

# A Crisis of Understanding

Robert J. Shiller, 12 March 2010, [project-syndicate.org](http://project-syndicate.org)

NEW HAVEN – Few economists predicted the current economic crisis, and there is little agreement among them about its ultimate causes. So, not surprisingly, economists are not in a good position to forecast how quickly it will end, either.

Of course, we all know the proximate causes of an economic crisis: people are not spending, because their incomes have fallen, their jobs are insecure, or both. But we can take it a step further back: people's income is lower and their jobs are insecure because they were not spending a short time ago – and so on, backwards in time, in a repeating feedback loop.

It is a vicious circle, but where and why did it start? Why did it worsen? What will reverse it? It is to these questions that economists have been unable to offer clear answers.

The state of economic knowledge was just as bad in the Great Depression that followed the 1929 stock market crash. Economists did not predict that event, either. In the 1920's, some warned about an overpriced stock market, but they did not predict a decade-long depression affecting the entire economy.

Late in the Great Depression, in August 1938, an article by Ralph M. Blagden in *The Christian Science Monitor* reported an informal set of interviews with US “professors, banking experts, union leaders, and representatives of business associations and political factions,” all of whom were given the same question: “What causes recessions?” The multiplicity of answers seemed bewildering, and did not inspire confidence that anyone knew what was causing the deepest crisis of capitalism.

The causes given were “distributed widely among government, labor, industry, international politics and policies.” They included misguided government interference with markets, high income and capital gains taxes, mistaken monetary policy, pressures towards high wages, monopoly, overstocked inventories, uncertainty caused by the reorganization plan for the Supreme Court, rearmament in Europe and fear of war, government encouragement of labor disputes, a savings glut because of population shrinkage, the passing of the frontier, and easy credit before the depression.

Although economic theory today is much improved, if we ask people about the cause of the current crisis, we will mostly get the same answers. We would certainly hear some new ones, too: unprecedented real-estate bubbles, a global savings glut, international trade imbalances, exotic financial contracts, sub-prime mortgages, unregulated over-the-counter markets, rating agencies' errors, compromised real-estate appraisals, and complacency about counterparty risk.

More likely than not, many or most of these people would be mostly or partly right, for the economic crisis was caused by a confluence of many factors, the chance co-occurrence of a lot of bad things, which pushed the financial system beyond its breaking point. At that point, the trouble grabbed widespread attention, destroyed public confidence, and set in motion a negative feedback loop.

Our attention, after all, is naturally drawn to the worst events. Precisely because the worst events are statistical outliers, their causes are probably multiple.

Consider the question of predicting events like the January 2010 earthquake in Haiti, which killed more than 200,000 people. It captured our attention because it was so bad in terms of lives and property damage. But if one went beyond trying to predict the occurrence of earthquakes to predicting the extent of the damage, one could surely devise a long list of contributing factors – including even political, financial, and insurance factors – that resembles the list of factors that caused the global economic crisis.

Indeed, the crisis knows no end to the list of its causes. For, in a complicated economic system that feeds back on itself in many ways, events that start a vicious cycle might be as seemingly trivial as the proverbial butterfly in the Amazon, which, by flapping its wings, sets off a chain of events that eventually results in a far-away hurricane. Chaos theory in mathematics explains such dependency on remote and seemingly trivial initial conditions, and explains why even the extrapolation of apparently precise planetary motion becomes impossible when taken far enough into the future.

Weather forecasters cannot forecast far into the future, either, but at least they have precise mathematical models. Massive parallel computers are programmed to yield numerical solutions of differential equations derived from the theory of fluid dynamics and thermodynamics. Scientists appear to know the mechanism that generates weather, even if it is inherently difficult to extrapolate very far.

The problem for macroeconomics is that the types of causes mentioned for the current crisis are difficult to systematize. The mathematical models that macroeconomists have may resemble weather models in some respects, but their structural integrity is not guaranteed by anything like a solid, immutable theory.

The most important new book about the origins of the economic crisis, Carmen Reinhart's and Kenneth Rogoff's *This Time Is Different*, is essentially a summary of lessons learned from virtually every financial crisis in every country in recorded history. But the book is almost entirely non-theoretical. It merely documents recurrent patterns. Unfortunately, in 800 years of financial history, there is only one example of a really massive worldwide contraction, namely the Great Depression of the 1930's. So it is hard to know exactly what to expect in the current contraction based on the Reinhart-Rogoff analysis.

This leaves us trying to use patterns from past, dissimilar crises to try to infer the likely prognosis for the current crisis. As a result, we simply do not know if the recovery will be solid or disappointing.

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