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Fault Lines: How Hidden Fractures Still Threaten the World Economy

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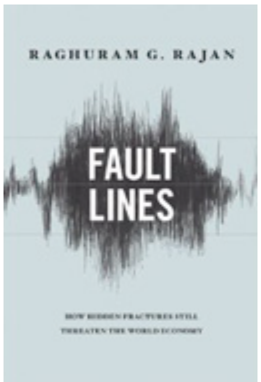

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Introduction

JOANNE MYERS: Good morning. I'm Joanne Myers, Director of Public Affairs Programs, and on behalf of the Carnegie Council, I would like to welcome our members and our guests, especially our guests from Booz & Company, this morning.

Today our speaker is one of the most accomplished young economists around, and one whose reputation precedes him. I know that to our guests who are here from Booz & Company, Raghu Rajan is very well known. He is one of their senior advisers, and by their support this morning, there's no question but that he is held in very high esteem.

For this morning's presentation, he will be discussing his book, *Fault Lines: How Hidden Fractures Still Threaten the World Economy*.

We consider it a matter of good fortune that Scott Corwin, one of the leading partners in the New York office of Booz & Company and a very good friend of the Carnegie Council, has agreed to introduce our speaker. We very much appreciate your presence. Thank you for graciously taking the time to join us.

SCOTT CORWIN: Good morning. Joanne, thank you. It's very gratifying to be acknowledged as a friend to the Council, and indeed we are. On behalf of my partners and colleagues at Booz & Company, we hold the Council in very high regard and very much appreciate all the things that the Council does.

I am especially privileged this morning to join you to introduce our good friend Professor Raghuram Rajan. Professor Rajan, as you can see from his bio, is a distinguished and thoughtful economist. In reading his bio and knowing him, I have to say, he makes me feel old, given what he has accomplished in such a young career. But we're really delighted that he is an adviser to our firm, among many noteworthy accomplishments.

As you may know, Booz & Company advises many major corporations on core strategic challenges. We do this globally. We have also been increasingly involved in the life of New York. We have been privileged to work with many preeminent not-for-profits, educational and cultural institutions, think tanks, and foundations based here. We very much hold the Carnegie Council in high regard, and particularly the leadership of Joel Rosenthal.

The reason for that is because the Council shares a commitment that we have as well. We view the role of our firm and one of our core missions to work with organizations and institutions to try to address some of the very profound large, intractable problems that confront us today. These, of course, transcend not just the private sector, but the public sector and all walks of life.

Booz & Company and our magazine *strategy + business* have tried to contribute to this dialogue. We have sponsored a program here at the Council called Workshops for Ethics in Business. We have done that with partners like Hewlett Packard, IBM, Merck, NYU, ILO, General Electric, and the Eurasia Group.

These dialogues, these workshops, have really been on some very profound issues. We have tried to bring together some of the leading thinkers and probe on issues like the sources of the global financial meltdown, which we'll touch upon today, I suspect, the ethics of sponsoring the China Olympics, the fate of the media in a Twitter world, the ethics of profiting in an age of climate change. A common thread really uniting these various questions is an attempt to understand and evaluate incentives and risks that drive the behavior of key agents and stakeholders in this global system.

Each January for the past two years, as part of this workshop series, we have sponsored a workshop aimed at identifying the biggest risks and decisions the world faces in the year ahead. These have been quite popular. The discussions have been very lively. They have been among the most downloaded YouTube videos that come from this studio. I encourage you to log in and see the wealth of content and information and programs that the Carnegie Ethics Studio has put together. This morning's presentation is also being recorded and will be publicly available.

At the core of all these efforts, in my view, is really a deeply profound question: What risks will we face in the future that result from choices we make today around some fundamental ethical questions, all of which affect things like war and peace, our planet, the global community, the environment, sustainable economic development, human rights, governments, religions, et cetera?

It's in this regard that I think that Dr. Rajan's perspectives from his new book, *Fault Lines*, will be particularly enlightening and contribute to this discussion. Hopefully he will share some of the lessons learned from the recent financial crisis and highlight some of the challenges still in front of us.

Particularly striking, I thought, was one reviewer's comments: "Rather than leap on the bandwagon of blame, Dr. Rajan offers an independent and clearheaded dissection of the political, trade, and policy fault lines that undercut global finances. He says it is simplistic to blame individuals. Instead, he argues, it was the collective weight of individual choices that brought the economic meltdown."

I think that's a very profound set of insights.

We're looking forward to hearing what he has to say. You have his bio. As I suggested earlier, he has accomplished a great deal in a very short period of time. He served as the chief economist of the International Monetary Fund. He is the Eric J. Gleacher Distinguished Service Professor of Finance at Chicago's Booth School of Business. In 2003, he earned the Fischer Black Prize, awarded by the American Finance Association for the person under 40 who has contributed the most to the theory and practice of finance. He is an economic adviser to the prime minister of India, serves on the Academic Advisory Board of Moody's—that's something we would like to know a little more about—and on the International Advisory Board of Bank Itaú Unibanco, as well as a senior adviser to Booz & Company. He provides an invaluable source of perspective on global economics and the markets to our firm, to our partners, and to our clients.

So on behalf of the Council, I welcome you. It's a pleasure to have you here this morning.

Remarks

RAGHURAM RAJAN: Good morning, everyone. Thanks for being here at this early hour.

You asked me a question about Moody's. This is an academic advisory council. I joined them in 2002 for one meeting, left, and then they asked me back after the crisis to see if I could talk about what happened and figure out how they should change. I think part of my role as an academic should be to help even Moody's think about how they should better themselves.

This book, *Fault Lines*, which I'm going to talk about is, as Scott pointed out, basically taking the standard explanations for the crisis and asking, are these sufficient? What are the standard explanations?

To caricature them, we have greedy, conflicted bankers—as one banker put it to me, when you talk about conflicts of interest, when there's no conflict, there's no interest; that's the banker's view—and pliant regulators. These two were at the center of the crisis. It was because of them. And what we need to do is fix the bankers, make them less greedy, change incentive systems, et cetera, and fix the regulators. Give them a lot more regulations to implement, forgetting that they didn't implement the old regulations in the first place. Then we fix the system, and we're done. We can go ahead and do everything we did before.

I think this is extremely simplistic and worrisome. What if the problem is deeper? We have to ask why there was a crisis in the most sophisticated financial system in the world and why regulators, who seem to have avoided previous crises—why is an industrial country's system different from an emerging market? Because, we believe, the institutions are stronger. Why did the institutions break down this time? What happened? What was driving all this? If, in fact, there are some deeper forces, how do we know those forces won't act up again and, even now, aren't acting up?

My argument is, yes, there are what I call serious fault lines in the U.S. and the world economy, and the financial sector was at the center of those fault lines.

This is not to absolve the bankers. This is not a defense of what the bankers did. They were neither innocent nor victims. But they did respond to implicit and explicit incentives that the system created. Therefore, we must make sure that those incentives aren't created again, as we would suffer.

I think an equally simplistic view of the regulators is that they were driven by laissez-faire ideology. This was, "The market works." Yes, there was some of that. But also I think they had a deeper and in many ways appropriate agenda, which interfered with the regulatory system. I'll talk about that in a little bit.

In a sense, we had the perfect storm, with everybody following what were in many ways reasonable courses of action when taken alone but, when taken together, were calamitous. That's why I think it's important to think about what happened and think about what we can do about it in a more constructive way.

Let me quickly walk through the three fault lines that I want to emphasize and then go to the consequences for the financial sector. I won't give every last detail. There must be something left for you to read in the book. But at least let me make clear what my point is.

The first fault line I want to talk about, the underlying fissure in the world economy, is growing inequality, not just in the United States—though I emphasize the United States in the book—but elsewhere also.

The first chart that I have—there are no charts in the book, but I just want to tell you that there is actually some analysis behind what goes in the book—the first chart shows you the 90-50 hourly wage differential. What does that mean? Take somebody at the 90th percentile of the wage distribution in the United States, compare their wage with the 50th percentile wage, and plot that over time. You see that the 90th percentile wage earner, who is typically a manager in a store, is walking away quite fast from the person at the 50th percentile, who is usually an office assistant or a factory worker. You see that difference is not between the 50th and the 10th percentiles. That's the second line there. The 50th to 10th percentile is fairly flat. It is the 90th to 50th percentile.

This, to my mind, is a profound source of concern. Most middle-class columnists focus on the inequality above them. They look at John Paulson, the hedge fund manager who made $3.75 billion in 2008, which is 75,000 times the average household income, and which, according to—I was reading about Mithridates, the Persian ruler, whom Pompey defeated, and brought back the riches from his kingdom. They amounted to $1.7 billion. So John Paulson made more than the entire riches of Mithridates in one year.

That's enormous wealth. But that is, to my mind, less worrisome than this 90-50, because this is what most Americans see, and it is a source of concern and a source of public policy responses which become problematic.

What's driving this? Why the 90-50 inequality? I think the best answer is given by two professors at Harvard University, Larry Katz and Claudia Goldin. They basically argue that it's not technology. Most people argue that technology is running away from us and that's why we need more and more skilled, educated people.

In truth, technology has been on gallop throughout the century. We talk about Facebook and Internet and so on. At the beginning of the 20th century, it was chemical plants, large, integrated chemical plants, which hadn't been seen before. They were as much of a leap for people moving from the farms as the Facebook and Internet and so on are for people moving with a high-school degree into the cities. Technology has been on a gallop throughout recent history.

What has happened is that the supply of highly educated people has fallen behind. To give you a couple of examples, high-school graduation rates in the United States have been stagnant, stagnant since the 1970s. You can get a little more action if you add in graduate equivalency diplomas, but those aren't really worth the paper they are written on. In truth, America is falling behind as far as high-school graduates go.

But we don't just need a high-school graduate nowadays. The 90-50 differential reflects a college-to-high school differential. We need people with a college education. That's extremely worrisome. The graduation rates for males for cohorts born in the 1970s are no different from the graduation rates for males born in the 1940s. So we haven't increased the number of male graduates. Female graduates have moved up. That's sort of positive. But for male graduates, there has been no difference.

This is a massive problem. Really, the roots are complex but lie in some combination of families breaking up, communities becoming more dysfunctional, inadequate preschool preparation, and inadequate K-12 experience. Every president, of the last so many, has said, "This is a major problem which I want to address."

But it's a difficult problem. It involves massive transformation, which is difficult.

My argument in the book is that often, if you look at every emerging market, bad policy emerges from inequality. Why? Take what happened with the subprime prices. As more Americans were left behind, in perception if not in reality, you had increasing polarization. It's well known that Congress has become more polarized over time. There are studies of this. But it also makes these issues of inequality harder to tackle. There is no political support for redistribution. Of course, it entails massive incentive costs and so on.

One of the judgments implicit that many politicians may well have made over this time is, what do people care about? If we can't give them incomes, perhaps we can give them consumption. How do we give them consumption? Credit growth often—and again I appeal to emerging markets—eases the way you expand consumption.

How do you get credit growth? The tool that the government had either directly under it or that it could influence was housing credit. So you had this massive push towards housing credit, both from the Clinton Administration and the Bush Administration. This was a bipartisan effort. It was a bipartisan effort which had no opposition from the Democrats, because clearly it was sending money towards their preferred constituency and creating homes. Who could object against homes and wider homeownership? For the Republicans, they felt they were building new constituents, property owners, homeowners. Of course, homeownership is a good thing in society.

The one thing that *The Village Voice* suggests that the Clinton Administration and the Bush Administration agreed on was homeownership, and they pushed it massively, with massive infusions of money. But there were other instruments that were used. Interestingly, many of these instruments were created to deal with the mess in the Depression and gave the government the entryway into housing. The Community Reinvestment Act was applied and enforced for the first time in the 1990s, except, of course, the 1970s act, which wasn't enforced. The Federal Housing Administration reduced its lending standards, sent more money. A wall of money went towards low-income housing.

This is important. It's hard to imagine that the private sector suddenly woke up one day and had a social conscience and said, "We have to finance low-income housing." Why did that happen? Why so much money went that way was because this was fundamentally good intentions on the part of the government—we want more homeownership—but done in a way which actually created massive distortions in the financial sector.

So the fault line here is rising inequality and the political pressure to do something, typically, across countries. It existed in Spain also, for example. But I want to highlight the presence in the United States.

The second fault line I want to focus on is an international fault line, which creates some of the conditions again. Post-war Germany and Japan were flat on their backs, capital stock largely destroyed, people very poor as a result of the world. How did they grow? They basically latched onto an export-led growth strategy, because there was no domestic demand. They had to depend on demand outside. Their banks and governments basically focused on creating strong producers who could service the foreign demand, create domestic jobs, and help these countries grow out of the poverty created by the war.

This was an extremely successful strategy. There is no period in history, other than through conquest, where a country has grown faster than Japan grew between 1950 and 1973—per-capita growth rates of 8 percent a year. Never before in history has that been seen. We have seen that since with China, but never before had you seen it, when Japan came on the world stage.

There were a bunch of things which helped it. They focused on exports to a hungry world. In many ways, it set the example for the East Asian economies, for economies like Korea, Taiwan, eventually Chile, and now China.

What is central to the strategy is that you help the producers, typically by discriminating against the households, and you keep the producers honest by forcing them to export, because then they are forced to compete in the world economy and that keeps them relatively efficient. And it worked. In many ways, for a development economist, when you look at this, this is probably the only strategy which has worked in terms of pulling countries out of poverty quickly. I think India has perhaps one alternative strategy which is not export-led growth, but we can talk about the ways India's is different a little later.

However, there is a deep flaw in this strategy. The deep flaw in the strategy is, while you can get your export sector to be very disciplined, very competitive, the strong intervention that is entailed in this kind of growth strategy means that many domestic-oriented producers tend to use the government to make their industries uncompetitive. So these countries have very strong export sectors, very weak domestic-oriented producing sectors, very inefficient producing sectors.

Just a pop quiz: How many large Japanese restaurant chains can you think of that are worldwide? How many large Japanese hotels can you think of? On the other hand, if I ask you how many car companies you can think of, how many computer manufacturers, you can reel them off —Toyota, Honda, Toshiba, Fujitsu. The point is that manufacturing, especially export-led manufacturing, very strong; services, especially the stuff that grows domestically, very weak.

The New York Times ran a story on haircuts in Japan recently. Haircuts in Japan are very expensive. This upstart chain decided they would challenge the existing sort of guilds and try to give cheap haircuts. So it set up shop and started expanding very fast—lots of custom for cheap haircuts. The barber guild got very worried and tried to figure out how to stop this. Eventually, what it did was to say that giving a haircut without having a shampoo first was unhygienic. Therefore, you must first have a shampoo and then offer a haircut. This was an ingenious way to drive the franchise out of business, because you needed expensive hair-washing facilities to give a shampoo. So it immediately discriminated against them. Their cost structure went up and their growth slowed tremendously.

But this is an example of the broader point that when you don't have competition and you can use the regulatory powers of the government, you can constrain growth. Japan has very constrained growth, which means it's dependent on the world economy to pull it out of slumps. Internally it can't do it. In the last 20 years of trying to get out, Japan has had massive stimulus plan after massive stimulus plan. The entire Japan is now covered with concrete from the kinds of construction plans that were put together. But it has still not come out because it depends on external growth.

The broader point is, we have a bunch of exporters in the world who don't have strong sources of domestic demand who are pumping goods into the world economy. Those goods are looking for buyers. That creates a deep problem, because it wants countries to overspend to buy those goods. If I tell you that in the 1990s, the countries that overspent were the emerging markets, in the 2000s, the countries that overspent—it sounds like a rogues' gallery of countries that are now in trouble—the United States, the U.K., Greece, Portugal, Spain, to some extent Italy, but not that much. Who are the countries in trouble now? Many of the countries that spent beyond their means.

The point I'm trying to make is that the second fault line is that you have export-dependent countries that now are unable to pull back. That strategy was very good in taking them to growth, but now it's very hard, because they are surplus countries and are forced to look for other countries to overspend—in a sense, others to take the counterpart. In a sense, they are looking for the weakest countries in the world, and that's a problem.

The third fault line I want to point to—again a conspicuous fault line—is that the nature of U.S. recessions has changed. U.S. recessions used to be in and out. You went in, you came out. Why? Because firms cut jobs, in the auto industry, for example. As soon as demand started coming back, they went quickly to rehire. Typically, it took two quarters for growth to come back, eight months to recover all the lost jobs—not just for job growth to be positive, but to recover all the lost jobs from the depth of the recession. That's why the thin U.S. safety net—you get unemployment benefits for six months—seemed to work reasonably well. You had enough while you were looking for a job and typically the jobs came back.

Something changed starting in 1990-1991. In 1991, it took three quarters for growth to come back to the levels that it was before, but it took 23 months for jobs. In 2001, it took one quarter for growth to come back, but it took 38 months, three and a quarter years, for jobs to come back.

What do we know about the current recession? Most economists would say it ended as far as growth goes in about July of last year. We are already in May, and it's still not clear that we have gotten into substantial positive job growth. The last jobs number was good. If this continues, it means about eight or nine months after the recession is over as far as growth goes we have started growing jobs. For us to recover the jobs that were lost in this recession, by most economists' count, will take about four more years.

That's the kind of unemployment we are now seeing. The question we have to ask is, is the safety net adequate for the kinds of recovery we have seen?

Why do I say this is important? Because policy is often driven by politics, and politics is driven by public anxiety, and public anxiety is driven by the fears of unemployment, not just from those who are actually unemployed, but those who prospectively could get unemployed. What we have seen again and again as far as government policy goes is that policy driven by a crisis is not good policy. We have seen that in the stimulus post-2001. We saw that in the recent stimulus. But more than the fiscal stimulus I want to point to is the monetary stimulus, which, to my mind, is even more problematic.

People say Greenspan was asleep on the job. Why didn't he raise interest rates? Why didn't Greenspan take a more active role in regulation?

I want to argue that no central banker would be brave enough to raise interest rates when unemployment is where it is. If jobs aren't coming back, nobody is going to raise rates. That was true of Greenspan. It is true of Bernanke right now. In fact, Greenspan went further and said, "Look, you guys are worried about investing. I'm assuring you, if there is a double dip, I will come in and pour more money into the economy." This was a famous Greenspan quote, saying, "I will plug the economy with liquidity if, in fact, you have a problem."

These kinds of government policies are a response to the political inadequacies of the safety net to some extent. But they create incentive distortions in the financial sector. As you often say, the road to hell is paved with good intentions.

These kinds of fault lines, in some sense, create the underlying incentive structures for the financial sector.

Let me focus on two—actually, let me focus on just one, given the time, and then leave some time for questions.

Why were low-quality mortgage-backed securities created? What does all this have to say about it?

The explanation is actually quite a simple one. There was a wall of money which was pouring into subprime lending to fulfill these congressional mandates. There is documented evidence from former employees of Fannie and Freddie on how much went into these areas every year. There was an accompanying wall of money coming from outside from the surplus countries which were trying to sell to the United States. These guys were looking for high-yield safe securities, the triple-A mortgages that became infamous during this crisis.

With the tremendous amount of money flowing into the financial sector, for noneconomic reasons, from outside—much of it was being sent by central banks that wanted to, in a sense, preserve the value of their currency against the dollar and maintain competitiveness. From inside, it was to fulfill the congressional mandates, not so much from a profit perspective. Given that all this money was not that focused on pricing, it distorted prices in the sector. The financial sector, when it knew that you could sell these mortgage-backed securities to people who didn't ask questions, went out and created a whole lot of rotten mortgages which then were financed.

We can go into the details—the details are in the book—as to how this happened. But I want to end with this: What is it in the financial sector that makes it focus only on prices and not on whether you are getting a grandmother who can't afford the house into the house? I want to argue that the nature of the financial sector is such that it makes you focus on whether you are making money or not. That, in many ways, is a good thing, except when the prices get distorted.

A quick example. Most people care about whether their work has value. I think the financial sector is no exception. So when we say "greedy bankers," why did they suddenly become greedy and without social conscience? I want to give you my explanation for that in a second.

But the experiment I want to talk about is an experiment which was run by MIT researchers using

Harvard students. They wanted to set the Harvard students a task that they thought was adequate to their mental capabilities, which they didn't think highly of, so they asked them—this was the experiment—to make models out of Lego Bionicle kits. It's a model kit. You put together the Bionicle. The experiment was to try to see whether you feel like working more when you have a product, when you can see the value of your work.

So they had these guys come in, sit down, and put together the models. They paid you on a decreasing scale for every additional model that you built. So at some point you were going to quit. It wasn't worth even the time you were spending to make a model for five cents. But they altered the experiment for one group of subjects by doing the following.

One group of subjects made the model. The assistant came, and as you were making the second model, she dismantled the first model and gave you back the kit. It was as if you were on a wheel going nowhere. For the second group, she took the model and put it on a shelf. You could see eight, nine, ten models as you built them.

Most people would know that even when you put them on a shelf, once they left the room, they would be dismantled. They didn't think those models were being kept for posterity. But just the fact that in one case they dismantled it right off, while in the other case they were kept for a while, made a difference in how long you wanted to go on doing this.

The point is that we care about the effects of our work. We want to see these things, and the more we see it, the more we want to build good things. The problem with the financial sector, to some extent, is that it has become an arm's-length transaction-oriented financial sector. In many ways, this is a good thing. It allows risk to be spread. It allows us to do things that enhance value, provided the market prices are right.

For example, a short seller who is selling Enron because he thinks the accounting is flawed, and makes a ton of money doing that, is providing a service to society, because he is putting Enron out of business, and Enron wasted tremendous amounts of resources in this society which could have been better utilized elsewhere. But if he looked at Enron and saw the people going to work every day, saw the people who would lose their jobs, he would be a little less motivated to sell the shares short. Compassion would be a bad thing in this case. The fact that he is at an arm's length is a good thing.

But it depends very much on the prices eventually being right, that Enron would collapse in price and he would make a ton of money. If every stock that he sold short collapsed in price, there would be an incentive to distort the economy.

Similarly here, if people were willing to buy any garbage that you sold—think about the broker there who is talking to a client. You know you are not going to see this client ever again. You know that out there people are waiting to buy any mortgage that you can put out, because they are packing it and selling it to German banks that don't ask any questions. When you have that kind of structure, immediately you lose all sense of anchoring, because the prices are telling you, "Do more of it. Do more of it." And they did more of it—Countrywide, First Century. The rogues' gallery there is pretty strong.

But you don't have to portray these guys as evil, dastardly rascals. They're like us. They're probably here. It's the incentive structure which, when distorted—when prices get distorted, the modern, sophisticated financial system can go a long way.

Bottom line: I started by saying, can we blame the bankers? Can we blame the regulators? Yes, they do deserve blame. But in many ways, you can well imagine that there is some truth to Lloyd Blankfein's statement that they thought they were doing God's work. The prices were telling them they were doing God's work. We need to go back and ask why the prices were distorted. Why did things go haywire?

I think, for that, we have to step back and ask a fundamental question about our society: Are we too unequal? Should we improve access in the society? How can we improve access? Can we do the right things, instead of doing the palliatives and the wrong things which take us off course? Similarly, do we need a stronger safety net? We have to trade off. The U.S. has always had a flexible economy, which has been a source of innovation. If we increase safety nets to the level that they are in Europe, maybe we will lose some of the innovation. How do we make this tradeoff? What are the right metrics we should think about in doing this?

Those, to my mind, are the serious questions we have to ask, in addition to, of course, how much we regulate, how we restructure the financial system. There are key questions there. For example, we have got to a point where too many institutions are too big to fail. We have got to the point where the standard response to anything is, "Bail it out." Of course, anticipating we'll be bailed out, we have lots of strange incentives.

One of the things I have left out in all this discussion is, why did the bankers, who knew the garbage that was in the mortgages, buy the stuff and hold them on the books? That's for you to read in the book, if you ever get to that.

But the point is, the problem is not the government. The problem is not the financial sector. The problem is the interface between the two, which is driven by some of these larger considerations that I talked about—the fault lines, so to speak—which create a perverse interface and create the kinds of problems that led to the most sophisticated financial system in the world behaving exactly like an emerging market. To get away from this, we need to fix those underlying problems. And that, to my mind, is a much bigger agenda than what anybody is talking about.

Let me stop there.

Questions and Answers

QUESTION: First, given your concern with safety nets and inequality, what in the world are you doing in Chicago [i.e., the Chicago school of economics]?

Second, you spoke about the incentive effects of asset pricing. I wonder if you could comment on the incentive effects of compensation in the financial system, and particularly given that regulatory efforts going on now don't seem to address that at all.

RAGHURAM RAJAN: Two things. One, Chicago is a big house. There are all kinds—I think the caricature of Chicago as right-wing loonies—perhaps right of Genghis Khan—is mischaracterized today. I think Chicago had to be that way when the fight was over winning government. Now I think we have a much better balance, and there are far more people at the center today.

We still recognize, in many ways, the downsides to excessive faith in government. I think you see that right now. The answer to everything seems to be more regulation. What happened to the regulations that were on the books when, in fact, all this was going on? They weren't enforced. How do you know that the regulators won't drink the same Kool-Aid again?

So I think we need to be careful. To the extent that Chicago provides a voice of caution, I think that's good. But we're not right-wing loonies. I don't think we ever were, but we certainly aren't now.

On the issue of compensation, I was one of the first to complain about the structures which gave one-way bets a blessing: Make money on the up. That's fine. Lose money on the down. Nobody hurts you. The question is, if traders have this incentive—by the way, in Chicago it's known as the O'Hare play. You put the trade on, buy it to get from O'Hare [airport]. If the trade works, you tear up the ticket and go home. If the trade doesn't work, you take the plane and go to your new job somewhere else.

But this asymmetric structure of incentives I think is a problem. The question is, why don't the firms fix it? Why don't the financial firms fix it? I think there you have to worry about the whole problem going right up to the top. Even the boards, I think, in many of these risk-taking financial firms, had the incentive to push for more risk. Citibank, with the wisdom of Robert Rubin, a great Treasury secretary and a very good CEO of Goldman Sachs, pushed Citibank to take those risks in 2005.

The question is, why? You have to understand that everybody in the structure, including the security holders, benefit from more risk, because the downside is socialized. So we need to find a way to start reversing that socialization of downside risk. The taxpayers should not be coming in to pick it up. That, to my mind, will push the adverse effects of risk taking back to the firm, to the CEO, and down to the traders.

Do the regulators have a role here? Yes, to the extent that firms don't want to take the first step in making their traders see some of the downside because of the fear that in a hot market they will lose traders. Perhaps some coordination, saying, if you don't have clawbacks, for example—if you make big losses down the line, your previous bonuses are clawed back—we will increase your capital. That's something that we have been advocating for some time. The FSA [Financial Services Authority] is thinking about it, and the FDIC, I know, has been trying to put it into place.

I think there are some changes there. But I think the real change will have to be to make the market prices of bonds and shares reflect the risk that these banks are taking.

I keep going back to this point: When the prices are distorted, you can't stand in the way of this enormous herd going where the prices tell them to go. So it's better to get the prices right, which means to withdraw the government from places it shouldn't be in—for example, housing; I don't see why the government should be in housing anymore—and make it back off from these guarantees which the private sector takes so much advantage of. How we do that requires some cleverness. There are proposals out there. We need to focus on those.

QUESTION: If we don't fix these three things, how do you see the next crisis manifesting itself? It's hard for me to imagine that if we don't fix these things, we are going to then see another lending boom in the mortgage market and another crisis unfold, because everybody now knows about that crisis. My point is, let's say we don't fix these things. How does the next crisis unfold? Where does it manifest itself? How do we understand it?

RAGHURAM RAJAN: The banking system has found its way to get into trouble in creative ways. Every ten years it finds a new way, because the old ways don't work as well.

It's not going to be the mortgage-backed securities the next time. Everybody is aware of them. You can already see the next mini-crisis under way right now. Why did the German banks hold onto so much Greek debt? Again, it's very much like what happened here, why the banks held onto mortgage-backed securities: Because there is an implicit belief that no matter how messed up the fundamentals of the security were, you were getting a spread which was money for nothing. The risk wasn't real.The government would come in and bail out the Greeks, the euro-area would come in and bail them out, and so you could load up on this stuff.

By loading up, you made the government's intervention real, because the government has no option. The German government and the French government are going in, not because they like the Greeks so much, but because there is a sense that if they don't do it, they'll have to bail out their own banks. The bankers have absolutely no sympathy in public. So rather than be forced to bail out the bankers, whom nobody likes, bail out the Greeks, whom fewer people don't like.

I'm arguing that these fault lines push certain kinds of regulatory and public behavior, which create the conditions for future crisis. For example, what are we most worried about down the line? We are worried about government finances. Think of the biggest load on government finances we have had recently, the health-care bill. There are lots of good things in the health-care bill. I think it's a travesty that the United States doesn't have universal health care insurance. But we also need to figure out ways to pay for it. That is completely left untouched by the bill. There are good ideas there, but we'll see how that emerges down the line.

The point I'm trying to make is that this incentive to bring the people left behind with you causes this kind of spending, which then creates the underlying weaknesses down the line, which may come back to haunt you. If we have a problem with public finances down the line—and we will unless we fix the entitlement problem. This was a golden chance to get at it, to fix it. And we didn't take it, partly because we were stuck in this somewhat bad equilibrium. I think fixing these fault lines is both good for stabilizing the global economy directly and also good in its own right. I think, for both reasons, it makes sense to do it.

But they are hard problems. They won't get done easily. But we should try.

QUESTION: Last night David Cameron, on the steps of 10 Downing Street, called for a new sense of responsibility in public life in Britain. When Barack Obama was inaugurated, he called for a new era of responsibility in his inaugural address. Indeed, a year and a half before that, Nicolas Sarkozy used the same language when he became president of France. This is new in public life.

Looking at your fault lines, it would seem to me that part of the problem is not just the incentives, but an imbalance between the role of the private sector and the role of public policy. One of the things that seems to have become clear over the last 30 years is that the private sector has no capacity to make public policy. There are no automatic incentives, and no matter how many incentives you put in place, in fact public policy has to be made by governments. So we now are seeing this switch from a faith in markets to a reliance on governments, even if there isn't a faith in governments. Hence this new vocabulary of responsibility.

My question is, if you look at where the next crisis is coming from, to pick up on the last question, is it not also going to come from a problem with the structure of the place where public policy is made—namely, governments? Take Greece and the difficulty of the European Union to respond to that. Take the gridlock in Congress and so forth. Do you really think that the fault lines that you have identified from the last crisis will actually be replicated, or will it not be a new series of fault lines that come out of an overreaction against the fault lines from the last crisis?

RAGHURAM RAJAN: A very good question. I don't think there will be an overreaction. I think there will be a different reaction. I think it will prompt reaction. I agree with you there. My sense is that that could create the problems, because we typically won't address the root of the problem. We'll address the symptom and we'll get carried away.

I want to define the crisis not so much as a problem with the private sector, but a problem with the interface between the private sector and the public sector, the public sector trying to do things that, to some extent, intruded on the realm of the private sector, and the private sector being very smart, trying to take full advantage of the public sector, and in the process, essentially bringing itself into a crisis.

It's that interaction we need to get better. These guys are the guardians, the watchdogs. These guys are the actors. When the watchdogs become actors, they get taken for an enormous ride by the actors, the sharks in the pool. But, of course, in doing that, in providing such easy meat, the sharks overfeed and have problems of their own.

I'm mixing so many metaphors here.

But the point I'm trying to make is, it's better that those guys stay outside the pool and do the things they need to do, amongst which I want to emphasize access and safety nets. That should be the focus of government. Let the private sector do what it wants to do, and don't, for heaven's sake, try to push policy in which you are sort of an actor in that process and then you become part of the pool, and therefore keep bailing it out at public expense.

QUESTION: If the state of Nevada, say, were to go bankrupt, I don't think there would be a great reaction against the dollar in the world. As the crisis in Greece intensified, however, the euro suffered greatly. What's the structural connection, if any, between Greece and the euro? Is it mostly psychological or are there structural factors?

Secondly, if it is mostly psychological, does that suggest that a long-term solution might be for Greece to return to its drachma?

RAGHURAM RAJAN: I think it's more than that. I think it hits at the European project or European idea that if Greece were to default on its debts and say, "Look, we need to restructure," the incentive for Greece to continue on the euro would be much diminished. In some sense, the euro is holding it back in terms of growth. The euro was useful because it provided implicit insurance that Greece would repay its debts. But once it is restructuring, there's no implicit or explicit insurance. It might as well go off the euro at that point.

That starts breaking the euro down at the periphery. Then the question is, would Portugal find that appealing also? Remember, the whole European project is as much political as economic. It is sort of to integrate France and Germany tightly together to prevent future wars, et cetera. That was the original.

But now it's to integrate the whole of Europe together. They started doing this with monetary union. Once that monetary union breaks down, it is the first step backwards for the euro-area. And it may be an appropriate step, but it means rethinking the whole process of integration again. They're very scared of doing that, because they know there's no public appetite now for the kind of integration, not in the Greeces of the world nor in the Germanys. Both sides don't want it.

So it could lead to a disintegration, which is why they are trying to hold this together by hook or by crook through these massive interventions and the massive subsidies, subsidized lending. Once it starts breaking down, it's gone. Merkel made exactly that point, that this is about the European project.

Would it happen in the U.S.? No. Nevada would default. Not a big deal. I don't think the federal government should be compelled to go to the rescue of Nevada or California. They take their lumps.

The other problem is that the overriding sense in public policy now seems to be no failures anywhere. Newspapers suggest that Barack Obama and Geithner were instrumental in phoning the Europeans and telling them they are to bail out everything. The problem with this continuous bailout is that it moves what was a containable private-sector problem into what may be an uncontainable public-sector problem. That's the worry.

You talked about the euro-area. If they are guaranteeing Spain and Portugal—and those countries aren't going to grow, because they are stuck in the euro-area—that means an enormous subsidy. Think of the impact on the German budget, on the French budget. Then when you ask the French taxpayer to pony up more or the German taxpayer to pony up more, how much willingness is there to do that?

So, ultimately, fiscal problems are political problems. What you have done is really escalated the political problem one level.

Will the euro survive? Who knows? I think you should be asking those questions.

QUESTION: You replicated this great American philosopher, Pogo, who said, "We have met the enemy and he is us."

Basically, then, and as a cacophony of voices has witnessed these, there are solutions out there, but each cacophony has a different solution, and therefore the Tower of Babel. You now are this benevolent czar. Could you sculpt a political, viable solution to the problems that you have—you have spent all of this time telling us how bad—and it's reality. Can you solve it, politically?

RAGHURAM RAJAN: I think Barack Obama had a wonderful speech early on in his presidency, where he said, "Here are the things we need to do." He laid out a bunch of things: financial sector reform, the entitlement reform, education reform, and creating a greener economy, which would provide sort of a scope for massive new growth.

I think all those are sensible. But the devil is in the details. How do you do it in an effective way? I would say, in terms of objectives, this is great. In terms of actions, I'm not persuaded that the current administration has done what it needs to do.

On the financial sector side, the key, to my mind, is eliminating this "too big to fail," "too systematic to fail," whatever you want to call it. The answer is not silly ideas, like "let's have a lot of small banks." We heard exactly the opposite idea after the Depression: Let's have a lot of big banks because they won't fail. Now we want a lot of small banks because they can be failed. If they fail all in a row, we will come back to the rescue.

So the point is not big/small. It's really trying to get banks to have the right incentives to take risks, which ultimately, as I said, means that you have to get the market to penalize the banks when, in fact, it sees them taking risk. The market didn't do it. I think, in many ways, it didn't do it, not because it didn't understand the risk it was taking, but because it understood it would be fully subsidized, which, in fact, it has been. I see massive intervention in housing post the crash. I see the massive intervention in the banking sector. Anybody who had a problem got a free loan from the government.

We need to break that. We need to figure out how to make the private sector pay for its own rescues, so that it doesn't immediately go to the taxpayer and say, "Bail me out," while taking all the upside at different times.

There are interesting solutions. For example, create a class of securities which will be held by non-banks, which will be forced to bear a cost if there is a downside, which will be wiped out in any rescue. Make more of those classes of securities so that you have buffers.

One example which we have been advocating is convertible debt, debt that converts to equity, if a bank gets into trouble and takes the hit and wipes out the existing equity. So the claimholders all have an incentive, without using the bank and society as collateral, so that you are scared to fail the bank because you figure that there may be losses to society.

There are things like that we should be thinking of—for example, on energy also. My sense is that subsidizing this industry and that industry doesn't make a lot of sense. A carbon tax is something that every economist would suggest is the best way forward, because it gives the right incentives to create the innovation which will reduce the greenhouse gases. But, of course, that has been off the books for a long time. Let's think about bringing that back.

Ultimately, there are solutions. The issue is, can we summon the political will? I think it was Churchill who said, "The U.S. tries everything before it does the right thing." My sense is, we will get there. I have hope and faith that we will get there. But we'll do a lot of stuff before we do.

QUESTION: I'm interesting in hearing your thoughts about an argument that was made by another former IMF chief economist, Simon Johnson, who pointed to the prevailing culture of a blind belief in the wisdom and efficiency of unfettered markets as a root cause of the crisis, a belief that was reinforced by the very cozy relationship that developed between the captains of high finance and Capitol Hill. He talks about a revolving door.

My question is, to what extent do you think this crisis warrants a fundamental rethinking of our assumptions and a review of our mental maps, as an economist?

RAGHURAM RAJAN: I hired Simon Johnson into the IMF, in my department. Simon is hitting at an important issue, but I think he overstates the issue. He is hitting at the nexus between Wall Street and government, which is strong, which is, to my mind, not crony corruption, crony capitalism, but is really what one might call cognitive capture. Everybody on Wall Street moves his way up into the administration. The administration—and Tim Geithner and everybody else—sees things the way Wall Street sees them, because they talk to these guys every day. That is their source of information. When they say, "Look, this is crazy. It won't work," you have to have real confidence to go against what they say.

So I do think there is cognitive capture, but I don't think for a moment that Paulson, for example, was doing this because he was benefiting Goldman Sachs. I think one of the things you learn when you read his book is the extent of cognitive capture, the extent to which he doesn't seem to be worried about the picture of the secretary of the Treasury calling GE, in one case, or Goldman Sachs to ask for their opinions. But what does come out is a person who thinks he is doing the right thing by the United States. I have no reason to believe that there was a craftily created sort of explanation. I do think these people were doing their best, but in an environment where they were getting filtered information.

We need to break that nexus. I talk a little bit about that in the book. But I also do think that the problems in the market were not that the market in general doesn't get prices right. The market seems to get prices in a variety of other areas right. It was that it didn't get the prices right in mortgage-backed securities—or as right as they should have been. I would argue—and this is not just a kneejerk Chicago reaction—that the massive amount of intervention, both before and after, was responsible for those prices being distorted. I would say we need more of a free market rather than less of a free market.

But we need regulation. I'm not one of those crazies who say we don't need regulation. But we need the right amount of regulation, and not regulation which creates enormous incentives for arbitrage or regulations that only a few observe and the rest don't, and the regulators don't bother to try to bring those who don't observe them back on track, for example, with all these off-balance-sheet activities.

I actually have more faith in the market than Simon has. I think it works, but it needs to be allowed to work, which again means that this interface between the public sector and the private sector has to be better managed. That, to my mind, is how we get out of this crisis.

JOANNE MYERS: Thank you for such a wonderful discussion and for your optimism.