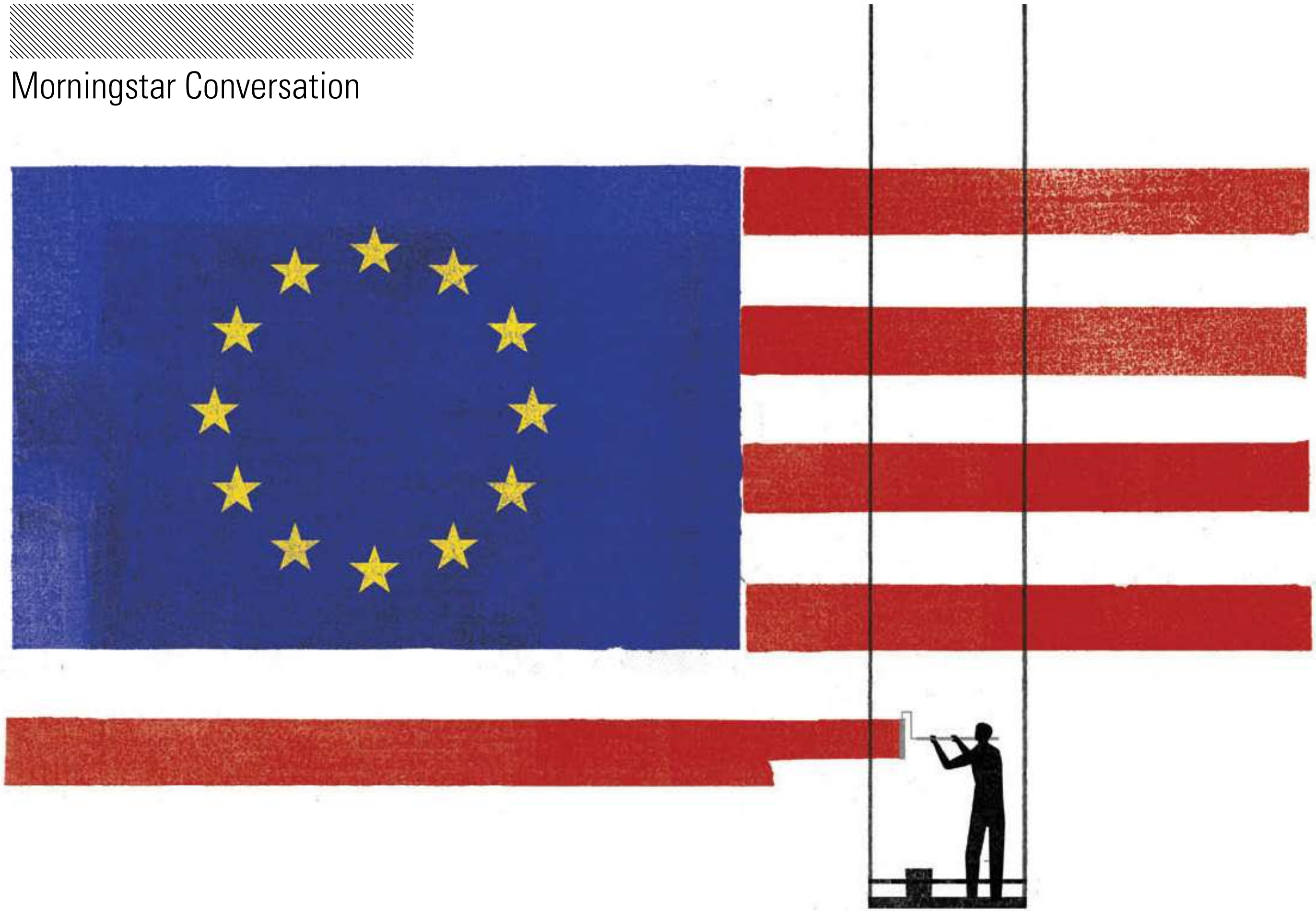

An Economist's Response to Crises

By Francisco Torralba

Nobel-winner Thomas Sargent discusses the economic effects of policy responses to crises in Europe and the United States.

Macroeconomists have a really tough job. They do not have the luxury of empirically testing theories as many times as needed, under controlled conditions, the way physicists or biologists do. Instead, most of the time they rely on noisy data, gathered over decades, and from which cause and effect are not inferred easily, if at all.

Thomas Sargent, a professor at New York University, earned the 2011 Nobel prize in economic sciences—with Christopher Sims—doing something really hard. He developed models of the macroeconomy based on deep, microeconomic factors that do not change with economic policy. Using those models, Sargent was able to show that expected monetary growth will not do much for output because it does not fool people.

Most of Sargent's work involves serious math (which I know firsthand after taking his class when he was visiting the University of Chicago). But he has also produced very readable work on economic history, such as "The Ends of Four Big Inflations" (1981) and *The Big Problem of Small Change* (Princeton University Press, 2002). Sargent gave the keynote address on Feb. 23 at the 2012 Morningstar Ibbotson Conference. Before his speech, we sat down to discuss inflation, unemployment, and the European crisis. Our discussion has been edited for clarity and length.

The Fiction of an Independent Fed

Francisco Torralba: People are worried in the United States about the possible

inflationary effects of what the Fed is doing. In one of your best-known papers, "Some Unpleasant Monetarist Arithmetic," with Neil Wallace, you talk about the interplay between monetary and fiscal policy and how inflation is actually determined by both.

Thomas Sargent: Yes. There's a fiction—it may be a useful fiction, but nevertheless economically it's a fiction—that we have an independent monetary authority, an independent Fed, and that we have an independent fiscal authority, which is the Congress and the president. But the facts are that Congress and the president determine taxes and government expenditures—or they determine the laws that determine those. Some government expenditures and some taxes depend on the state of the economy. But given that taxes and expenditures are set by the Congress and the president and that taxes and expenditures don't have to be equal, government expenditures can exceed taxes. What happens then is that the government borrows.

Say we were on a gold standard, which means that we did not have a monetary authority and we were basically using a foreign currency. The government budget, while it could be unbalanced in a given year, then would have to be balanced in the present value sense. The reason is, when we floated bonds, the bondholders would want some insurance that they were going to be paid. The only way they can be paid is if the government runs surpluses in the future and uses the surplus to pay off the bonds.

But we're not on a gold standard. We're on a fiat money standard. And when you're on a fiat money standard, what determines the value of this un-backed piece of paper? It's the implicit promise of the people who print the paper that they're not going to print too much. So what's been done in the United States is management of the stock of money has been handed to an "independent agency"—the Federal Reserve—that, roughly speaking, determines how much un-backed currency is printed up.

And when you're in a fiat money system, it's no longer true that the government budget has to be balanced in the present value sense—just with explicit taxes covering the deficit—because the Federal Reserve can raise revenues by printing money.

When it prints too much money, we get inflation, but nevertheless it raises revenues. It's an additional source. It's as old as the hills. You print money. And now the control of that is supposedly under the Fed. So is the Fed really independent? The answer is, if you take the government budget constraint out, it can't be. The reason is because now what you get is government debt backed by, well, not only the present value of explicit taxes, but also the present value of the inflation tax.

And it's gotten worse in the recent years, after the crisis. Additional powers were given to the Federal Reserve, which were basically fiscal powers. It's an immense power. The Fed now has the ability to pay interest on reserves to banks. You have to ask, how are we going to finance those payments of interest on reserves? Ultimately, it's going to be tax collections.

Torralba: Mechanically, if you look at the equation that describes the inter-temporal change of sovereign debt, there's essentially four ways that a country can reduce or increase its debt. It can reduce its deficit, it can increase growth, it can have inflation, or it can reduce its debt by defaulting.

Sargent: Yes, and there's one more. You can have an angel like Germany bail you out.

Torralba: Yes (laughter). Going forward, then, I think many people are worried about the explosive path on which U.S. debt is. Considering the political constraints that we have, what is the optimal solution, and what solution do you think we'll actually get?

Sargent: I'm going to paraphrase the situation. It's actually one of my pet peeves. You'll hear the phrase "U.S. fiscal policy is unsustainable." What that means is, if you actually go look at the promises that have been made—meaning the status quo legislation—Medicare is on a path, Social Security is on a path. Well, *those* programs are unsustainable.

But what that's telling you is that they're not credible, because the government budget constraint is going to make them credible. They're going to balance. Government budgets balance. So what that means is that some of those promises are going to be broken. This is the macroeconomics of broken promises. And everyone knows that. But this is actually creating uncertainty, because to reach the resolution, what is going to give? Are expenditures going to come down? Which ones? Are entitlements going to come down? Entitlements to whom? Are taxes going to go up? If so, which taxes? There's going to be winners and losers.

I'm absolutely sure that either taxes are going to go up or expenditures are going to go down, or some combination. One way taxes can go up is defaults. That's taxing somebody who's holding your debt.

Torralba: Would you then rule out inflation?

Sargent: No, I wouldn't rule out inflation. Inflation is a thief in the night. And one thing it avoids is the courts. There's no recourse. But it creates winners and losers—massive winners and losers. It's a sneaky redistribution.

You know, we can't be too insular. There are lots of examples, and we don't even have to leave our hemisphere. In Latin America, there's been country after country that has had explosive debt paths, and they have had inflation—Brazil, Argentina.

A Force for Inflation

Torralba: We are in a situation of slow growth. Short-term interest rates are essentially zero and Congress seems not to be too willing

to increase the deficit. From a policy point of view, what is your diagnostic of why we have such low growth? What would be the appropriate policies to steer the U.S. economy toward higher growth?

Sargent: I'm going to appeal to some empirical evidence. There's massive evidence that most business cycles aren't associated with a financial crisis, a banking crisis, or an exchange crisis. With recessions that are not associated with a banking crisis, recoveries tend to be quite fast. That's fact number one.

Fact number two is, if there's been a banking crisis, the evidence is the real economy recovers very slowly. So we are right on track with that.

Thomas Sargent

Torralba: Essentially what Carmen Reinhart and Ken Rogoff say in *This Time Is Different*.

Sargent: Yes, they say it, but other people said it before them. It's in *Understanding Financial Crises*, a wonderful book by Douglas Gale and Franklin Allen. It's all there in the data, and we're right on track. When the banking system gets messed up, all sorts of financial constraints that weren't operating in normal times start operating. Banks and financial intermediaries can't do what they're supposed to do.

The banks have to get in better shape. They won't say this, because the Fed's under a lot of political pressure, but a big part of the low interest-rate policy of the Fed is designed to repair banks' balance sheets—but at the cost of harming people like my father, who are dependent on interest rates on safe assets.

By the way, there are other ways to do it. There is a smooth way to do it that's been done before—and you don't say this in public—but it's to have a very rapid inflation. If you do some calculations, what a fast inflation does that's unanticipated is that it transfers resources from creditors to debtors. It writes down debts smoothly.

If the whole price level jumps up and the value of real assets go up, lots of balance sheets that are in bad shape would be repaired. Lots of people who thought they owned assets would lose them, but in a way, this massive redistribution would repair the state of a lot of financial institutions. It would solve the mortgage crisis. It's been done before. Hong Kong did it in 1983.

Torralba: What would a quick episode of inflation be like?

Sargent: We're doing theory, OK? It isolates a pressure that's there for inflation. Everybody knows this. Olivier Blanchard [chief economist of the International Monetary Fund] said a little bit of this, and he got hammered. But an example would be, just do it, a 30% jump in the price level.

People say that would be difficult to do. No, it wouldn't. You could figure out how to do it very fast. All prices go up by 30%. Just check what that does to your balance sheet. Your house, even if the real value is down, your house goes up by 30%. Your mortgage, which is nominal, stays where it was. You're suddenly over water. All those mortgage-backed securities that were underwater, they're fine.

It's a hypothetical experiment, but it identifies a pressure for inflation. I'm speaking theoretically, but the quote-unquote "advantage" of this is that the courts will say a dollar is a dollar. There are no disputes.

Torralba: But governments have to be careful with how they handle inflation. It's in your paper "The Ends of Four Big Inflations." What does the government need to be careful about when it allows inflation to rise?

Sargent: That is the question. The answer is what dominates policymakers' response to this crisis. There's some history of this. Go back 100 years. At that time, the world's on a gold standard, which is about to be threatened because World War I is about to start. But almost every academic in a monetary authority said that gold standard's the only way to go. "You just can't print money. It's off the table."

In the meantime, there were these scholars—Irving Fisher and John Maynard Keynes—who said, "Well, actually, theoretically you could do better than the gold standard." They said you could have a *well-managed* fiat standard and you just use the quantity theory of money and limit the quantity of money. That could be a replacement for the gold standard. You could actually get more stable prices.

So the short story is that the experiment was done. We went off the gold standard. And if you look at what happened to prices in the 20th century, the fiat money standard was not *well managed*. You got explosions in prices, not just in Latin American countries, but in so-called hard-currency countries. It took 70 years to "learn how to run" a managed fiat system.

What we got to is a period of inflation targeting. But it took the world a long time, and it was a struggle. In the 1970s and '80s, one country after the other beat inflation basically by applying those principles that I wrote about in "Four Big Inflations." There was a great struggle to avoid inflation. And now, just when inflation targeting has come into being, we've created a culture in central banks in which no one will talk about generating inflation.

We've created what Barry Eichengreen calls "golden fetters" for the gold standard. We've basically created a simulated gold standard that's restricting our ability to use inflation to get out of these debts. It's a big conflict.

Torralba: It definitely would be an uphill battle to convince monetary policymakers in Europe to allow higher inflation.

Sargent: They won't do it. You hear it over and over again—the Germans will not tolerate inflation, because they've been through two big ones. And it is true. I can say technically I'm going to have a 30% jump and then flat. That's perfect management. What these policymakers know and fear is that once it starts it'll be very hard to end. They're probably right about that. But nevertheless, the experiment does identify a force for inflation.

The Unemployment Trap

Torralba: Another consequence of the big contraction in 2008 was a high rate of unemployment and long unemployment duration. You have done some work with Lars Ljungqvist about this in the European context, but I'm sure some of it can be extrapolated to the United States. What is most concerning about the long duration of unemployment?

Sargent: I hope what Lars and I did for Europe is not relevant for the United States. But I fear it may be. It's a trap that you have to be aware of. Lars and I asked: Why is it true that in Europe—until 2008—many European countries had systematically higher unemployment than the United States over the past 30 years? Germany, France, Sweden—most countries were having unemployment rates of 10% or 12%, not just in recessions but in boom times, year in and year out. Some people say it's just kids unemployed. That's not true. Lots of the unemployment is people over 50. So why?

Well, one superficial reason you can give is that they have more generous unemployment benefits. The replacement rate—the unemployment you get as a fraction of your previous wage—is higher in Europe than in the United States. And the duration is longer. In Europe, the replacement rate is higher and the duration is basically indefinite. The United States is stingy; and in normal times, the duration is six months. So you could ask, is that what did it? But there has to be something more. Here's why. In the 1950s and '60s, Europe also had generous unemployment, but its unemployment rates got lower than ours. So, how can you account for both things? That's the puzzle.

So here's the story: Something in the environment changed. Between the 1950s and '60s and the 1980s, the economic environment changed to confront individuals with some bigger risks at the microeconomic level. We call it turbulence. Here's our mechanism: A worker's human capital—his general skill level when he's employed—is building up.

Torralba: Just to clarify, when you say human capital, you mean a set of intangible qualities, like experience, education, IQ, etc.

Sargent: Your skills, knowledge of the firm, knowledge of the business, work habits. You said it beautifully—all those intangible things grow when you're employed. When you're unemployed, they deteriorate. It's like a stock of capital that's falling apart if you don't use it.

So, a worker has attached to him this human capital. It's going north when he's employed, and it's going south when he's unemployed. What we think happened, starting in the 1980s, is that an older worker is more likely to be fired from a job where his human capital just disappeared—that job's ended, it's been shipped to India. So he suffers a big loss in human capital. But his unemployment compensation is linked to his past earnings. So this person has an incentive to be picky when he's going for new jobs, because there's a mismatch between his aspirations and his human capital. That creates a trap—workers get trapped into saying that the option of staying on unemployment, given current job prospects, is better than taking a job.

In Europe, it was subsidized. In the United States, you got six months, so even though your human capital took this hit, you're going to go back to work. That's what the mathematics of our model says. The political trap is when we get a big negative shock like we got in the United States. Our natural compassion is to make unemployment compensation more generous. But now, we're up to 99 weeks.

Torralba: You seem to be hinting at a matching problem. In the United States, all these people who were working in construction or in mortgage financing in the 2000s—their jobs are gone. So these people who worked in those sectors now don't have the human capital to do something else, so they have to accept a much lower wage level.

Sargent: Yes. It's the essence of the story. It isn't a new phenomenon. There are so-called displaced worker studies. Dan Sullivan at Chicago did a paper in 1980s on steelworkers in Pennsylvania. If a steelworker is in a plant that doesn't get closed, his earnings keep going up. However, for the steelworker whose job is terminated, the time series takes a huge hit. Now, he's on unemployment compensation. He gets six months. He's not a steelworker anymore—all the stuff he knew how to do. He takes some new crappy job. He eventually builds up his human capital, but he takes a 25% permanent earnings hit.

Torralba: His new earnings path is 25% lower.

Sargent: Yes, he takes a big hit. And it's permanent. At first, it's even bigger, a 60% hit, and then he builds it up. And if he's 50 years old and has European unemployment compensation levels, he would not come back. This is all about how society gets people to participate in the labor market.

Germany's been very aware of this problem, and they've done a bunch of reforms. Now, as a U.S. citizen, I don't want Germany to have flexible labor market institutions that allow them to avoid these problems while we, for benevolent reasons, back into very perpetual generous unemployment compensation that traps people. It sounds hard-hearted, but I think it's really a more far-sighted benevolence, because you want people to be participating.

Moral Hazard in the Eurozone

Torralba: I want to talk about the eurozone. What is really at the core of the problem? Is it that countries flaunted the fiscal rules or is it the current account imbalances? Or is it both?

Sargent: One reason is accounting, when those rules were imposed. In some countries, there are implicit obligations, where the government is standing ready to bail out various kinds of debts that are incurred by other people, like regions or maybe some banks. So when you're in good times, the books are not going to show the value of these obligations.

Here's a rule: Fiscal rules that are announced are just hot air, just so much talk. A real rule, you have to test it. But this was not done.

So you go back to 1995 or so, and Germany says, "Look, you are free to join a monetary union, and it's a monetary union with Germany. And, by the way, we'll change the name of the Deutschemark to the euro. And this is going to be a currency issued by Germany. You're free to denominate in terms of the euro if you want. You can trade in terms of it. And actually if you want to use it, we'll print some up so you can issue it. But if you issue debts denominated in euros, that's your problem."

Germany could have treated the rest of Europe like the United States treats Panama. Panama uses the dollar. But if they want to issue dollar-denominated debt, that's not the United States' problem.

So then what would happen is that various countries would join the euro. They might issue some debt, and some of it might go bust. At that point, Germany could say, "Um, sorry. That's not our problem. That's not the deal." So then, Spain could still use the euro, and the debt could go under, be renegotiated. That would be a clear understanding. A few defaults like that, and people would get the message.

Torralba: The funny thing, however, is that when the eurozone was created there was no explicit provision for bailouts. Yet the markets, if you judge the yields in that period, were assuming no defaults or bailouts.

Sargent: In the early 1990s, interest rates on Italian debt were 20%. I told friends from Italy—I was just kidding—that I was thinking of buying some. My friend said, "Are you stupid? Why do you think it's 20%?" Well, I should have bought it, because they joined the union and those bonds had huge capital gains. Someone made a lot of money on those things.

Why do you think those default premiums or inflation premiums went down? Well, you have two possibilities. The Italian government is going to change its fiscal behavior. Or, it was, "Oh, boy, now the Germans aren't going to let them fail." I think the market thought it was the second, or maybe the market thought it would be some combination—that the Germans would make the Italian fiscal policy different.

Torralba: What about creating some joint liability, like eurobonds? Just create a joint Treasury or some form of guarantee of debt. Then, how would you deal with incentives and the moral hazard problem? Italy could say, "Why am I going to be disciplined if the Germans are going to bail me out?"

Sargent: It's a good question. There's a great paper, which everyone should read, by [John] Kareken and [Neil] Wallace ["Deposit Insurance and Bank Regulation," 1978]. It's about moral hazard and deposit insurance. Their analysis says that if you have deposit insurance and it's not priced properly—and it never is—it provides incentives for banks to become as big as possible and as risky as possible. You will have a crisis with probability one. The reason is it's in banks' shareholders' interests for the banks to become big. Kereken and Wallace's conclusion was, if you're going to have deposit insurance to fight this moral hazard, you're going to have to regulate banks' portfolios to prevent them from becoming too risky.

You can translate that to what you were saying and just change the names of the variables. If Germany is going to foster a facility of lender of last resort, to fight the moral hazard, it is going to have to put in controls.

Torralba: So Italy needs to give up some of the fiscal sovereignty.

Sargent: Absolutely.

Torralba: Which is a political issue.

Sargent: That's the heart of the issue, right? M

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