



Lessons Learned Oral History Project Interview

Interviewee Name and Crisis Position	Michael Krimminger ¹ Deputy to the Chairman and General, FDIC
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Introduction:

The Yale Program on Financial Stability interviewed Michael Krimminger to explore his insights about the Federal Deposit Insurance Corporation (FDIC)'s role in the 2008 financial crisis². Krimminger served in senior positions at the FDIC for 21 years, including as a senior policy advisor, deputy to the Chairman for policy and general counsel for the FDIC during the crisis. He was a principal legal and policy advisor for the FDIC on the writing and later implementation of Dodd-Frank Act, including its SIFI resolution, living wills, capital markets and capital, and structured finance requirements. Throughout this period he served as a major policy and legal advisor for the FDIC's chairman.

Since 2012, Krimminger has been a partner Cleary Gottlieb, where he offers advice on financial regulation. In that role, he has advised many financial institutions on compliance with banking, Fintech, and related regulatory issues.

[This transcript of a telephone interview has been edited for accuracy and clarity.]

Transcript:

YPFS: Just to frame the issue, can you talk a little bit about how the FDIC interacted with other regulators during the crisis, or would you rather start with the dawn of the crisis? What's the best starting point for you?

Krimminger: How regulators dealt with each other was heavily influenced by and reflected their statutory obligations and responsibilities. Far too much has been made about personality conflicts. I'm not saying personality conflicts did not occur, but

¹ The opinions expressed during this interview are those of Mr. Krimminger, and not those any of the institutions for which the interview subject is affiliated.

² A stylized summary of the key observations and insights gleaned from this interview with Mr. Krimminger is available [here](#) in the Yale Program on Financial Stability's *Journal of Financial Crises*.

predominantly any conflicts were created by policy differences often arising due to the different agencies' institutional duties and obligations. The FDIC is the primary federal supervisor for state non-member banks, the deposit insurer for all federally insured banks, and receiver for failed banks. So it has a different role than does the OCC or the Fed or the Treasury.

I'm a big believer in the genius of one of the key elements of the American system of government—the separation of powers. The design of the separation of powers recognizes the necessity for checks on absolute power and the value of competing centers of authority to prevent the growth of such power. Some of the problems in American government today stem from a failure of those competing centers of authority to assert the checks necessary on concentration of power. The competition between different branches, while sometimes messy, is critical to the design, not a flaw. I think the same process of checks and balances is important between agencies as well so that competing considerations receive careful review and a single perspective does not overwhelm those considerations.

In the crisis, different agencies had different statutory duties and obligations, and they asserted positions consistent with those duties and obligations. This led to debate, sometimes contentious, but rarely personal. The competition of ideas and the imperative to get multiple agencies – each asserting their statutory roles and obligations - aligned to achieve goals resulted in better decision-making in my view. The views of the FDIC, Treasury, the OCC, and the Fed reflected their statutory duties and responsibilities – and those reflect different interests – that helped moderate and usually improve the ultimate policy decisions.

As an aside, I continually find fascinating how almost invariably new appointees begin to reflect the perspective of their agencies – and I think it's because it is sobering to any conscientious administrator to understand, sometimes for the first time, the statutory roles the agency, and that administrator, play in our system of checks and balances.

YPFS: Can you give me an example of these different institutional imperatives kind of coming up against each other? And how that can be not just a difficult thing, but also a creative thing.

Krimminger: Let's look at the June 17, 2009 Treasury white paper entitled "Financial Regulatory Reform, A New Foundation: Rebuilding Financial Supervision and Regulation". The white paper proposed for the Treasury Secretary to have much greater control and authority to take independent steps in response to a macroeconomic and a systemic financial crisis. This authority would have included allowing the Treasury Secretary to provide support guarantees, loans, et cetera, in order to do bailouts as necessary.

The Treasury white paper recommended that the Secretary retain the authority to choose “[to stabilize a failing institution (including one that is in conservatorship or receivership) by providing loans to the firm, purchasing assets from the firm, guaranteeing the liabilities of the firm, or making equity investments in the firm.” Page 77.

The FDIC had long advocated that greater regulatory oversight and market discipline was essential. The FDIC opposed that broad grant of authority to the Treasury Secretary because it would create unlimited bail-out authority and create market expectations of a bail-out with cumulative distortions in market practices.

In order to create more regulatory oversight and market discipline, Sheila Bair, the chair of the FDIC at that time, urged the adoption of a resolution process patterned after the one the FDIC had long used to resolve failing banks. In 2008, there was simply no process other than bankruptcy to resolve systemically-important financial institutions, such as Citigroup and other holding companies. The impact of Lehman’s bankruptcy demonstrated 1) that bankruptcy was not a good process for such companies and 2) if a disruptive bankruptcy was the only other option, policymakers would opt for a bail-out every time.

Treasury tended to favor loans and other measures and was lukewarm about a resolution process. The initial white paper reflected that. The FDIC came out fairly strongly against including options for the kind of bailout that the public and Congress had just railed against in the fall of 2008. Having a bailout option on the table was not going to improve the market discipline essential to reduce the likelihood of a future crisis.

Fortunately, the Treasury never got the authority to provide unlimited loans and guarantees to troubled banks and holding companies. That is important. Having that option available would simply mean bailouts would be the default option because, in the short term, they are less disruptive. We have seen that repeatedly in Europe, which has relied on bailouts even for most small banks. There needs to be market discipline, which requires that the market incorporate into its pricing for bank debt and equity the potential for losses to creditors – and that they will not be bailed out.

A resolution process also can create “regulatory discipline” for regulators – a longer discussion - so they don’t just sweep things under the rug. But, in short, it forces the regulators to make a decision: bankruptcy or resolution.

YPFS: What would you attribute this inherent tendency to push things aside? Is it a kind of coziness of relationships or is it a complexity of issues, or a complexity of translating issues from one realm to the other? Or is it being overwhelmed with other work and so it's a back burner problem. What would you attribute that to?

Krimminger: We should strive to make the likelihood of a bailout very low even for the largest financial institutions—recognizing that there could be the unusual circumstance, like 2008 or 1929, where you might have to do something beyond a resolution.

The political dysfunction we face today is partly based on the public anger at the bailouts, and the resulting desire to completely reject the “system”. So the negative consequences of a bailout can be much broader and much longer lasting. This is not true in all countries – examples probably being France and Germany – but we have certainly seen long-lasting consequences from the bailouts in the US.

If you resort to bailouts with small banks or medium-sized banks or even the occasional large bank, most of the public doesn't really pay much attention. If you're doing it on a system wide basis, like we had to do in 2008, the public pays a lot more attention. I think that, in part, led to the Tea Party movement.

YPFS: So just to clarify, it sounds like a key part of it is just the intense rush of events and the need to do something is what causes people to look for the quickest solution, so they can just get to the solution, and then deal with whatever's left in that next day. Is that a fair way to put it or not?

Krimminger: In the fall of 2008 and early 2009, there was a tendency of the FDIC to say, look, we should do a resolution of this entity or that entity. Other federal actors, such as Treasury and the Federal Reserve, often disagreed. I can see in a cataclysmic crisis, other imperatives may control and it potentially could be destabilizing simply to initiate the resolution process due to the uncertainty it could create. During 2008, without any viable statutory framework with which to act, I think you can see the FDIC's position evolved some and it became more willing to take more dramatic action to prop up the market as the liquidity crisis worsened during October 2008. However, even then, the FDIC was always conscious of the importance of maintaining market discipline and providing a strategy to return to market-based funding from government guarantees. You can see that in the FDIC's Temporary Liquidity Guarantee Program, which incorporated incentives to gradually wean financial institutions off FDIC-guaranteed debt issuances.

As I noted, in 2008 we did not have a developed statutory framework as a backstop to a Lehman-style bankruptcy proceeding (which we do now in Title II of Dodd-Frank) and we did not have a strategy to address individual insolvencies and calm the market other than government equity, guarantees and liquidity. Now, I believe we have much greater capabilities in Title II and through the bail-in strategy and resources at the financial institutions.

In 2008, the FDIC worked closely with other regulators on the temporary liquidity guarantee program, which was coordinated with the Treasury's TARP program and the Federal Reserve's quantitative easing programs and funding and liquidity programs. There was a lot of debate and there were disagreements, but I think that is a positive in achieving balanced, thought-through solutions. Collectively, there was a recognition that we had to do something akin to a bail out. But the FDIC tried to include market-based incentives and pricing as much as possible in TLGP. However, getting liquidity into the system was critical, so that had to be the controlling criteria at that time.

YPFS: Does it help to be trained ahead of time to expect these kinds of pressures and tendencies so that you can be ready for these inevitable pressures? In other words, how much training and preparation goes into developing a sense of awareness in regards to the political environment, and its consequences and so forth? Do you think this kind of training will be helpful the next time that something like this happens?

Krimminger: It's absolutely essential. Everything I say and everything everybody else says will be forgotten by the time the next crisis comes around, whether that next crisis is next year, five years or 20 years. But if there's literature about the issues to consider, the critical determining factors leading to decisions in past crises, the trade-offs, and lessons learned ... some people will look and say, "Well, they wrote about this and they came up with these ideas and said to think about these issues." And hopefully it'll have some impact.

I'm a realist. I think that human nature seems inclined to think that it's always the first time anyone has dealt with an event – every time it happens. Hopefully, someone will have the judgment to consider whether lessons can be drawn from the past.

Planning for the next crisis is critical. This is why I worry that we've already kind of declared victory over the last crisis and gone home. Thinking through these issues is critical, so you have some strategy for going forward. And while the specific strategy might not be implemented as it's structured in a future crisis, preparing and improving resiliency will provide the frameworks within which that future crisis can be considered and, hopefully, addressed. The mere process of planning will make you better able to deal with the crisis than if you hadn't done the planning. It's like the well-known quotation by Dwight Eisenhower – "I have always found that plans are useless, but planning is indispensable". The process of planning improves capabilities and the critical understanding of the options. The plan puts you in a position to win.

How are you going to ensure that, in a crisis, banking operations can continue? Who provides the liquidity, who provides support services, who has the contracts, who has the personnel, who controls the infrastructure, cybersecurity, and back-up systems? And many more key elements. All of these things are

critical, but knowing the answers to these questions is usually less important in a day to day business environment, right? In a crisis, they're absolutely critical, but in conducting resolution planning banks have even discovered that in the day-to-day business environment, the banks can become more efficient by understanding the answers to these questions. Most banks, if they're honest, would agree that planning for the extreme helps you manage everyday business operations better. It would make you more efficient, leaner, and a better value-driven proposition for investors.

YPFS: Could the FDIC have done anything more to dampen housing speculation before the crisis hit?

Krimminger: The housing crisis was a product of excessive greed and negligence and malfeasance by everybody, including lenders, regulators, brokers, investors, and, yes, consumers. If you're making \$30,000 a year, you probably shouldn't be buying a \$500,000 home, no matter whether you qualify for the loan or not. Within government, Sheila Bair recognized early on—what some others had been saying outside, but not very many in the market—that there was a ruin coming because of the horrible structure of the loans that had been generated in order to feed the securitization demand.

I have nothing against securitization. It can be a very effective tool to transfer risk and to gain liquidity for financial institutions. However, in the run up to the crisis, securitization contributed to a gross underpricing of risk. Too many bought into the idea that slicing and dicing weak mortgage loans prevented risk. At best, it simply redistributed those risks, but the risk was still there. In effect, you could get a Triple-A rating for trash. Creating senior and junior tranches of securities can only protect against loss up to a point. Unfortunately, through a combination of features and a lack of interest in thorough analytics in “good times”, the securitization of mortgage assets became a machine to feed, led to opacity about the exposures of financial institutions and investors, and erected barriers to transparency and potential solutions.

The private housing market has never really recovered. Sheila Bair raised the clarion call. Nobody ever wants to listen to the dangers when times appear good. The analysts in every agency had identified the issues, but the question was what impact would the coming reset have? We got enormous pushback, from the Treasury and from the OCC. The Fed was trying to be quiet about it, that it wasn't as big of an issue as we were saying. It was a big issue.

YPFS: Why was that? I mean just from the standpoint of ordinary guy who reads the paper every day. I was oftentimes shocked that at some of the terms of home loans. I actually used to know this guy who wrote a book about getting loans far beyond what he could afford. And he ended up crashing and burning. He wrote a whole book about it. He was a reporter for the New York Times. I was kind of watching this happen and thinking: Don't they have any

rules anymore? So is there a way to make sure that the alarm is actually heard?

Krimminger: Leading up to the crisis, the market-based and regulatory controls on underwriting failed to operate. Off-balance sheet securitization both masked the problems by, it was thought, spreading the risks to many parties and encouraged a disastrous decline in underwriting standards. Under the accounting rules in place leading up to the crisis, it was relatively easy to achieve a “true sale” of the loans into securitization trusts, which then sold securities representing structured cash flows to investors. If the risk was sold away from the banks, too many thought, then the risks would not be concentrated in any one part of the market and this dispersal of risks would limit the impact.

By structuring the cash flows, you could achieve a so-called AAA rating for some portion of the securities from virtually any type of loan – no matter how likely to fail if market conditions changed. These securities were widely distributed – and theoretically dispersing risk should mean that losses would not be sufficiently dire to threaten the solvency of anyone. Unfortunately, there was too much opacity in the securitization process and the dispersal of risks effectively meant no one knew who held the risks and how much risk they held. This opacity and broad dispersion of securities widely to many parties actually led to the market drastically discounting the asset values of anyone with exposure to mortgage risks since it was almost impossible to define precisely how much risk they held. AAA was no protection.

Similarly, the imperative to keep selling loans to finance new operations meant that, once you had lent to good borrowers, you had to constantly reduce underwriting standards to gain liquidity, retain market share, and show profits from the growing market expectations for growth. That first affected the non-bank lenders, like New Century, and then banks, and then the GSEs.

So, in short, if prudent underwriting standards had continued to be met, we could have avoided the crisis. Given the masking of risk achieved through securitization, the rising risks were not sufficiently recognized. There is a role for regulation - you need rules that compel prudent underwriting and oversight to ensure those are followed. If Freddie and Fannie had stuck to the loans that met their criteria for going into their securitization pools, they would have been fine. It would not have been a problem. The loss rates on the standard GSE loans remained relatively stable and never rose to the levels we saw for subprime or Alt-A loans. Unfortunately, they invested in portfolios of crappy mortgages that were sold by banks to regain market share from the private securitization markets and get a higher yield. That was a very bad decision.

If banks, non-banks, and market participants had insisted on strong underwriting – simply demonstrating the borrower’s ability to repay the loan under its original and potential reset terms – then you would not have had this problem. But you

would have been taking away the punch bowl at the party. You could see it in 2019; we have political leadership that's saying, let's go to negative interest rates to pump the market for political purposes, and virtually no one is calling them out for it. That's the kind of attitude you have prior to any of these crises. Anytime things are going well, people want them to go better. So just keep pumping out profits –and push the ultimate reckoning down further.

For 15 or more years prior to 2007, no one had not seen mortgage defaults at the levels we began to see during that fall. I remember in May 2008 having a meeting with the Treasury staff in which we were urging Treasury to propose and provide \$10 billion in emergency funding to modify mortgages and get rid of some of the 2-28 and 3-27 subprime resetting mortgage problems and they refused.

I'll never forget a senior Treasury official showing me a list of things that they were planning to do. He said, these are our break-the-glass strategies, but we're nowhere near those yet. And we don't think it's necessary to put any money like that into it. Then, when August and September of 2008 hit, they went through all of those strategies and it made no difference – the financial system continued to lose liquidity.

YPFS: Does that raise a key issue—that you can't take corrective action before the crisis hits?

Krimminger: The qualified mortgage and qualified residential mortgage standards in Dodd-Frank were designed to make sure that mortgages were underwritten to a high level of quality by requiring risk retention for many mortgage securitizations, while eliminating risk retention only for the safest mortgages meeting the QRM standard. However, the final rule adopted in 2014 effectively made QM and QRM standards the same – thereby eliminating risk retention for all mortgages meeting the QM standard. I think this was a missed opportunity to incentivize safer mortgages by eliminating risk retention only for them. So far, it is of limited importance since virtually all mortgages meet GSE standards and there is only a very limited non-GSE securitization market.

The key point for the future – and a lesson of the crisis – is that maintaining strong underwriting standards is critical. Regulatory standards can play a critical role – but only if they are based on market incentives (such as by mandating transparency and risk retention) and only if they are enforced. The crisis proved that market incentives alone are not enough.

YPFS: I'm wondering if you could say a few words about the shadow banking system and how these kinds of credit intermediaries and other nonbank entities like hedge funds and so on, how they play into this and if anything, someone like the FDIC can do about it or who should do something about it? And they're willing to bear whatever consequences.

Krimminger: When sophisticated investors take risks and know what the risks are, that's fine. That's the way free markets should work. They're willing to bear the consequences. The problems occur when a firm gets so large and interconnected that its insolvency could end up creating dislocations in the markets that could take down other market participants. If the market, and even the firm, begin to assume the government will not let them fail – then the market incentives get diluted and we end up privatizing the profits during good times and socializing the risks. That is simply not a free market.

You must make sure the markets are policing things as much as possible. I've always been a firm believer in the free market economy. But occasionally there are places where the governmental sector and regulations need to make sure that the market is focusing on certain risks that can have dangerous, distorting effects. You've got to be very careful. There are certain things—like for example environmental protection—that the market's never really going to take care of alone because the profits swamp the short-term risks, even though the longer term risks may be immense. There are other examples where the short-term risks are lower than the profits – the market is not really good at addressing those types of issues.

YPFS: So you've, got all this activity in the shadow banking system, which is oftentimes very innovative. There's some risks, but some risk is quite acceptable if you're willing to pay for the consequences. So there's all this activity going there. How much do member banks and the FDIC itself, how much do they feel that kind of pressure to do things differently or to refrain from speaking about other people doing it differently? Or do you feel like there's enough autonomy there that they can resist the kind of prevailing winds and the fevers of the day?

Krimminger: Banks always feel under stress. Banks have lost many of their old-line markets – much of the funding for commercial and even personal activities used to be dominated by banks. That's no longer the case in the U.S. In Europe, funding for personal and commercial loans is still predominantly done by banks. In the U.S., a lot of the funding is done by market lenders that aren't banks.

How have banks responded to this? In the U.S., by engaging in other activities focused on fees and payments services. But, those tend to be low margin businesses. Investment banking can be profitable, but there are limits there as well. So, there's constantly pressure to take more risks in order to achieve the growth to meet their shareholders' demands for return on equity – particularly compared to other options where shareholders can deploy their funds. Which is one of the reasons that you have to have strong supervision, making sure that financial institutions are monitoring risks and putting things in place to deal with the risks into their system. There is always a balance – banks must be able to make money, but they cannot do so in a way that imperils the system.

Banks fund their assets, if you will, with federally supported deposit insurance. That's why it's important to have regulatory discipline. In my perfect world, you'd have a lot more information about banks so investors could evaluate whether the bank is doing a good job of monitoring risk.

YPFS: **So you just anticipated my next question. There is a lot of free market regulation thought, in all kinds of fields, about how the ultimate discipline is information and transparency. How much do you think that's true—that one of the reasons this crash was able to happen is people were not just averting their eyes from the crisis, but they also didn't really see all the signs of the crisis. Maybe some more transparency could make more people see the crisis and possibly create the opportunity to take preemptive action to prevent the crisis.**

Krimminger: Transparency is always going to be important. But banking cannot function if a bank's balance sheet is daily marked to market like a broker dealer's balance sheet. Banking takes short-term liabilities and transforms them into longer-term assets. As a result, it's difficult to determine whether a bank is making risky loans just because the market reaction to the borrower goes up or down. Given this inherent opacity, history has proven that market discipline is a very uncertain thing to rely on. So that's why you need regulatory discipline. Federally-supported deposit insurance allows banks to maintain liquidity – and ameliorate the mismatch between liabilities and assets – but it creates moral hazard and risk because you've got an ability to obtain funding for new assets that other institutions don't have through deposit insurance.

And you can run a bank for a while even if it's insolvent as long as you can leverage deposit insurance to get more cash and make loans. That's why you need that regulatory discipline to buttress the market discipline.

Some people say more transparency could have allowed the market to react and avert the crisis. I frankly don't believe that because in 2007 I spent a lot of time working with the SEC about trying to improve Reg AB. Reg AB required information about all the tranches and all of the individual assets within a securitization to be made public, but only for the first year of the securitization. I asked, why? And the answer was ... that the market didn't demand it. The market didn't really care. The securitization alchemy was working, so they thought, and loan losses were tolerable. The market can be overwhelmed with information like any other person or entity, right? They have to make judgments quickly and they make misjudgments. That's why I think you need supervisory discipline involved. But, both market discipline and supervisory discipline must work together.

YPFS: **You mentioned something earlier about shareholders. And there's been a lot of discussion lately about to what extent should shareholders interests be the drivers of major economic entities and their decisions. Can you talk**

about that a little bit about the role of shareholders and banks and other financial institutions?

Krimminger: Shareholders demand a rate of return on their investments balanced against their risks. Prior to the crisis, there certainly was some shareholder pressure for lenders – banks and non-banks – to take more risks, but that was all part of shareholders and management seeing the way the market was moving and feeling compelled to keep pace because of pressure for earnings. That gets back to the supervisory discipline.

Leading up to the crisis, regulators were not challenging the business model to the degree that was needed. Investors were buying AAA-rated securities based on horribly-underwritten loans. Homeowners were using their equity as a piggy bank – encouraged by lenders and a mantra that real estate always went up in value. It was a fundamental failure of market, regulatory, public and internal discipline. People saw a huge run of increasing housing prices and they didn't think it was going to end, which is kind of crazy. It's really hard to resist that pressure. That doesn't make the people who give in to the pressure bad people. It just means that they succumb to that pressure.

YPFS: A growing literature on behavioral economics finds that computer programs often assess risk better than the guy behind the desk. Sometimes individuals with feelings and motivations and so forth don't make the decisions that a more robotic kind of approach would. Is there a growing role for more kind of automatic benchmarks and automatic alerts that don't rely on human motivation and bias and so forth?

Krimminger: How should a bank set its risk tolerance or threshold? The risk tolerance or threshold may be at one point in one year, and at different points the next year or the next quarter because you do have to consider the surrounding economic conditions. That's business. But, you should ALWAYS ensure that you are soundly underwriting the loans based on the ability to repay the loan according to its terms. That's always going to be important.

I wouldn't turn risk management over to data analytics, but I think better data is important. One of the problems the regulators had in the fall of 2008 is we didn't have the data to clearly understand the trajectory of events – so it was very difficult to assess options until the collapse of liquidity made that painfully clear.

Banks have pushed back on occasion in response to demands for data and they do have to provide a lot of data. And I'm sympathetic to degree – particularly if it's unclear if the data will ever be used. Piling up data at the regulators is not the answer – unless there is a cogent, focused purpose for it.

Various schools, like the Stonier Graduate School of Banking, focus on the blocking and tackling that needs to be put in place. Understanding the basics of

risk management and the role that data analytics can play is critical. Then bankers and regulators can act based upon judgment and based upon the information and the judgment that derive from experience and lessons learned from the past. So you've got continuity in that type of consideration because you look at what actually causes banks to fail. It's not really complex.

Every bank that I've seen fail has either been because of fraud, mispricing or mismanagement of risk, or excessive greed. Each of those causes derive from poor governance leading to poor risk management – perhaps it's domination of the bank by a single person or small group, excessive growth outpacing risk management, but it usually all comes down to mispricing or mismanagement of risk. As a general rule, you can run pretty severe risks if you are accurately pricing for that risk. That means you are going to charge a lot for it, and then it's not going to be taken by many people. That's a good thing.

There could be more postgraduate training for bankers and others that would provide the opportunity to kind of step back from day-to-day operations and focus on particular types of banking enterprises and risks. A lot of banks do an awful lot of training themselves. There is a lot of education on that, but then it can always be improved.

YPFS: And, well you just mentioned rating industries. Do you have a comment on, on how well they perform?

Krimminger: If you look at the rating methodologies for securitization structures prior to the crisis you see older models applied to new products. Like any model, they relied on the historic information about risks. The rating agencies were trying to rate securitization structures based upon models developed for debt and equities. Unfortunately, as was proven, those methodologies just have no application whatsoever to residential mortgage backed securities in a declining real estate market.

Rating agencies should carefully evaluate the assumptions built into existing methodologies, and whether they can apply to more innovative instruments. And in a perfect world, rating agencies would not be paid by the company getting debt-rated or a securitization-rated. We tried to change the way that rating agencies are compensated, but it was never widely adopted.

YPFS: So you spoke of a few moments ago about a mispricing of risk, and I'm wondering if you can distinguish between mispricing of risk and just ignoring risk.

Krimminger: I think there one is a feature that is important to recognize – the mispricing of risks can occur due to underpricing or simply ignoring relevant risks. Both occurred in the run up to the crisis. The long run prior to 2007 of increasing housing prices led many to simply ignore the inherent risk that prices could go

down. Many of the risk pricing models, I've been told, only considered prices going back 5-7 years – during a time prior to the crisis when prices had consistently gone up. If you assume prices will go up, and that rates will remain relatively constant, then a loan that requires refinancing to remain affordable does not look very risky. If those assumptions are incorrect, that same loan becomes virtually toxic to the borrower and to the holder of that asset whether a bank, a securitization trust, or another structured investment vehicle.

YPFS: Is it fair to say that at the heart of all of this is an orientation toward short term time horizons, and the real challenge is to somehow find ways for people to pay attention to the long term time horizons? Is that a fair statement?

Krimminger: That's why I think there's a huge challenge from China, because of their willingness to look longer term and with an authoritarian government that, to some degree, has the ability to look longer term as well. The U.S. market demand for constantly improved earnings quarter over quarter creates a challenging dynamic. It may be relatively efficient in allocating capital, but an authoritarian China can invest in infrastructure that will pay dividends for decades.

In a small way, we tried to address the short-term focus of trading and lending by looking at executive compensation and requiring holdbacks for parts of a trader's or banker's compensation for three years.

Prior to the crisis, traders and bankers were compensated upon deal closing, which created an obvious incentive to churn deals even if there was a risk the deal might collapse in the future. In contrast, the health of the company or bank is based on longer-term performance. The company itself usually is compensated for a loan or other asset over an extended period of time. However, even here the quarterly earnings report cycle leads to short-term actions by companies to pump up earnings – and this may 'mortgage' the companies' long-term future. The ease of "off balance sheet" securitization running up to the crisis contributed to a "short-termerism" among financial companies too – after all, if I can sell the crappy loan, I don't have to bear the risks! But, it often did not really work out that way.

If your compensation is tied to decisions you made three or four years ago, then you'll take the slightly longer-term risks of a trade or a loan into consideration. I think incentives should be structured to require consideration of longer term effects. That's going to be a positive. If we could do that politically, that would be great.

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