Krugman's attack has two goals. First, he thinks financial markets are "inefficient," fundamentally due to "irrational" investors, and thus prey to excessive volatility which needs government control. Second, he likes the huge "fiscal stimulus" provided by multi-trillion dollar deficits.

Efficiency.

It's fun to say we didn't see the crisis coming, but the central empirical prediction of the efficient markets hypothesis is precisely that nobody can tell where markets are going – neither benevolent government bureaucrats, nor crafty hedge-fund managers, nor ivory-tower academics. This is probably the best-tested proposition in all the social sciences. Krugman knows this, so all he can do is huff and puff about his dislike for a theory whose central prediction is that nobody can be a reliable soothsayer.

Krugman writes as if the volatility of stock prices alone disproves market efficiency, and efficient marketers just ignored it all these years. This is a canard that Paul knows better than to pass on, no matter how rhetorically convenient. (I can overlook his mixing up the CAPM and Black-Scholes model, but not this.) There is nothing about "efficiency" that promises "stability." "Stable" growth would in fact be a major violation of efficiency. Efficient markets did not need to wait for "the memory of 1929 ... gradually receding," nor did we fail to read the newspapers in 1987. Data from the great depression has been included in practically all the tests. In fact, the great "equity premium puzzle" is that if efficient, stock markets don't seem risky *enough* to deter more people from investing! Gene Fama's PhD thesis was on "fat tails" in stock returns.

It is true and very well documented that asset prices move more than reasonable expectations of future cashflows. This might be because people are prey to bursts of irrational optimism and pessimism. It might also be because people's willingness to take on risk varies over time, and is lower in bad economic times. As Gene Fama pointed out in 1970, these are observationally equivalent explanations. Unless you are willing to elaborate your theory to the point that it can quantitatively describe *how much* and *when* risk premiums, or waves of "optimism" and "pessimism," can vary, you know nothing. No theory is particularly good at that right now.

Crying "bubble" is empty unless you have an operational procedure for identifying bubbles, distinguishing them from rationally low risk premiums, and not crying wolf too many years in a row. Krugman rightly praises Robert Shiller for his warnings over many years that house prices might fall. But advice that we should listen to Shiller, because he got the last one right, is no more useful than previous

advice from many quarters to listen to Greenspan because he got several ones right. Following the last mystic oracle until he gets one wrong, then casting him to the wolves, is not a good long-term strategy for identifying bubbles. Krugman likes Shiller because he advocates behavioral ideas, but that's no help either. People who call themselves behavioral have just as wide a divergence of opinion as those who don't. Are markets irrationally exuberant or irrationally depressed? It's hard to tell.

This difficulty is no surprise. It's the central prediction of free-market economics, as crystallized by Hayek, that no academic, bureaucrat or regulator will ever be able to fully explain market price movements. Nobody knows what "fundamental" value is. If anyone could tell what the price of tomatoes should be, let alone the price of Microsoft stock, communism would have worked.

More deeply, the economist's job is not to "explain" market fluctuations after the fact, to give a pleasant story on the evening news about why markets went up or down. Markets up? "A wave of positive sentiment." Markets went down? "Irrational pessimism." ("The risk premium must have increased" is just as empty.) Our ancestors could do that. Really, is that an improvement on "Zeus had a fight with Apollo?" Good serious behavioral economists know this, and they are circumspect in their explanatory claims so far.

But this argument takes us away from the main point. The case for free markets never was that markets are perfect. The case for free markets is that government control of markets, especially asset markets, has always been much worse.

Krugman at bottom is arguing that the government should massively intervene in financial markets, and take charge of the allocation of capital. He can't quite come out and say this, but he does say "Keynes considered it a very bad idea to let such markets...dictate important business decisions," and "finance economists believed that we should put the capital development of the nation in the hands of what Keynes had called a 'casino.'" Well, if markets can't be trusted to allocate capital, we don't have to connect too many dots to imagine who Paul has in mind.

To reach this conclusion, you need evidence, experience, or any realistic hope that the alternative will be better. Remember, the SEC couldn't even find Bernie Madoff when he was handed to them on a silver platter. Think of the great job Fannie, Freddie, and Congress did in the mortgage market. Is this system going to regulate Citigroup, guide financial markets to the right price, replace the stock market, and tell our society which new products are worth investment? As David Wessel's excellent *In Fed We Trust* makes perfectly clear, government regulators failed just as abysmally as private investors and economists to see the storm coming. And not from any lack of smarts.

In fact, the behavioral view gives us a new and stronger argument *against* regulation and control. Regulators are just as human and irrational as market participants. If bankers are, in Krugman's words, "idiots," then so must be the typical treasury secretary, fed chairman, and regulatory staff. They act alone or in committees, where behavioral biases are much better documented than in market settings. They are still easily captured by industries, and face politically distorted incentives.

Careful behavioralists know this, and do not quickly run from “the market got it wrong” to “the government can put it all right.” Even my most behavioral colleagues Richard Thaler and Cass Sunstein in their book “Nudge” go only so far as a light libertarian paternalism, suggesting good default options on our 401(k) accounts. (And even here they’re not very clear on how the Federal Nudging Agency is going to steer clear of industry capture.) They don’t even think of jumping from irrational markets, which they believe in deeply, to Federal control of stock and house prices and allocation of capital.

Stimulus

Most of all, Krugman likes fiscal stimulus. In this quest, he accuses us and the rest of the economics profession of “mistaking beauty for truth.” He’s not clear on what the “beauty” is that we all fell in love with, and why one should shun it, for good reason. The first siren of beauty is simple logical consistency. Paul’s Keynesian economics requires that people make logically inconsistent plans to consume more, invest more, and pay more taxes with the same income. The second siren is plausible assumptions about how people behave. Keynesian economics requires that the government is able to systematically fool people again and again. It presumes that people don’t think about the future in making decisions today. Logical consistency and plausible foundations are indeed “beautiful” but to me they are also basic preconditions for “truth.”

In economics, stimulus spending ran aground on Robert Barro’s Ricardian equivalence theorem. This theorem says that debt-financed spending can’t have any effect because people, seeing the higher future taxes that must pay off the debt, will simply save more. They will buy the new government debt and leave all spending decisions unaltered. Is this theorem true? It’s a logical connection from a set of “if” to a set of “therefore.” Not even Paul can object to the connection.

Therefore, we have to examine the “ifs.” And those ifs are, as usual, obviously not true. For example, the theorem presumes lump-sum taxes, not proportional income taxes. Alas, when you take this into account we are all made poorer by deficit spending, so the multiplier is most likely negative. The theorem (like most Keynesian economics) ignores the composition of output; but surely spending money on roads rather than cars can affect the overall level.

Economists have spent a generation tossing and turning the Ricardian equivalence theorem, and assessing the likely effects of fiscal stimulus in its light, generalizing the “ifs” and figuring out the likely “therefores.” This is exactly the right way to do things. The impact of Ricardian equivalence is not that this simple abstract benchmark is literally true. The impact is that in its wake, if you want to understand the effects of government spending, you have to specify why it is false. Doing so does not lead you anywhere near old-fashioned Keynesian economics. It leads you to consider distorting taxes, how much people care about their children, how many people would like to borrow more to finance today’s consumption and so on. And when you find “market failures” that might justify a multiplier, optimal-policy analysis suggests fixing the market failures, not their exploitation by fiscal multiplier. Most “New Keynesian” analyses that add frictions don’t produce big multipliers.

This is how real thinking about stimulus actually proceeds. *Nobody ever* “asserted that an increase in government spending cannot, under any circumstances, increase employment.” This is unsupported by any serious review of professional writings, and Krugman knows it. (My own are perfectly clear on lots of possibilities for an answer that is not zero.) But thinking through this sort of thing and explaining it is much harder than just tarring your enemies with out-of-context quotes, ethical innuendo, or silly cartoons.

In fact, I propose that Krugman himself doesn’t really believe the Keynesian logic for that stimulus. I doubt he would follow that logic to its inevitable conclusions. Stimulus must have some other attraction to him.

If you believe the Keynesian argument for stimulus, you should think Bernie Madoff is a hero. He took money from people who were saving it, and gave it to people who most assuredly were going to spend it. Each dollar so transferred, in Krugman’s world, generates an additional dollar and a half of national income. The analogy is even closer. Madoff didn’t just take money from his savers, he essentially borrowed it from them, giving them phony accounts with promises of great profits to come. This looks a lot like government debt.

If you believe the Keynesian argument for stimulus, you don’t care how the money is spent. All this puffery about “infrastructure,” monitoring, wise investment, jobs “created” and so on is pointless. Keynes thought the government should pay people to dig ditches and fill them up.

If you believe in Keynesian stimulus, you don’t even care if the government spending money is stolen. Actually, that would be better. Thieves have notoriously high propensities to consume.

The crash.

Krugman’s article is supposedly about how the crash and recession changed our thinking, and what economics has to say about it. The most amazing news in the whole article is that Paul Krugman has absolutely no idea about what caused the crash, what policies might have prevented it, and what policies we should adopt going forward. He seems completely unaware of the large body of work by economists who actually do know something about the banking and financial system, and have been thinking about it productively for a generation.

Here’s all he has to say: “Irrationality” caused markets to go up and then down. “Spending” then declined, for unclear reasons, possibly “irrational” as well. The sum total of his policy recommendations is for the Federal Government to spend like a drunken sailor after the fact.

Paul, there was a *financial* crisis, a classic near-run on banks. The centerpiece of our crash was not the relatively free stock or real estate markets, it was the highly regulated commercial banks. A generation of economists has thought really hard about these kinds of events. Look up Diamond, Rajan, Gorton, Kashyap, Stein, and so on. They’ve thought about why there is so much short term debt, why banks run,

how deposit insurance and credit guarantees help, and how they give incentives for excessive risk taking.

If we want to think about events and policies, this seems like more than a minor detail. The hard and central policy debate over the last year was how to manage this *financial* crisis. Now it is how to set up the incentives of banks and other financial institutions so this mess doesn't happen again. There's lots of good and subtle economics here that New York Times readers might like to know about. What does Krugman have to say? Zero.

Krugman doesn't even have anything to say about the Fed. Ben Bernanke did a lot more last year than set the funds rate to zero and then go off on vacation and wait for fiscal policy to do its magic. Leaving aside the string of bailouts, the Fed started term lending to securities dealers. Then, rather than buy treasuries in exchange for reserves, it essentially sold treasuries in exchange for private debt. Though the funds rate was near zero, the Fed noticed huge commercial paper and securitized debt spreads, and intervened in those markets. There is no "the" interest rate anymore, the Fed is attempting to manage them all. Recently the Fed has started buying massive quantities of mortgage-backed securities and long-term treasury debt.

Monetary policy now has little to do with "money" vs. "bonds" with all the latter lumped together. Monetary policy has become wide-ranging *financial* policy. Does any of this work? What are the dangers? Can the Fed stay independent in this new role? These are the questions of our time. What does Krugman have to say? Nothing.

Krugman is trying to say that a cabal of obvious crackpots bedazzled all of macroeconomics with the beauty of their mathematics, to the point of inducing policy paralysis. Alas, that won't stick. The sad fact is that few in Washington pay the slightest attention to modern macroeconomic research, in particular anything with a serious intertemporal dimension. Paul's simple Keynesianism has dominated policy analysis for decades and continues to do so. From the CEA to the Fed to the OMB and CBO, everyone just adds up consumer, investment and government "demand" to forecast output and uses simple Phillips curves to think about inflation. If a failure of ideas caused bad policy, it's a simpleminded Keynesianism that failed.

The future of economics.

How should economics change? Krugman argues for three incompatible changes.

First, he argues for a future of economics that "recognizes flaws and frictions," and incorporates alternative assumptions about behavior, especially towards risk-taking. To which I say, "Hello, Paul, where have you been for the last 30 years?" Macroeconomists have not spent 30 years admiring the eternal verities of Kydland and Prescott's 1982 paper. Pretty much all we have been doing for 30 years is introducing flaws, frictions and new behaviors, especially new models of attitudes to risk, and

comparing the resulting models, quantitatively, to data. The long literature on financial crises and banking which Krugman does not mention has also been doing exactly the same.

Second, Krugman argues that “a more or less Keynesian view is the only plausible game in town,” and “Keynesian economics remains the best framework we have for making sense of recessions and depressions.” One thing is pretty clear by now, that when economics incorporates flaws and frictions, the result will not be to rehabilitate an 80-year-old book. As Paul bemoans, the “new Keynesians” who did just what he asks, putting Keynes inspired price-stickiness into logically coherent models, ended up with something that looked a lot more like monetarism. (Actually, though this is the consensus, my own work finds that new-Keynesian economics ended up with something much different and more radical than monetarism.) A science that moves forward almost never ends up back where it started. Einstein revises Newton, but does not send you back to Aristotle. At best you can play the fun game of hunting for inspirational quotes, but that doesn’t mean that you could have known the same thing by just reading Keynes once more.

Third, and most surprising, is Krugman’s Luddite attack on mathematics; “economists as a group, mistook beauty, clad in impressive-looking mathematics, for truth.” Models are “gussied up with fancy equations.” I’m old enough to remember when Krugman was young, working out the interactions of game theory and increasing returns in international trade for which he won the Nobel Prize, and the old guard tut-tutted “nice recreational mathematics, but not real-world at all.” He once [wrote](#) eloquently about how only math keeps your ideas straight in economics. How quickly time passes.

Again, what is the alternative? Does Krugman really think we can make progress on his – and my – agenda for economic and financial research -- understanding frictions, imperfect markets, complex human behavior, institutional rigidities – by reverting to a literary style of exposition, and abandoning the attempt to compare theories quantitatively against data? Against the worldwide tide of quantification in all fields of human endeavor (read “Moneyball”) is there any real hope that this will work in economics?

No, the problem is that we don’t have *enough* math. Math in economics serves to keep the logic straight, to make sure that the “then” really does follow the “if,” which it so frequently does not if you just write prose. The challenge is how hard it is to write down explicit artificial economies with these ingredients, actually solve them, in order to see what makes them tick. Frictions are just bloody hard with the mathematical tools we have now.

The insults.

The level of personal attack in this article, and fudging of the facts to achieve it, is simply amazing.

As one little example (ok, I’m a bit sensitive), take my quotation about carpenters in Nevada. I didn’t write this. It’s a quote, taken out of context, from a bloomberg.com article, written by a reporter who I

spent about 10 hours with patiently trying to explain some basics, and who also turned out only to be on a hunt for embarrassing quotes. (It's the last time I'll do that!) I was trying to explain how sectoral shifts contribute to unemployment. Krugman follows it by a lie -- I never asserted that "it take mass unemployment across the whole nation to get carpenters to move out of Nevada." You can't even dredge up a quote for that monstrosity.

What's the point? I don't think Paul disagrees that sectoral shifts result in some unemployment, so the quote actually makes sense as economics. The only point is to make me, personally, seem heartless -- a pure, personal, calumnious attack, having nothing to do with economics.

Bob Lucas has written extensively on Keynesian and monetarist economics, sensibly and even-handedly. Krugman chooses to quote a joke, made back in 1980 at a lunch talk to some business school alumni. Really, this is on the level of the picture of Barack Obama with Bill Ayres that Sean Hannity likes to show on Fox News.

It goes on. Krugman asserts that I and others "believe" "that an increase in government spending cannot, under any circumstances, increase employment," or that we "argued that price fluctuations and shocks to demand actually had nothing to do with the business cycle." These are just gross distortions, unsupported by any documentation, let alone professional writing. And Krugman knows better. All economic models are simplified to exhibit one point; we all understand the real world is more complicated; and his job is supposed to be to explain that to lay readers. It would be no different than if someone were to look up Paul's early work which assumed away transport costs and claim "Paul Krugman believes ocean shipping is free, how stupid" in the Wall Street Journal.

The idea that any of us do what we do because we're paid off by fancy Wall Street salaries or cushy sabbaticals at Hoover is just ridiculous. (If Krugman knew anything about hedge funds he'd know that believing in efficient markets *disqualifies* you for employment. Nobody wants a guy who thinks you can't make any money trading!) Given Krugman's speaking fees, it's a surprising first stone for him to cast.

Apparently, salacious prose, innuendo, calumny, and selective quotation from media aren't enough: Krugman added cartoons to try to make opponents look silly. The Lucas-Blanchard-Bernanke conspiratorial cocktail party celebrating the end of recessions is a silly fiction. So is their despondent gloom on reading "recession" in the paper. Nobody at a conference looks like Dr. Pangloss with wild hair and a suit from the 1800s. (OK, Randy Wright has the hair, but not the suit.) Keynes did not reappear at the NBER to be booed as an "outsider." Why are you allowed to make things up in pictures that wouldn't pass even the Times' weak fact-checking in words?

Most of all, Paul isn't doing his job. He's supposed to read, explain, and criticize things economists write, and real professional writing, not interviews, opeds and blog posts. At a minimum, this style leads to the unavoidable conclusion that Krugman isn't reading real economics anymore.

How did Krugman get it so wrong?

So what is Krugman up to? Why become a denier, a skeptic, an apologist for 70 year old ideas, replete with well-known logical fallacies, a pariah? Why publish an essentially personal attack on an ever-growing enemies list that now includes practically every professional economist? Why publish an incoherent vision for the future of economics?

The only explanation that makes sense to me is that Krugman isn't trying to be an economist, he is trying to be a partisan, political opinion writer. This is not an insult. I read George Will, Charles Krauthammer and Frank Rich with equal pleasure even when I disagree with them. Krugman wants to be Rush Limbaugh of the Left.

Alas, to Krugman, as to far too many ex-economists in partisan debates, economics is not a quest for understanding. It is a set of debating points to argue for policies that one has adopted for partisan political purposes. "Stimulus" is just marketing to sell Congressmen and voters on a package of government spending priorities that you want for political reasons. It's not a proposition to be explained, understood, taken seriously to its logical limits, or reflective of market failures that should be addressed directly.

Why argue for a nonsensical future for economics? Well, again, if you don't regard economics as a science, a discipline that ought to result in quantitative matches to data, a discipline that requires crystal-clear logical connections between the "if" and the "then," if the point of economics is merely to provide marketing and propaganda for politically-motivated policy, then his writing does make sense. It makes sense to appeal to some future economics – not yet worked out, even verbally – to disdain quantification and comparison to data, and to appeal to the authority of ancient books as interpreted you, their lone remaining apostle.

Most of all, this is the only reason I can come up with to understand why Krugman wants to write personal attacks on those who disagree with him. I *like* it when people disagree with me, and take time to read my work and criticize it. At worst I learn how to position it better. At best, I discover I was wrong and learn something. I send a polite thank you note.

Krugman wants people to swallow his arguments whole from his authority, without demanding logic, or evidence. Those who disagree with him, alas, are pretty smart and have pretty good arguments if you bother to read them. So, he tries to discredit them with personal attacks.

This is the political sphere, not the intellectual one. Don't argue with them, swift-boat them. Find some embarrassing quote from an old interview. Well, good luck, Paul. Let's just not pretend this has anything to do with economics, or actual truth about how the world works or could be made a better place.