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Interview with Anil K. Kashyap

Some say that the financial crisis has launched a thousand Ph.D. dissertations and perhaps just as many books. Anil Kashyap was on the case from the very beginning. In September 2008, as troubles in the financial markets spun into a full-blown crisis, he dashed off one of the earliest and most coherent explanations of what was happening. "Everything You Need to Know about the Financial Crisis"—which Kashyap wrote with fellow University of Chicago economist Douglas Diamond—became the most circulated post ever on the *New York Times*'s "Freakonomics" blog. Later, Kashyap joined the Squam Lake Working Group on Financial Regulation, a veritable who's who of top thinkers in financial economics, and he helped prepare several of the group's policy briefs.

Kashyap is the Edward Eagle Brown Professor of Economics and Finance at the University of Chicago's Booth School of Business. Before joining the Chicago faculty in 1991, he worked as a staff economist with the Federal Reserve Board of Governors. His research on financial markets has earned him several awards, including a Sloan Research Fellowship and the Nikkei Prize for Excellent Books in Economic Science. Among his other activities, Kashyap co-founded the annual U.S. Monetary Policy Forum and co-organizes the National Bureau of Economic Research's Working Group on the Japanese Economy.

Mark Sniderman, executive vice president and chief policy officer at the Federal Reserve Bank of Cleveland, interviewed Kashyap on February 15, 2010, at the Booth School. An edited transcript follows.

Sniderman: Everybody has a version of what caused the financial crisis.
Every newspaper story, every magazine article, has its own take on it. I'd like you to share your views on this with us.

Kashyap: Ken French [Dartmouth economist], a good friend of mine, has a good analogy: If you investigate an airplane crash, you usually find 10 things that failed. Seven of them could have happened and there would have been no problem. It would probably take nine or 10 to happen simultaneously to take the plane down. That's the way I think of the financial crisis. I don't think there was just one thing or even two things. It was a combination of problems.

There were a lot of bad incentives all through the financial system:
The ratings agencies, the regulators, the politicians, and the traders inside a lot of the financial institutions—they all had bad incentives. It was a combination of actions by many different actors and failures of many different parts of the system.

Sniderman: A lot of people look at the housing sector and say it's the epicenter of everything. But if I understand the way you describe it, perhaps six months to a year later, some other sector might have shown the stresses and strains.

Kashyap: The financial institutions were so highly leveraged — it was like a Ferrari that hits a pebble and crashes. The system was so fragile that, yes, it turned out to be housing, an initial set of losses related to subprime mortgages. But, as we saw, the damage was much broader.

And then you say, where did that leverage come from? People could tell that there were some problems with financial institutions, so they were not interested in putting in equity financing, and were only willing to fund the banks with debt. Then funding became increasingly short-term because people knew that they might want to get out, and keeping terms short is a good way to keep financial institutions on a leash. But then, of course, when trouble comes, it's all the worse.

Sniderman: Now that we have some insights into these half-dozen or more weak spots in the system, most of the attention is focused on how we fix them. Here again, there are many versions of what needs to be done. I know you are a member of a group of economists and finance professionals who are taking a very comprehensive look at this—the Squam Lake Working Group on Financial Regulation. I wonder if you might tell us how this group was formed and the directions you are headed in.

Kashyap: Right after Lehman Brothers failed, a number of finance faculty were talking to each other about what this would mean. Many people were worried that there would be an overreaction, an immediate jump for scapegoats, and not a lot of wellthought-out regulatory responses. So Ken French started calling around and saying, we have to get together and come up with something much more technical and focused on the real set of problems. We wanted to make recommendations that would consider the possibility of unintended consequences from the reforms. This group was formed with the idea of being very nonpartisan, not to ascribe blame to any one cause but to come up with a much more academically grounded set of recommendations about what might be done.

Sniderman: Before we get into particulars, let's broaden the scope a bit. This financial crisis was actually global. Does it turn out that some of the regulatory reform proposals that make sense for the United States also make sense internationally? Or is there something different about the way you are looking at the U.S. situation?

Kashyap: The Squam Lake proposal, along with most of my thinking, carries across borders. The legal and political problems vary from country to country, so to get the same package passed in each country, the political deals needed might vary. But I don't think the international dimension was so unusual that you would get a different diagnosis for us than for Europe.

Sniderman: Let's get into particulars. What are the top three to five places to focus for financial reform that you and your colleagues are recommending?

Kashyap: I would say the single biggest thing would be a resolution authority. Let's suppose Greece, which just had all this trouble, had somehow spectacularly failed and then we discovered that a financial institution connected to it had a lot of exposure, and now had its solvency threatened. We'd have all the same bad choices that we had with Lehman, and I think that's terrible.

Most of the response to the crisis post-Lehman amounted to giving guarantees to different actors to get them to go along. We provided access to different types of support, loosened the rules here and there, and there was basically no way to say credibly that we were going to fail an institution. That's a huge problem. That's by far the single biggest priority.







I think the single biggest issue is just getting the rules in place so you could actually take an institution over without having to sell it in one shot.

And then there are a bunch of complementary ideas that make failure less likely. Everybody is talking about changing capital standards, liquidity standards. Living wills are an idea that would allow firms approaching bankruptcy to get a bit better informed before something happens. But to me, the central thing has got to be if a large organization gets in trouble, there has to be a way to actually shut it down.

Anil K. Kashyap

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Corporate Financing and Governance in Japan: The Road to the Future, with Takeo Hoshi (Cambridge, Mass: MIT Press, 2001).

Structural Impediments to Growth in Japan, jointly edited with Magnus Blomström, Jennifer Corbett, and Fumio Hayashi (Chicago: NBER and University of Chicago Press, 2003).

Monetary Policy Transmission in the Euro Area, jointly edited with Ignazio Angeloni and Benoît Mojon (Cambridge, England: Cambridge University Press, 2003).

Japan's Bubble, Deflation, and Long-term Stagnation, jointly edited with Koichi Hamada and David E. Weinstein (Cambridge, Mass.: MIT Press, forthcoming).

Selected Papers:

- "Banks as Liquidity Providers: An Explanation for the Co-Existence of Lending and Deposit-Taking" with Raghuram Rajan and Jeremy Stein, 2002, *Journal of Finance*, 57 (1), pp. 33–74. (2002 Brattle Prize Distinguished Paper.)
- "Leveraged Losses: Lessons from the Mortgage Market Meltdown" with David Greenlaw, Jan Hatzius, and Hyun Shin, 2008, U.S. Monetary Policy Forum Report No. 2, Rosenberg Institute, Brandeis International Business School; and Initiative on Global Markets, University of Chicago Graduate School of Business.
- "Will the U.S. Bank Recapitalization Succeed? Eight Lessons from Japan," with Takeo Hoshi, Journal of Financial Economics, forthcoming.

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Sniderman: Is this largely a matter of legally creating an entity to do it, or a matter of figuring out how the financing would take place?

Kashyap: I think the single biggest issue is just getting the rules in place so you could actually take an institution over without having to sell it in one shot. The FDIC rules we have in the United States make it possible to walk into an institution on Friday and have it running in some form on Monday that leaves people largely able to function. You just couldn't do that with the 20 biggest financial institutions in the world. We need an intermediate thing that's not going to create panic that then spreads to the next one.

The week Lehman failed, Merrill had to be sold, and Morgan Stanley and Goldman were in trouble because their funding was at risk. We need a way to stop that, where you can say, "OK, this organization is in trouble. We are going to carve it up and sell off some parts of it and operate some parts for awhile." And that process must be understood well enough so there won't be complete panic that shuts down the entire sector. That's where I think the attention needs to be focused.

Sniderman: Sometimes I hear two schools of thought about these financial crises. Some people say we should turn the clock back to Glass-Steagall restrictions, when commercial banks were just commercial banks, and we had more lines of demarcation. Other people say that if you go back hundreds of years across countries, you will always see financial crises. There's no hope, basically, of preventing these things in the future. Where do you place yourself?

Kashyap: I'm closer to the latter view. The number of systemic banking crises in just the last 25 years is huge. Most of them didn't involve activities that were so different than those that would have been permitted under Glass-Steagall. So I'm pretty skeptical that just by containing things for awhile we could avoid all this instability.

It's important to realize that a lot of the trouble in the current crisis came through price contagion, where there were fire sales and we saw markets drying up, prices becoming uninformative, and illiquidity making it difficult for people to transact. The collapse, say, of asset-backed commercial paper and lots of other securitized forms of financing transmitted this shock from the financial sector into the real economy. So I worry that even if you did go in the direction of Glass-Steagall, you would just crowd out a lot of activities from the formal, better-regulated, and better-managed sector into parts of the system you can't see. And then when it blows up, you have all of the same problems but many fewer tools.

Sniderman: A lot of books about the financial crisis have raised the question about the nature of the market system, and whether we really will have to rely more on government intervention and regulation. It's the very problem that we worried about when Squam Lake was getting started—that there would be too much regulation as an overreaction. Yet a number of people have said, "Well, the free market school (including Chicago Booth) has led us down a primrose path by suggesting that markets can do more than they really can." I want to ask you about that because I know you are teaching a new class about the analytics of the financial crisis.

Kashyap: That's a hard question. I think markets work reasonably well. But markets require regulation, rules of the game. Many aspects of the crisis involved fraud that nobody condones. In the U.S., our regulatory system was so fragmented. It was really ripe for having these problems emerge. Two days before Bear Stearns fails, its primary regulator—the SECsays there's no problem. That's just unbelievable. You saw the Fed, which was late on subprime concerns, eventually put out guidance, but it took a long time. And what happens is the banks that are most worried about changing their charter go where they can't be supervised by the Fed. The regulators that were supposed to be on top of AIG had no clue.

There were so many loopholes in our regulatory system that I think made things worse. Some of these things were widely discussed for years and years. Others were problems we didn't appreciate adequately. On the other side, the United Kingdom tried to consolidate supervision and that didn't work so well either. Its Financial Services Authority ended up not covering itself in glory.

So I don't think there's some best practice that we all mindlessly adopt that's going to work very well. But we need to design regulations that would cover both the formal banking system and the so-called shadow banking system so we avoid big discontinuities in the rules you have to follow (or the capital you have to hold) if you restructure transactions and move them out of the formal system. I think that has been the least researched and discussed aspect of the crisis. My current fear is that we are going to do something that might be somewhat draconian and punitive to the banks and push a lot of stuff that has been inside the banking system to outside the banking system, where we won't have the regulatory apparatus in place to follow things very well.

Sniderman: How comfortable (or uncomfortable) are you about the idea of having a macroprudential supervisor that would be able to spot all of these things happening in the broader financial marketplace?

Kashyap: I think we need to try to do that. People talk about capital standards as an important part of that, and many people talk about liquidity as a second thing. I want to focus more on leverage as a third consideration, because deleveraging was very costly. Everybody decided to shrink their balance sheets at once, and the economy suffered. That doesn't have to happen in the banking system. If the shadow system stops securitizing, it has all the same pernicious effects. I want to make sure if we are going the route of macroprudential supervision, it involves some tool that gets all three legs—liquidity, capital, and leverage.

Sniderman: So is it fair to say some of your research and current thinking is on these issues?

Kashyap: I have been trying to think about this. I don't know if we'll ever succeed, but Dick Berner at Morgan Stanley, Charles Goodhart [former member of the Bank of England's monetary policy committee], and I are trying to write up a macroprudential toolkit. I am also working with some people at the Chicago Fed on trying to write a living will for Lehman and to explain how that would have mattered. Jeremy Stein [Harvard economist] and I have been working on several projects.

Sniderman: You have been a student of Japan and the Japanese banking system and a student of monetary transmission mechanisms more generally. Has this crisis gone by the playbook, or have aspects of it turned out to be surprising even for people who have studied these things?

Kashyap: I think the hardest thing for academics and a lot of central banks is the workhorse way of thinking about the financial system—it's very loose. Three years ago, most macroeconomic models didn't have a financial system. So if we went back and read central bankers' speeches or even if we just went to conferences where academics were talking, there was no uniform way of discussing if your financial system gets sick, what it's going to mean and how it's going to matter. I think that's been a real handicap for people who have studied financial crises.

In the U.S., the amount of reliance on the informal shadow system wasn't so well understood at first. Just seeing how fast the market evaporated and how that tightened credit conditions was something different. But it looks a lot like the other big financial crises we had and a lot of recent emerging market problems.

Sniderman: What about lessons from the Great Depression for central bankers?

Kashyap: Here's something funny. Three years ago, as I mentioned, the workhorse model didn't include the financial system. What are the two biggest macroeconomic catastrophes over the past 75 years? The Depression, and you'd probably say Japan. Both were cases where the collapse of the banking system was absolutely central, yet even the models that did describe how financial conditions matter tended to rely on borrowerside frictions.

[Federal Reserve Chairman Ben] Bernanke, [New York University economist Mark] Gertler, and [Boston University economist Simon] Gilchrist proposed a starting point for addressing these phenomena. They say the fundamental friction in the economy is that borrowers can disappear with funds and lenders are concerned with that. I take a different view. The fundamental thing that can go wrong in the financial system is that the supply of credit contracts because of funding problems for banks. This credit supply channel is understudied. It was really important in the Depression and in Japan. I think it's been really important in this crisis, and I bet that when it's over, most macroeconomic models will have a financial system, and the credit supply will be the primary way it will matter.

Sniderman: And that will come in through frictions in supply?

Kashyap: I think it will have something to do with the funding that's available to the banks to intermediate. If the banks can't get their own funding, then they pull that from the borrowers. So many creditworthy borrowers still want funding, but changes in the lenders' condition make them unable to give it.

Sniderman: It sounds like it's not strictly either/or. These external finance premiums are what we are seeing a lot, particularly with small and mediumsized businesses that have a lot of problems in finding access to credit.

Kashyap: In many cases, they are suffering because their lenders have problems. There's a nice paper by [Harvard economists] David Scharfstein and Victoria Ivashina, which I think is the best study of the current crisis. The final draft [to appear in the *Journal of Financial Economics*], which most people won't have read because an earlier draft got a lot of attention a year and a half ago when it was first circulated, includes a neat experiment where they look at which



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banks tended to be part of loan syndicates with Lehman. Once Lehman went away, not surprisingly a lot of people who were borrowing from those syndicates immediately said, boy, we're not going to be able to get credit, so they took down a lot of that credit. What Scharfstein and Ivashina show is that those banks saw a disproportionate drawdown of credit that cut their new lending. This is almost a natural experiment, because people who were syndicating with Lehman were not selecting very different kinds of borrowers. The people who got cut off were really exposed to the contagion and second-round effects of the Lehman failure.

Sniderman: One topic we haven't talked about is consumers in the marketplace. In this particular episode—you mentioned fraud earlier—there has been a lot of concern about consumers not being able to compete on an equal footing in the financial services marketplace. And there are a number of recommendations on how to deal with that. Have you thought much about the consumer side of this and where there may be opportunities?

Kashyap: That's probably the part I've studied the least and that's because costs during the really acute phase of the crisis—say from September 2008 to April or May of 2009—didn't change much on the consumer side. People were comfortable taking out these mortgages that they must have known they didn't understand. Many of them probably thought this deal was too good to be true, and it was. But we didn't have as many breakdowns on consumer protection across all countries, and yet the crisis was still very, very bad when the financial institutions themselves got into trouble and that spread. I think we could try to do more on consumer protection.



A lot of the regulatory proposals put too little weight on the liquidity provision. There's a limit to how much immediately demandable funds the market can produce.

That's a place where I'd be very careful because we know from past experience that something can start out well-intentioned but have really strange consequences once it gets enacted. You could easily end up restricting the supply of credit to groups because you think, well, they're not sophisticated so we need to protect them, but that could get them redlined out of the financial system. The details matter in a lot of these proposals.

Sniderman: You mentioned the commercial banking system and the shadow banking system and how we need to be careful about not driving business from one to the other if we over-regulate. Banks have been considered special for quite a while in the literature. Some people say banks are inherently special; other people say banks are only special because we regulate them that way and choose to make them special. Has the time now come to stop thinking about the commercial banking system and the shadow banking system as two separate systems? Should we be thinking about this in a much more integrated way? Or are the banks in fact special?

Kashyap: There are two theories of banking. At the 30,000-foot level, some people think the banks monitor firms or customers that are difficult to evaluate and for whom getting market credit would be hard without the monitoring. Others emphasize the fact that banks do liquidity provision. A lot of the regulatory proposals put too little weight on the liquidity provision. There's a limit to how much immediately demandable funds the market can produce. Part of the reason why the shadow system collapsed is that way at the end of many of these chains of market transactions was a liquidity guarantee from a bank. Those became in doubt, and the whole chain imploded. I don't think you'll ever be able to set up the market system to necessarily do a lot of liquidity creation. You might be able to do a certain amount of the monitoring, but I think the liquidity creation fundamentally resides in banks.

You ask why. Again, two theories. One is that anyone who has access to the discount window in the end can get central bank funding, and that's what allows them to give funding. But I also think there's a reason why there's a natural amount of liquidity creation because banks are in the business of giving people checking accounts, which is something people want. Then managing that kind of risk of liabilities

going away is very similar to measuring the kind of risk you need to appreciate if you are going to give somebody a loan agreement. A checking account and a loan commitment are really almost the same thing from the organization that's providing them. Either way, you wake up one day and all of a sudden more money has gone out the door. So if you have the infrastructure in place to manage the checking accounts, it's natural that you are going to go in the loan commitment business. But now, of course, we're into liquidity creation.

In the end, you might say the access to the discount window is what allows you to get into this franchise. But I don't think that's quite true because you see in lots of other countries in other time periods that there is always somebody that provides checking accounts, and this was before we had central banks. And almost invariably, the people doing that and allowing what was called overdraft protection were in the business of giving loan commitments. So I think that synergy is real. It's not just because of the central bank guarantee. The central bank guarantee must help it, but I think that's the sense I would say that banks are special. This perspective delivers a bunch of propositions about regulations, including whether they will be effective and whether they will be costly.

Sniderman: Systemic risk has become a very, dare I say, popular topic these days. When we get into macroprudential supervision and look at systemic risk, we need some definitions of systemic risk so that we don't just say yes, we're going to do this. That may require some additional theory, then some measurements and tools, and maybe some new data. How, as a practical matter, might we do this?

Kashyap: It's unbelievably challenging because we don't measure well so many things that we know are important. An active area of research is to try to come up with ways to summarize networks and linkages. I think you're right; it's going to require all three things you mention. Some new theory, some new data probably, and



then some changes in regulations. I'm hoping the Fed can do its bit by publishing some of the statistics that you are probably collecting. I keep pushing on this deleveraging idea, but haircuts and margins are something the Fed, by virtue of acting in the marketplace, is already seeing in those prices.

I'd love to see the Fed publish, once a week, a set of statistics about indicative margins that indicates something about the ability to get leverage. That's the type of thing I suspect we're going to need, because those types of factors matter a lot for the securitized markets. And the condition of the repurchase markets is something we need to learn more about. Measuring that isn't so easy but it's an important task.

Sniderman: Do you mean that having more information in the public domain will help markets discipline behavior?

Kashyap: I was thinking even more selfishly. It will help academics write papers that will teach the regulators. The Squam Lake group wrote a memo pointing out that if you just disclose more stuff to the regulators on all kinds of dimensions, that's probably not going to be enough. We need to think about ways to put information into the regulatory system but also so that it can come out and others in the system can learn more. I think you're right, the chance of getting market discipline going depends on people believing that they understand what's happening in the system as well as having confidence that regulators can do the right thing.

Sniderman: One element of financial reform that seems to be getting rave reviews is the idea of creating some exchanges, clearing houses, and new ways for derivative markets and other markets to clear and settle. Why do people view that as such a promising direction, and are there pitfalls we need to watch out for?

Kashyap: On exchanges, I think one thing we learned from Lehman's case was that unwinding all the positions that were open at the time of the liquidation or failure was incredibly complicated. And there was no obvious reason why all these transactions had to be over the counter and why many couldn't be standardized. You mentioned the pitfalls of exchangesespecially what happens if the exchange itself fails. Hopefully, that is not going to be a problem. Exchanges have proven to be very robust in the past. It's probably going to be a good idea to say, look, things don't absolutely have to be traded over an exchange. But if you do trade over an exchange, you don't have to hold as much capital, and you're subject to extra supervision and regulation on over-the-counter transactions.

The fear with exchanges, besides failure, is that you might stifle innovation. Not all of the structured products we saw were serving a great purpose, but many of them were designed for good reasons. And if we go toward a world where we have more specialized derivative contracts, they invariably have to start out highly customized. Only after you learn about them can you get them standardized enough to trade them over an exchange.

So I think it would be a big mistake to say everything has to be traded over an exchange. There's not enough discussion about the differences between centralized clearing and exchange trading. You can get a lot of advantages just by clearing trades differently, even if you don't trade them over an exchange. So I'm usually in favor of centralized clearing as a minimum condition. And if stuff migrates to an exchange, that's fine. But you really need a lot of infrastructure supporting the centralized counterparty.

Sniderman: In the area of supervision, for understandable reasons, conditions at individual institutions are not revealed, but are there other opportunities to benefit the financial system by improving information flow?

Kashyap: You're right in saying that it would be desirable to do more to get the markets to appreciate the intent of the regulation and to reinforce some of the actions that would come out of supervision. There are huge discussions as to whether anyone actually believed Lehman could fail. Some organizations didn't think there was any chance it could happen, which made it all the messier when it did. If there had been some way to disclose policy rules and discuss them ahead of time, it might have made a difference.

More generally, if macroprudential supervision is doing its job, it is going to include writing some reports on market conditions and warning about stuff. That's why I think it's really important that the macroprudential supervisor has some tools to follow up. One thing we learned about this process is that having many officials talk about something for a really long time doesn't matter. Fannie and Freddie were slow-moving train wrecks. Every single official in the Treasury and the Fed had been talking about the problem for years, but they didn't have a way to do anything about it. And the result was that it was allowed to fester. So disclosing information to the market can help, but there's got to be some scope for following up if the actions you want to be taken aren't taken and if the untoward or reckless behavior continues, so that there are consequences. Information is good, but you've got to be able to follow through. ■



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