Publicaciones de la Real Academia de Ciencias Económicas y Financieras

Why austerity does not work: policies for equitable and sustainable growth in Spain and Europe

Conferencia del académico correspondiente para Estados Unidos

EXCMO. SR. DR. D. Joseph E. Stiglitz

Premio Nobel de Economía 2001

(Pronunciada en Barcelona en diciembre de 2012 y revisada en mayo de 2013)

Barcelona, 2013

Edición no venal

Why austerity does not work: policies for equitable and sustainable growth in Spain and Europe

First let me thank you so much for your invitation to speak here this evening.

Five years after the beginning of the global economic recession brought on by the global financial crisis, seven years after the bursting of America's real estate bubble that brought about this global calamity, the world is still mired in recession. Spain and Greece are in depression. That is the only word you can use to describe a situation where one out of four people are unemployed, and one out of two young people are unemployed. And the numbers would be even larger were it not for the fact that many people who have left the country.

Europe as a whole is once again in recession, and the forecast is that Europe will remain with negative growth, not only for 2012 but for 2013 as well. If you look around the roster of countries, it is not just Spain whose income today is lower than it was before the crisis. But there is a long list of other countries for which that holds true as well. In fact, the Euro area as a whole has a GDP adjusted for inflation that is lower than it was before the crisis.

So, Europe has not in any sense recovered from the downturn. If you look around the list of countries, what stands out is the high relationship, the high correlation between the countries that have performed very badly and the countries who have adopted policies of austerity. And I am going to talk mostly this evening about the relationship between austerity and the broader Euro framework that has brought Europe into this sorry state of affairs.

If we look at unemployment rather than output, the situation is even worse. Unemployment is predicted to continue to increase in the Euro area into 2014, at which time it be a percentage point higher than it is today. How do we explain this dismal economic performance? There have been no wars in Europe, there's no pestilence, no natural disaster like an earthquake or flood. The disaster that I have just described, this now more than a half decade of stagnation and worse, is a manmade disaster. It is neither inevitable nor unavoidable. It was a result of two key policies that as I said are of man's creation: the policy of austerity and the framework of the Euro zone. But behind these two problems lies a deeper problem.

Europe is the birthplace of the enlightenment, of science, and academies like this academy were founded, in part, as an element of the enlightenment response to the importance of science. But in certain areas there has remained resistance to the advances of science. In certain areas a kind of blind faith has persisted, and one of those areas has been economics: there is a diehard notion of market fundamentalism, a belief that markets on their own are efficient and stable.

_

¹ This was true at the time of the lecture, and remains the case in 2013 at the time of publication.

This notion is grounded in a set of doctrines that are sometimes referred to as neo-liberal doctrines has for 30 years dominated thinking in Europe and in many quarters of the United States and elsewhere in the world. Of course, the Great Depression, some 80 years ago, should have shown that markets are not necessarily efficient or stable, but sometimes memories are short. The great recession that began in 2008, however, should have reminded us that markets are often neither efficient nor stable. Remarkably though, faith in these flawed market fundamentalist doctrines has remained obstinate.

Many of you may know that I have been a very great critic of the IMF. One of my earlier books, *Globalization and Its Discontents*, described how the IMF has foisted policies of austerity in East Asia and how it led to economic decline. I criticised the IMF for ignoring the importance of inequality, one of the key issues that was discussed a minute ago. But even the IMF has changed its views. The IMF and its world economic outlook a couple of years ago pointed out that austerity would not work and the policies that were needed in Europe were expansionary policies and growth policies, not austerity. They pointed out that there's a link between equality and stability. The head of the IMF actually made the point that the organization needed to focus on inequality because it was part of its mandate. Their mandate was stability, and if inequality resulted in instability, then they had to be worried about inequality.

What remarkable is that, even as so many people seem to have learnt the lessons of the Great Depression and the Great Recession, in some quarters there remains resistance to these ideas. I the remaining minutes of my talk, I want to focus on these two issues: the issue of austerity and the issue of the basic economic framework of the euro zone.

Why austerity does not work

The idea that austerity can restore an economy to prosperity is longstanding, but has failed miserably, and repeatedly. One of the earliest experiments, which you might call an experiment, was the approach of Herbert Hoover, U.S. president at the time of the stock market crash that initiated the Great Depression. In fact, Herbert Hoover managed to convert the stock market crash into the Great Depression through austerity measures.

One might think that harsh lesson was enough to teach everyone that austerity does not work, but in fact many people did not learn. I was chief economist of the World Bank during the East Asia crisis and that was the context in which the IMF insisted that countries in East Asia, like Indonesia, Korea, and Thailand adopt austerity. And in each of these cases austerity turned downturns into recessions and recessions into depressions. In some of these countries, the impact of austerity was far worse than anything Europe has experienced so far, which should be cautionary. Under the IMF policies of austerity in Indonesia, the unemployment rate in the central island of Java reached 40%. And yet after the failure of these policies, the IMF continued to insist on countries pursuing these policies of austerity. In Latin America, Argentina was the main country that suffered and the policies of austerity first led the economy to slow, and led unemployment to grow from 12% to 18% and even higher, and finally to the crisis of 2001.

What I find so amazing is that, given the track record of austerity, many of the European countries adopted austerity voluntarily. It wasn't pushed on them by the IMF. In fact, in the beginning of this crisis, the IMF was really a critic of these austerity policies but the interesting thing, as I said before, if you look across Europe, many of them have now adopted these policies. Those who have been the most enthusiastic about austerity have had the biggest downturns and those who came to austerity late are coming to economic downturns late. The important lesson is that no large country has ever recovered from an economic downturn through austerity. So it is a recipe that has, essentially, never worked.

If you think of Europe as a whole, is economically analogous to a large country, and the prospects of it recovering through austerity are, I think, nil. Now if you look across countries, there are a few small countries that have recovered from downturns with austerity policies. But those recoveries weren't due in spite of austerity: something had to fill the gap as government expenditures contracted, and that was normally exports. But that kind of growth requires a thriving trading partner. A smaller country like Canada could adopt a policy of relative austerity and cut back expenditures but as it did it, it was lucky that its neighbor, the United States, was having a boom. And it was lucky that it had flexible exchange rates so its currency could devalue, giving another boost to exports to the United States.

Similar stories have played out in a few other countries around the world. But that won't happen now because there is a global slowdown and the countries in Europe do not have the flexibility of a flexible exchange rate. And so the prospect, in this context, of austerity being offset by an increase in exports let alone an increase in consumption or investment are basically negligible.

Now, there are some economists who have looked at a number of economic, econometric studies who have argued that government spending doesn't stimulate the economy very much. The technical word here is that they are low multipliers. The standard argument has been that with government increases in spending, GDP increases anywhere from one and a half to two to three times as much as the government spending. And some of you may read some econometric studies that say no, the evidence is quite to the contrary and the number is around zero. Some people even talk about a big negative. Well, what that should tell you is that economists aren't always very good in their econometrics. The problem is a very simple one. Most of the time the economies have full employment or near full employment. And when the economies have full employment and you increase government spending, by definition there's very little room for national output to increase. So when economies have full employment and the government increases spending something else has to give. And usually to make sure that there is not inflation central banks raise interest rates. And so what happens is the increased government spending is offset by contraction on investment and very little change in GDP.

But that's not the situation in Europe or America today. With sustained, high unemployment, with central banks committed to not increasing interest rates, with there being no inflationary pressures to justify an increase in interest rates, these mechanisms are not in play. In that context an increase in government spending will stimulate the economy, and in the amounts that I said before: Every dollar of spending, euro of spending will lead to an

increase of GDP of one and a half to two and a half times the amount of that spending. The bottom line is that austerity can in fact play an important role in bringing the economy back to full employment.

Many European leaders assert that what is needed now is not more government spending but a restoration of confidence. The problem is that austerity will not bring about either growth or confidence. In fact in the last three years as parts of Europe have repeatedly tried patchwork, misguided solutions focusing on austerity, this has undermined confidence: as austerity destroys growth, it is also destroying confidence. It will continue to do so, no matter how many speeches are given about the importance of confidence and growth. So too, Europe's misdiagnosis of its problems has contributed to the wrong prescription. Germany and some others have repeatedly said that overspending—fiscal profligacy—is the cause of the problem. But that diagnosis is totally wrong. Yes, there were some countries, at least one country that probably overspent, and that of course is Greece. Austerity backers in Germany of course want to talk about Greece and its overspending. But if Greece were the only problem in Europe, Europe would not be in a prolonged crisis. Greece is small, a country of less than 11 million. It would be easy to address the problem of Greece. The problem is much more general.

Spain and Ireland are often singled out, but in fact they had surpluses before the crisis. They had low debt/GDP ratios. They had satisfied the Maastricht conventions. Hence, not only won't austerity solve this crisis, the straitjacket of the kind of fiscal compact that was agreed to in December 2011 won't even prevent the next crisis. And that really comes to the question, what about the level of debt and deficit that countries like Spain and Italy face today? I'd like to put this in a broader context. There is no economic theory that says that just because a country has a high level of debt that because it has mismanaged its fiscal operations in the past, it should be condemned to high levels of unemployment going forward. The debt is nothing but a claim on a country's resources—and most of the debt is held by people within the country. So it's a claim, it's a redistribution within the country. It's not a destruction of resources.

One has to remember, and this is really fundamental, that the resources of Spain and of the other European countries today are essentially the same as they were before the crisis in 2007 and 2008. The irony is, or the sad thing is, that the loss of output after the crisis is greater than the misallocation of resources before the crisis. Yes, the financial markets did not do a very good job of managing risk and allocating resources. Too much went in, before the crisis, too much went in to real estate in the United States and a number of other countries. There was a credit bubble, and the breaking of the bubble, inevitably, had consequences, but the fact is that the misallocation of resources before the crisis doesn't mean that we have to continue to underutilize the resources that we have after the crisis. In the United States we've done the calculations of the loss of output as a result of our underproduction after the crisis: we're wasting clost to a trillion dollars a year because we're not using our resources fully, and the situation is not as severe as in Europe. And of course in Spain and other countries, the numbers are even larger.

So this is the real tragedy: not only did we fail to manage our economy well before the crisis, but in the aftermath of the crisis we are continuing to mismanage our economy. There is no reason that debt should condemn us to an extended period of underutilization of our resources. Well, as we think about all the debt and the deficit it is useful to think about how we got that deficit. You know these days the issue is easier than in Europe and currently I know the US context better.

What can be learned from the United States' context?

The United States had a 2% surplus in 2000, before President George W. Bush was elected. The surplus was so large that Alan Greenspan supported Bush's tax cuts. His argument was one of the worst arguments of any central banker in history, but it was an interesting one. His argument was that our surplus was so large that we were at risk of paying back the entire national debt. And those of you who know about central banking know that the way central banks manage the interest rates is that they buy and sell government debt. And he said, if there's no government debt, I can't conduct monetary policy in the standard way. He described it as something of an emergency for the country, and advocated increasing the national debt up.

I always thought it was a bad argument because if it turned out that in say, ten years time we had totally paid back the national debt, or were about to pay back the national debt, Alan Greenspan, or his successor as Governor or Chairman of the central bank, could have come to the president in congress and said, we face a disaster, we are about to pay back our entire national debt. Can you respond to this crisis by spending a little bit more or by giving us a bigger tax cut? And I cannot believe that the president and Congress would not have figured out some way of compromising—of spending more or taxing less. But Greenspan's argument is that we had to ask immediately to prevent this disaster. So we got a tax cut beyond our ability to pay, aimed at the very rich, the people who had been doing very well. That was one of the ways that we went from a surplus to our current deficit.

There were two other things that we did: we fought two very expensive wars that did not give us more security. We increased our defense spending, spent hundreds of billions of dollars on weapons that don't work against enemies that don't exist. And the third thing we did is that we increased what we call corporate welfare—a whole set of programs helping corporations. But the biggest source of the conversion of our surplus into the deficit was very simple. It was the recession. When economies go into recession, tax revenues go down and spending on unemployment and social programs go up. It's really that simple. And so when we in the United States think about how to get out of our recession and thus get rid of our deficit, the answer is also very simple: put America back to work. Reduce the unemployment rate; get us back to full employment. That would do more than anything else to get rid of the deficit. Half the deficit is due to the economic downturn itself.

The same thing goes for Europe. The big lesson here is that the deficit didn't cause the recession; it was the other way around: the recession was a major source of the deficit. And so for Europe, austerity is a recipe for making things worse.

For the United States and a few other countries, like Germany, the answer to the economic downturn is easy. Right now the United States can borrow, and Germany and Europe as a whole could borrow at a negative real interest rate. The interest rate we pay adjusted for inflation is negative 2%, and that's true not only in the short term. We have a negative long term interest rate—we have inflation-indexed bonds that are paying negative interest rates. And if you look around, if any of you have come to visit the United States, coming into Kennedy Airport, you know that we need infrastructure. If you try to go from Kennedy Airport to New York City you know that we need infrastructure, we need railroads, we need roads, we need airports, we need to invest in technology, we need to invest in education. So we have a plethora of investment opportunities, yielding very high real returns that we could finance out of money that people are willing to lend to us at a negative real interest rate. And doing that would increase our balance sheet. Our assets would increase more than our liabilities; our fiscal position would be stronger. So this kind of policy would actually strengthen the economy in the short run, and strengthen the economy in the long run. It would reduce unemployment and promote economic growth.

There's a second thing that can be done which relates to the balanced budget multiplier. If governments increase taxes and increase spending in tandem, it stimulates the economy. And particularly if it designs the tax increase correctly, and the expenditure increase correctly, the increase in the GDP from a 1% increase in taxes can be greater than 1%. So even if the government does not want to increase borrowing, by well-designed tax increases and spending increases, the economy can be stimulated.

Finally, there are a whole variety of changes in patterns of expenditure and taxes that can stimulate the economy. For instance, one of the things that's pretty clear is that reducing across-the-board corporate income taxes is not going to stimulate investment very much. On the other hand, if you lower taxes on those firms that are investing in the country, raise taxes on those who are not investing in the country and not creating jobs, which can stimulate the economy. So that's an example of how you can change the structure of the taxes to promote economic growth within the country.

So for Europe, if it could get together and borrow as a whole, all three of these options are really available. The debt/GDP ratio for Europe as a whole is actually better than that of the United States. And so they could borrow at the same favorable terms and make the same kinds of investments that would promote growth in the long run and reduce unemployment in the short run. But even if Europe cannot get together to mutualize debt, it still has within its portfolio of decisions ways of stimulating the economy through the balance budget multiplier and expenditure and tax switching. But for countries like Spain and Greece, the options, the opportunities for doing a great deal about the current recession/depression are limited. The real problem—and thus the real solution—lies with Europe.

What went wrong in Europe?

And that brings me to the second part of my talk: the fundamental problems of the euro framework. For me, what has been increasingly clear was also clear actually at the time the euro was created is that the real structural reforms that are needed are not within the countries of Europe but within the euro framework. So what I want to describe is, what went

wrong with the euro framework and what reforms would make the euro framework, enable Europe to restore, to return to prosperity.

The basic idea is a very simple one. The creation of the euro took away two of the key adjustment mechanisms, interest rates and exchange rates. At the same time, nothing was done to replace those mechanisms. Worse, it created an institutional framework which was intended to promote efficiency but which led to inefficiency and instability. Now I will expand on that in a few minutes. In a way it created an institutional framework and then impeded adjustment and inherently risked crisis. The key point here is that separating out the monetary authority from the creator of the sovereign debt meant that the European countries now faced the risk of default in a way that they hadn't before. Europe put itself in the kind of position that many developing countries and emerging markets faced.

Let me contrast the situation facing a number of European countries with that of the United States, because there was a little discussion a couple of years ago about the US repaying its debt, and S&P downgraded the United States. (As an aside, this downgrading demonstrates how political the ratings agencies are and how you shouldn't take what they say seriously, but unfortunately others do take them seriously so you do have to take them seriously.) But there is very little risk of default for the United States, because when the United States borrows, it promises to pay back dollars. And of course, the US government controls the printing of those dollars. So there is no way in which we would not repay. We say, we've promised to pay a certain amount of dollars, and if push comes to shove, we can just print them. It's conceivable that we could have an electricity blackout for a while, but not for an extended period of time. So it's basically inconceivable that we would default on our debt.

Of course, one might point out that it may be that those dollars might not be worth very much. But in that case, the rating agencies should have said that there's a risk of inflation, and a risk of the exchange rate falling. But that's not what they said. They effectively said that there's a risk that our printing presses are not going to be working—and I don't think that anyone really thinks that that is a serious risk.

The situation in Europe is quite different. Europe decided to separate out borrowing from the central bank, and in doing that it put Europe in the position that Argentina, Thailand and all the other emerging markets are in. Of course, so long as there was growth, everything seemed OK. But actually it wasn't, because excessive confidence, brought on by the euro, contributed to the excessive lending to Spain, Greece and other crisis countries. So, in that sense, the problems of the euro were there before the crisis; they had basically been there since 2001. They gave a false confidence in the context of financial markets that often are irrationally exuberant and sometimes irrationally pessimistic. And so the euro fed this. It was inevitable that those different countries would be buffeted by different shocks, and that different countries would face different long-term rates of growth and productivity. And having a single currency when you have such differences was going to be difficult at best.

Now Europe in a way recognised some of these difficulties. Its leaders have talked about convergence, they talked about convergence criteria. But they made a fundamental mistake. They realized that the eurozone was not what we call an optimal currency area. An optimal currency area is a group of countries that can share a currency. My colleague at

Columbia, Bob Mundell, who got a Nobel Prize for this, received it for recognizing that Europe would need convergence. But what was thought was that all that was required was managing the debts and deficits. But, as I said before, that perspective was wrong. And in fact, other restrictions within the euro framework made convergence more difficult.

The restrictions were put on industrial policies that were an important instrument for convergence, policies that would have enabled those who were behind to grow more rapidly. They imposed restrictions on those and that's actually made convergence more difficult. More generally, the euro introduces to Europe a kind of rigidity that is analogous to the gold standard. And that kind of rigidity makes adjustment more difficult. As you know, one of the interpretations of the great depression was that the gold standard imposed rigidities in adjustment to the shocks that the world was going through in that period. If we look around Europe, what we see is that Iceland, where the crisis in Europe began and which had one of the deepest crises, is now doing better than other crisis countries partly because it has a flexible exchange rate and could adjust.

Some have argued that there is a substitute for adjustment of the exchange rate, what's called internal devaluation—that is to say, the lowering internal prices. But that kind of deflation is hard to coordinate, and causes enormous hardship, particularly with unindexed debt contracts. The borrowers cannot repay what is owed, leading to financial stress and instability. The simple historical lesson is simple: if internal devaluation were an easy substitute, the gold standard would not have imposed any constraint on adjustment and we would not have had to abandon the gold standard in the Great Depression. So the fact is that internal devaluation is not an alternative. Europe was unfortunate about the timing of the founding of the eurozone because it occurred in a period in which neo-liberalism and market fundamentalism were dominant. There was a belief in free markets but there was insufficient attention to the details.

The failure to pay attention to some details has had some profound effects. I can illustrate with two or three examples. The first is the notion of the free mobility of labor. Everybody believes that the free mobility of labor ought to lead to a more efficient allocation of labor, and that's based on the simple notion that wages are closely linked with productivities. But that's not the case when you have a large inherited debt, because there's a difference between your productivity and your wages which is the wedge of taxes. And some of those taxes are going to pay, not for new roads, not for education, but going to pay back the debts that one inherits from one's parents, the legacy debt. Now what does that mean? That means that somebody in Greece or Ireland, where the debt/GDP ratio is very high, is going to be taxed on his wages to pay back the mistakes of his parents and his grandparents. But Europe has created a framework in which you can say you don't have to pay back those debts. A young Irish person just goes across the sea and moves to London. A young Greek person can go to London. And if he goes to London he doesn't have to pay back any of those Greek debts or any of those Irish debts. And so you get people moving not on the basis of what is the most efficient but on the basis of how they can avoid paying back the debts of their parents. That leads not to only to economic inefficiency but also economic instability.

Let me give you another example: they created a single market principle that money can move everywhere, money and goods can move anywhere within Europe. It is a great idea for efficient allocation of capital. But what we saw was that if you don't have common regulations, you could have under-regulated banks moving from one country to another and thus putting in jeopardy the deposits and the well-being of other countries. But it's even worse than that: what we know is behind every country's banking system is its government. We don't like to admit it but it's true.

After the 2008 crisis, money came into the United States. Of course, the United States caused the crisis. It was our banking system that hadn't functioned well, that had misallocated capital, that had been involved in all these kinds of sieves and other kinds of financial shenanigans. Our regulators failed miserably. But money went into the United States. Why? Was it because they had confidence in our banking system? No. The money went into the United States because people had confidence that the US government had the deepest pockets in the world, demonstrated by putting up \$700 billion. So money went to the United States because of the backing of the US government. If you look at the CDS spreads on sovereigns and the banks within the country, they are almost perfectly correlated. When people lose confidence in the country, in the sovereigns, they lose confidence in the banks within that country. Because behind those banks, are, inevitably, the government.

What that means is that when a country like Greece is having problems, people know that the Greek government can't really bail out the banks. Thus, people start taking their money out of the Greek banks. As a result, the Greek banks can't lend then. And then, the credit constraint combined with austerity forces the economy down deeper. But then as the economy gets weaker, the ability of the government to support the banks becomes even weaker. And so there's a vicious circle.

Europe has created a financial system that is not only inefficient in the allocation of capital, but unstable. And you see that process of unravelling going on, in Greece, in Spain, in Portugal, and in all the other affected countries. The marvel, in a way, is how slow it's been, not how fast. Now that it's occurred, it's not a surprise that it's occurred. In fact it's a little bit of a surprise that it's moved as slowly as it has.

So far, Europe has been very reluctant to look at these fundamental problems within the Euro framework. They've talked about this problem of excessive spending, focusing on Greece but ignoring the deeper problems. They've come forward with a number of short-term fixes. But those fixes have only worked for a short time, and haven't addressed the underlying problem. An example, of course, is the LTRO fix which lasted a remarkably short time. It was a booster up operation which involved lending to the banks so they could buy the sovereigns and lending to the sovereigns so they could buy the bank bonds. And it was not a surprise that people began to say, there's a confidence game going on here. And it was only actually less than two months before that particular recipe unravelled. Let me just say a few words about one of the areas where they've talked a great deal is structural reforms. Many of the programs that have been imposed on the countries around Europe not only imposed austerity but also had a heavy emphasis on structural reforms.

What can be done?

There are a couple of observations I want to make about what can be done: Structural reforms take time and Europe is in need of some quick ways to address its problems. And most of the structural reforms are supply-side measures, but the problem today in Europe is one of demand. In fact, the structural problems on which they have focussed didn't create the current crisis and resolving them won't resolve the crisis. Europe has been worrying about minutiae and ignoring it's big issues. Worse, many of these so called structural reforms may weaken the economy by stifling demand. For instance, in many countries there are programs of what is called labour market flexibility which is a code word for lowering wages.

It's worth noting that the US, allegedly the most flexible labour market, has not performed well: it's much worse than Germany and other European countries with better systems of social protection. And there's an increasing consensus that growth in inequality in the US has contributed to the crisis, leading to weaker demand.

So what is really needed is not these structural reforms, although in many countries some of these structural reforms are desirable. What is really needed for solving Europe's problem is the structure for the eurozone program itself.

There are alternative policies that would create an alternative dynamic to the vicious cycle that's been going on. We have to remember, this has been going on now for five or six years. So there are alternative policies that would create a more positive dynamic. The first is to reverse austerity. The second is to promote growth, including through the mutualization of debt. Third, we have to create a stable financial system and capital markets. Let me spend just a minute on each of these.

In terms of the mutualization of debt, the problem right now is that the countries are facing very high interest rates. The crisis countries face very high interest rates. If one mutualized debt, the interest rates would come down. There's no reason why Europe, with a lower debt/GDP ratio than that of the United States would not have interest rates comparable to that of the United States, a negative real interest rate. But now, because of the high interest rates, there's not scope for expansionary spending. If interest rates came down, countries like Spain and Greece would be able to spend more money in stimulating the economy and restoring growth. Now there are a variety of ways in which this mutualization of debt could occur, but that there has to be some degree of mutualization of debt seems to be an absolute necessity.

The second thing I emphasized was a stable banking system—a Europe wide-banking system. There's been a lot of discussion in Europe about the need for common supervision and I agree about that. But a common banking system requires three things, common supervision, common deposit insurance, and common resolution. And it's the deposit insurance that is more important than either of the other two provisions. Now, many in Europe say that eventually, they will get to this common banking system. But first they have to do it in an orderly way. First they have to have common supervision, then common resolution and finally, common deposit insurance. But Europe doesn't have that time. This political process is out of sync with market processes. The delay is very costly. The delay will mean that more money will

leave countries like Greece and Portugal, devastating not only the financial system but the economy at the same time. And many of these effects are not easily reversible.

Economists use the word hysteresis to describe it. A firm that goes bankrupt, when you reverse the policy doesn't go un-bankrupt. You don't come back to life after you're dead. And so these processes of doing it very slowly are extraordinarily costly. The question then comes, What are the prospects of the eurozone surviving? In my mind, the current arrangements are unstable and can't persist. There are only two ways for Europe to go: either more Europe or less Europe. Either a mutualisation of debt, a system where there's a common banking system, and some other elements, such as harmonization of taxes. Without harmonization of taxes you can't have progressivity, without progressivity the kinds of inequality that have been growing will get worse. But if we can't go in that direction, it is inevitable in my mind that it goes the other way. Hence the question of whether or not the euro survives is as much a matter of politics as economics. There will be, of course, a residual area maybe of Northern Europe, which might survive.

But even with all those reforms, some people have raised the question of whether they're sufficient. These differences in countries may still be too large to make the system work under a common currency. So it's not obvious that the problems won't arise, or that they will be solved. People will point out that the 50 United States share a common currency. But we have a common language, a high degree of mobility, very large common fiscal sharing. And there's one other difference between the US and Europe: no-one really cares if North Dakota becomes empty, no-one really cares if everybody leaves North Dakota, because it's no longer economically viable. (Actually, as an example that is problematic, since people are flooding back into North Dakota now because of the discovery of gas there. And in fact some people like the notion of North Dakota having a very small population because it's cheaper to buy the senator of North Dakota if there are relatively few people!)

But Europe does care if nobody lives in Greece. They do care if nobody lives in any of these countries because there's a national identity in each of these countries in a way that there is no national identity with North Dakota. So there are some fundamental differences that make it more difficult for Europe, the euro zone, to work. That brings me to the question, well, if it does break up, what is the best way for it to break up? And this is a question that economists have been increasingly discussing. There's a broad consensus that the best way for Europe to break up would be for Germany to leave. George Soros gave a talk in Berlin which got a lot of attention where he said to Germany: either lead or leave. And the reason why there's a general consensus about this is that if Germany left, the new euro, the Southern euro if you want to call it that, the new euro, would depreciate relative to the Mark, the lower value of the exchange rate would stimulate exports, and that would promote economic growth, it would correct the large current account balance within Europe, which is one of the fundamental global problems of global imbalances.

This strengthening growth of the crisis countries would enable these countries to more easily meet their debt obligations and the stronger Mark would enable Germany to meet its debt obligations. So all this would mean that maybe they would restore prosperity without significant levels of debt restructuring. But if Germany doesn't leave, and if Europe can't agree

on the kind of framework that I've laid out, that would make the euro work, I think that the countries facing crisis, the countries in depression today, have to face some very difficult questions.

It reminds me of the questions that were asked of me when I was the chief economist of the World Bank, when I went to Argentina in 1998, 1999, and 2000. It was clear that the exchange rate system there that was pegged to the dollar was not working. The dollar was strong, Argentina had a large current account deficit. It had tried austerity, and austerity had led to rising unemployment. As the economy got weaker, tax revenues went down. The fiscal position did not improve very much. It wasn't clear whether things were sustainable. But they also knew that it if stopped being pegged to the dollar there would be turmoil. Contracts would have to be rewritten; it would not be easy. It faced a very unpleasant choice. And it did what most governments do when facing those unpleasant choices: it procrastinated. It did nothing, or it tried to muddle through. It tried additional doses of austerity, got some additional help from the IMF, and the IMF insisted on more doses of austerity. Argentina took the medicine but the medicine had the predictable effect of worsening the economy. So eventually, at the end of 2001, Argentina faced no choice. It had to leave the exchange rate, the peg with the dollar, and it had to restructure the debt. In retrospect, I think most would agree it should have done it in 1998. If it had done it in 1998, it would have avoided an extended period of high, unnecessary unemployment. But then, it's a matter of hindsight.

In 1998, there was still hope. So is there hope now for Europe, for Spain, for Greece? Is there a way out of the current situation? When I look at it, as an outsider, what I see is really depression without end, unless Europe changes its policies. So there is still hope because I still have some hope that Germany will and Europe will change its policies. But the question is, at what point do you give up on that hope? And what price do you have to pay until you give up on that hope? That's a political judgement and not an economical judgement, and that is the unpleasant problem that you have to face.

Most economic crises, like this one, are manmade. This is not a crisis caused by a famine or another natural disaster. Economic crises are a result of unstable market processes, made worse in recent years by a system that introduces new instabilities, imposes impediments to adjustment and creates adverse dynamics. The policy responses have, in many cases, only made matters worse. I think it is time within Europe to reexamine not only the policy of austerity but also the structure of the eurozone itself to try to come to terms and realize that it was an interesting experiment, exchange rate systems come and go, and there's life after the end of the exchange rate system, though it may be hard to conceive of until it happens. Of course, my hope is that Germany and the other leaders of Europe open their eyes to the cost of the failure to address these fundamental problems of austerity and the structure of the Euro zone; the costs that are unnecessary and imposing long run consequences for all of Europe and for the entire world.

Thank you.