Yale SCHOOL OF MANAGEMENT
Program on Financial Stability

Lessons Learned Oral History Project Interview

Interviewee Name and Crisis Position	Ron Borzekowski[1] Deputy Research Director, Financial Crisis Inquiry Commission
Interviewer Name	Mercedes Cardona (contractor) Yale Program on Financial Stability
Date of Interview	March 19, 2020
Lessons Learned No.	2019-32

Introduction:

The Yale Program on Financial Stability (YPFS) contacted Ron Borzekowski by email to request an interview regarding his time as Deputy Research Director for the Financial Crisis Inquiry Commission established in the aftermath of the financial crisis of 2007-09.[2] The 10-member bipartisan commission, known as the Angelides Commission after its chairman Phil Angelides, was charged with investigating and determining the causes of the crisis. It held more than 19 hearings and interviewed more than 700 people in the 15 months from September 2009 and Jan. 2011.

The FCIC's efforts culminated with the completion of a 662-page report that attempted to explain why the crisis came about and the roles of financial institutions, government and the public. The report included case studies of major financial institutions including Lehman Brothers, Bear Stearns, Countrywide Financial, AIG and others.

Borzekowski was a senior economist at the Federal Reserve Board when he was detailed to join the FCIC as a senior researcher. Borzekowski's research examined consumer financial services; developments in the payments industry, the adoption and impact of new technologies; and the strategic interactions among financial institutions.

After the FCIC completed its work, Borzekowski returned to the Fed briefly before joining the new Consumer Financial Protection Board (CFPB) established in 2011. Beginning in 2013, he served as Assistant Director of Research for the CFPB. At the time of this interview, he was Director, Economics at Amazon Web Services.

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

Transcript:

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

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

YPFS: **Can you tell me a little bit of what you were doing at the time, and how you came to be working with the commission?**

Borzekowski: About a year earlier I had switched groups at the Federal Reserve, from one that had been focused on bank competition, to one that was beginning to build a new focus on issues of financial stability, ironically. We were at the very early stages of that and trying to ramp up and hire. Back then, it was sort of a newer concept to think about what we would do, in terms of a research agenda.

By happenstance, someone who worked at the FCIC called me, asking for a reference for one of my old employees. While I was giving that reference, and in fact recommending this person, it came up whether I would like to join, and would I be part of this new project. It sounded sort of fascinating. I had asked my boss if I could take the detail over to the FCIC, and they said yes. It was quick. I think it was only a couple weeks later I was at the commission and working.

YPFS: **What was your role with the commission? I believe you were Deputy Research Director.**

Borzekowski: When I first got there, I was a senior researcher. They needed an economist who knew something about housing: housing data sets, financial markets, banks. A reasonably well-rounded financial economist. I got there and as you know; it was a small organization. It was a small research group at the time. There were a handful of us, so I jumped in. I think day one, the first week, was almost all focused on housing, because that was the first hearing that was coming up. It was about the mortgage and housing markets. We started doing interviews and writing background papers for that almost right away, if I have the sequencing correct.

At that point, Senior Researcher or Senior Economist might have been my title. Then, there was a re-org. Wendy Edelberg, who had been Research Director, became the Executive Director sometime, I think in the late spring. At that point, I stepped up. Greg Feldberg became the Research Director. I took the title of Deputy Research Director. Greg was doing more of the writing. I was guiding a lot of the analytics that we were trying to get into the book on the housing markets and the mortgage markets. A little less so on the financial collapse, where we had fewer specific data or analyses, we could do, and more of it was putting narrative together.

YPFS: **What kind of data were you seeking? Were you able to collect data that had not been publicly available?**

Borzekowski: We had a very mixed record on that. When we first got there, I tried to get all the standard data sets that the regulators had been using, which are not necessarily public, but they're available if you're willing to pay. These are data sets on mortgage data sets and the like. Back then, one was called Loan Performance, and the other McDash; these were the two biggest data sets. We tried to get some of those. We were somewhat successful, somewhat not successful. We had thought about getting data on CDOs from Intex, but it is a very expensive data set. We had tried in certain regards. We tried to get some data from Fannie and Freddie. In the end, we wound up getting tabulations from them instead of raw files. It was a mixed bag.

Part of it the issue was that we did not have the infrastructure. It was a brand-new commission that had been set up. In the nine or 10 months since it was established and before I got there, we had not really built a computer infrastructure to take large data sets, and to start crunching numbers, and to run analyses. We had some of that, but it was minimal relative to what you would need if you were going to build a full-blown research data set, modeling mortgages, and the like.

Like I said, I think we got a lot of data, and we got some data that was interesting, pretty specific, and had not been gotten before. At the same time, I think we did not do as well on some other dimensions. For example, the one that came to mind when I was thinking about this interview, was a survey we ran through NORC, the National Opinion Research Center at the University of Chicago, of hedge funds and their asset holdings and liabilities before the crisis. We had worked very hard to pull that off. The hard part was anonymity, of course. We promised all the hedge funds anonymity, and that is why we used a third party to collect the data. They were able to collect those data, help us crunch numbers and some analytics, and then the data were destroyed, is my understanding.

If you look in the depths of the report, you'll see that we have some evidence on hedge fund leverage going into the crisis, which is a question that had emerged that nobody had any data on whatsoever. We were able to put that together and put that to the forefront. I think there were a few other datasets I think that were sort of novel. We had gotten data on the attainment of the goals at Fannie and Freddie. We had gotten that from the regulator and were able to bring some evidence to date about how much the goals were or in fact were not driving Fannie and Freddie purchase of sub-prime or Alt-A. That was not publicly available before.

So, I think we were able to get some data to inform the crisis. We did not have the resources to do a full-blown set of more academic studies. I think in the last 10 years people have started to do those studies, and there's this growing literature, including the work by Sufi and Mian and others that has started to explore the subtler dynamics of the growth of the housing market and the boom.

YPFS: **Were those the major challenges you faced, or were there others: time constraints, cooperation from agencies? What were the major challenges?**

Borzekowski: The time constraint was huge. By the time I arrived, which was late January of 2010, the commission had roughly a year to do all the research and write the report. That made for some hard trade-offs. It was above pay grade at the time, but senior commission members had decided that they would pick representative firms and look at case studies of those firms. We had picked one ratings company, Moody's; one of the government-sponsored entities, they chose between Fannie and Freddie; and a couple of the large broker-dealers.

So, we had to narrow our focus and really be more directed, because there just was not enough time to do it all. What I like to joke about with a lot of people is: it was a big crisis. A lot of the staff were seconded from other agencies. It was a mixed staff. I think most of them were very, very good and dedicated.

I think our internal resources relative to the scope of the crisis were limited. Like I said, we had some computer infrastructure; it was not as robust as one would want. I think there were two large tracks that the commission wanted to tackle, and one, you could think of this as a research analytic exercise of understanding the crisis: the development of house prices, housing finance, how bad mortgage paper got into the system and where it flowed, and then to understand the collapses and all of the interdependencies. That is to some extent an analytic exercise.

There was also a legal exercise. There were three teams, I believe. I thought it was going to be four originally, but in the end, there were three. Fundamentally, the legal teams were looking for wrongdoing, and interviewing people, and taking depositions, and issuing document demands. Since the crisis, you have often heard, "How many people went to jail?" For some people, the way to think about the crisis was like we thought about the savings and loan crisis or something else, which was there was a lot of malfeasance somehow or illegal activity, and that had to be rooted out.

To do both of those tracks, with the staff we had, was just a huge resource constraint. So, we had to be strategic and work really hard. The biggest challenges were resource related, and to put all the pieces together. Everybody was doing a little bit of everything for a while. I discovered, for example, that I am not a very good interviewer along the lines of either an attorney or a journalist. On the other hand, I thought I was a pretty good analyst as we did our work.

YPFS: **Speaking of attorneys, Chris Seefer (FCIC counsel) and I talked a little bit about the difficulties of getting people to talk and getting the interviews. He did not seem too worried about the need for subpoenas. Were you blocked at any point, or was everybody cooperative in terms of speaking to the commission? Or did you need to twist some arms to get some interviews?**

Borzekowski: In terms of interviews, I think it was mixed. I think most people would speak to the commission. I remember certain interviews where I felt the people, we were talking to were pretty guarded; they were going to be very, very careful about what they said. I remember one where people had counsel present [even though] I am not an attorney. I was out to just understand what happened. My personal role was not out to prosecute the people I was speaking to.

I found I think most people were willing to speak to us. In a few cases they were reluctant. A lot of the analytic interviews I did with people at think tanks, mortgage experts, other policymakers, those people were open to tell us what they needed. In terms of documents, or document requests, again, I think some people dragged their feet and really did not want to give us material. It took a while, and we had to push and ask. But for the most part, I think other people were willing to share.

I felt mild reluctance among some folks to tell us what was going on, or a little skepticism, "Who are you, and why are you talking to us?" That is what I remember. I am trying to think interviews. That was my overall sense.

YPFS: **You spoke of wanting to understand what happened. As such, you were also the main author of a section called The Story of a Mortgage-Backed Security that followed the mortgages through securitization. Why was this an important project?**

Borzekowski: Thank you for bringing it up, actually. I am quite proud of that one. The crisis was huge, and it's hard to understand the connection between the personal stories of individual mortgagees taking $100,000, $150,000 mortgages and then taking down the world economy to the point that it was collapsing at 6.4% in the end of 2008 and into 2009. So, it struck me that to make this as concrete as possible we could use the example of one mortgage-backed security, and we could track it all the way, from end to end.

So while we would describe [this one security] in words in the report, there's actually a dataset online: The dataset we actually got, believe it or not, had names of the roughly 5,000 mortgagees that are in that original dataset for about a billion dollars in mortgages.

But the fact that you could see those mortgages, you could see (in hindsight) the risk factors associated with all of them and the risk layering, a lot of these had 40-year amortizations. They were all (adjustable) 2/28 or 3/27 loans. The FICO scores were incredibly low. So, these were borrowers that were risking a lot to get into a house. They were basically going for the lowest payment possible to get into the house.

To then be able to see that, and we have all the documents that describe what happened when New Century Financial Corp. tried to sell those mortgages to Citigroup Inc. Of course, New Century went bankrupt in the crisis. The very minute details that Citigroup was upset that mortgages got in there that shouldn't have; so-called NINJA, or 'no income, no job, no asset', loans got in there, and they had stipulated there wouldn't be any.

Then taking that all the way through the rating agencies, and then all the way to the bond holders, you can see that this debt then winds up on the books of some of the special purpose vehicles in Europe, some of the hedge funds that went under. If I remember correctly, it is four different countries to where this credit risk spreads.

To me, it made it all very concrete and very tangible. I wanted it to be in the book and on the website because I think it is a great pedagogic tool as people go forward to try to understand what actually happened.

For most folks, securitization is a hard concept, never mind re-securitizations: RMBS and CDOs, and the idea that it was the BBB tranches of the RMBS that became the AAA tranches of the CDOs that went under. I just thought this would be a way to make it very concrete and more accessible.

Both then and even now, 10 years later, I recommend to professors if they're teaching the crisis, you can download these data. You can model those mortgages. You could have your students see what happens if house prices fall 10% or 20% or 30%. It is easier to think about in this smaller context, but it's a perfect microcosm of the entire crisis.

YPFS: **Looking in the big picture at the FCIC report, what were the biggest, most meaningful findings? Were any of them surprising to you as an analyst?**

Borzekowski: When people ask me how to describe at least the early parts of the crisis, what is amazing to me is how the market failed, because a lot of things had to fail all at once. People know, much like if you are going to buy a used car, you take it to a third-party mechanic to check it out and ensure that it is sound. Generally, people know that you should do that. Similarly, there were mechanisms like due diligence firms, that would check the quality of mortgages, or rating agencies that would rate bonds. Both of those mechanisms failed and failed badly. Other mechanisms, even the nature of the relationship between the borrower and his or her mortgage agent—where presumably I'm not going to take a loan that I probably can't afford, and you probably shouldn't sell me one that I can't afford—that broke down. So, a whole series of what looked like very rational mechanisms that a market would develop all failed and failed simultaneously.

The other thing that surprised me—and again, it's obvious in hindsight—there was a blindness in the private sector, which I sort of understand, but (also) in the public sector, to the diffusion of mortgage credit through this system. I remember before the crisis a lot of people saying, "Yeah, maybe this is all bad mortgage paper, but it'll be bad; some people will lose their houses." The idea that these subprime securities were then used in securities lending, that all the CDS had been written against them and were designated as investment grade, and that a lot of these tranches were then bought by European investors — shows how the far credit could spread of credit and that this flow was not well understood before the crisis.

In retrospect, it makes perfect sense [but] it was a huge learning to me. That explains why it is that a few trillion dollars in bad credit takes down the economy of the U.S. and Europe, and parts of the world. That is the other big piece.

It was sort of the failure of the market mechanisms upfront, and then the huge, interconnected, very complex network of credit diffusion is something that I was fascinated by as we were uncovering it and tracing it all through.

YPFS: **Once the commission finished its report, what did they hope to accomplish with the findings? Were they able to succeed in that regard?**

Borzekowski: I do not want to speak for what the commission was trying to do. I know what I wanted to do which was to lay as much of a factual basis as possible, to do a little bit of what we're doing right now, which is to gather that information, those documents that are in the national archives. People can study this crisis and learn from it, as much as Mr. Bernanke and others had from the Great Depression.

My personal goal was to get the story out and to get it out in a way that was as accessible as possible. I think we achieved some of that. I think some of that was undercut by the eventual partisan vote of the commission, a 6/3/1 split. A lot of people sort of discounted the report, "Oh, that's just x," or "That's just y," which was unfortunate.

YPFS: **There was ultimately dissent, wasn't there?**

Borzekowski: Yeah, there were two dissents. There were the six commissioners voted to issue the report. Three of them dissented and issued their own 36-page summary that agrees, I believe, with almost all the factual findings, but disagrees on the recommendations and the weight of the various factors in the crisis. And then there's Mr. Wallison's dissent which has a totally different view of what happened, and one I think that is simply dispelled by the facts.

YPFS: **So as someone who still researches consumer financial services, in your opinion, is there anything the government could have done or should've done, leading to 2008 to better protect homeowners? Could regulators, and institutions foresee the crisis?**

Borzekowski: To make one clarification, I no longer do a lot of consumer finance work because I have left the Bureau. I now work for a private company. But for several years after the crisis I did investigate this. I have a lot of trouble second-guessing from before the crisis. It is not obvious to me what the remedy might have been.

I think there are some things we could have done. For example, there's a recurrent theme that some of the financial innovations, in particular for low- and moderate-income households, often tend to be—I don't have a better word for it—predatory. It is not often predatory, and there's always two sides to extending credit. It does give people some opportunities that they would not otherwise have.

But if I think back to the early '90s, the Home Ownership and Equity Protection Act (HOEPA) statute was passed [in 1998] because it turned out that there's a nice innovation that says you can use the equity in your home for improvements and the like. But for a lot of borrowers back then that was used basically to strip equity. I refinance you one, or two, or three times, but every time I take huge fees. And you think you are getting a great deal, and what happens is basically the mortgage lender, or the originator, broker, gets a lot of those fees. So that has happened in the past.

There were warning signs in the sub-prime market. Consumer groups had been raising the red flag. In the aggregate statistics it looked like maybe this is good, maybe it is bad. It was hard to see that sort of harm. So maybe there's a lesson learned; to pay attention to what start as anecdotes in those cases, to dig deeper, to really try to understand the details of those things, to look at those financial transactions. Because from the point of view of regulators, who are often looking at the aggregate statistics, some of those harms, some of those warning flags, are going to get lost.

There are lessons there to pay more attention. To be skeptical and to dig deeper into those areas and not just think everything is going along okay, which is the easier course often. So maybe that is the lesson I would take. It's probably worth investing into, "Yeah, maybe we should look into that area. Maybe there is really something to that story. How widespread is it?"

It is hard because, again, those are the kind of things you do not see in large datasets; they don't float up to the level of a state or a national regulator. It may be important to look, and maybe you look carefully, and you dismiss some of them or you say those are idiosyncratic. But every so often you are going to say, "No, this is actually evidence of something systemic and you need to take action." It could be regulatory or statutory or something of the sort.

YPFS: **I remember at the AP in 2006 and 2007, and we were constantly fielding stories about the housing market and the threat of all of those mortgages that were about to adjust teaser rates and what it was going to do to low- and middle-income households. So, there was anecdotal evidence out there that the market was in a bubble.**

Borzekowski: Even before that, in 2002, 2003, you start seeing the first stories of sub-prime abuses, the refi churn. But it is interesting that a lot of the 2006, 2007 stories of resets becoming a problem never came true because the market collapsed before then.

YPFS: **That's not much comfort.**

Borzekowski: Right. But I am saying the resets were not, in the end, what got people into a default cycle. Interestingly, I think some of the worst mortgage credit—and I think our report bears this out—was not as much the sub-prime stuff in the very early periods. Most sub-prime is done by 2004, 2005, in terms of growth; 2005-2006 is all Alt-A. This becomes people with higher FICO scores, middle-income folks speculating on condos (and) second properties.

So on paper, that actually looks better in some sense, like we shouldn't worry about it as much. These people are 730 FICO score borrowers or maybe they are 690 FICO score borrowers. But there was very, very low down payments on that stuff of course, because they were basically betting on the house price appreciation.

I actually think that the tipping point in 2006 turned out to be an Alt-A paper that suffers the worst losses and gets wiped out even faster, because those bonds actually had less subordination than subprime. So that gets back to why we wanted to trace out the crisis.

There is another interesting analog which I have never had the chance to really dig as deep into. I don't know if the data exists, but even the manufactured housing crisis of the late '90s and early 2000s had a lot of the same flavors of what we saw later in the crisis. It never got big enough, but it had vulnerable populations taking up mortgages. They were securitized in a very unstable way. There was what looks like evidence of either very aggressive structures or malfeasance in the level of equity in those bonds. There is almost a whole precursor to this in the late 2000s that we did not seem to learn enough from.

YPFS: **Once this is all said and done, after the commission issues its report, I believe you went onto the CFPB.**

Borzekowski: I went back to the Fed for a few months. I started detailing to the CFPB in April or May 2011.

YPFS: **You have now moved onto the private sector. There's been a lot of debate about the CFPB's mission, its effectiveness, its mandate. Where do you see it as someone who was inside and is now looking at it from the outside?**

Borzekowski: I think of it as an overall success. I am very proud of the agency. There are parts of it I had a large role in. There are parts of it I did not and can't speak to as much.

From my point of view, the division I was in—I had the honor the last few years I was there of leading the research office—built a policymaking apparatus. This policy side of the shop is separate from supervision and enforcement, from the folks that are looking at particular firms.

Our goal, at least my goal and I think my colleagues' goal, was to build a policy shop that was very strongly evidence-based and that could pass regulations that find the right balance between consumer protection and the availability of credit. The markets we regulate are mostly the credit markets. Although we also had checking accounts and credit reporting, debt collection, which is at the very end of credit markets.

In that regard, I think we built an agency that was heavily grounded in data and facts. I do not know how much you have followed this, but the division was something called RMR, which stood for Research, Markets, and Regulation. The reason to build that division and to put on equal footing three offices: the research office that, as I mentioned, I had the honor of leading; the regulations office, which were the regulatory attorneys; and the markets offices, which are a pretty new construct in government. These are offices that are organized by verticals; so, one for mortgages, checking accounts, debt collection and credit reporting, and student loans etc.

Those markets offices were staffed from people that had been in the industries and knew the institutional details of those industries. We had built a policymaking apparatus that used the expertise and the knowledge and the insights from all three of those offices when we were writing rules or doing any large project whatsoever.

So that was the structure, along with a heavy commitment to a data-driven approach. We did at the CFPB buy data that we needed or collect data that we needed. We built a computer infrastructure that we needed. When you put all of that together, I think in terms of writing the rules that we'd written—the first eight of which are on the mortgage market—those were pretty solid, defensible, reasonable rules.

Did we get every provision right? Of course not. Were we willing to change things after the fact if we got something wrong or needed to tweak things? Yes.

I think that's a good model for government, as we keep talking about evidence-based policymaking, for how to do things. It did mean that sometimes the rules we came out were not as aggressive as some consumer advocates had wanted, or they were more aggressive than industry might've wanted. I always thought that was a good sign if we were somewhere in the middle there.

But the fact that we could ground all the decisions that we made, and we can ground them in reasons, the best reasons we could. We don't always have the data, and we don't always have all the facts, so at some point there are judgments to be made, and Director Richard Cordray made those, and Director Kathleen Kraninger is making them now.

But I think as an institution, we did a very strong job at the CFPB of building the kind of agency that we would want. And that includes some of these issues of vigilance that we were talking about a minute ago. We tried to build, and I think it is still there, some bridges between the supervisory functions and the enforcement functions and the research and policy functions.

One example is the supervisory highlights that supervision puts out. It's a periodic report of what they're seeing. It doesn't mention any particular firms, but it tries to share with the public what they're seeing within particular industries, be it mortgage servicing or debt collection or credit reporting or some other, not to call those out.

That notion that you can bring information and facts that the agency is learning to the public, and then also across divisions within the agency, is a strong model. You must do it carefully. You must respect the supervisory process. You must respect industry confidentiality. But leaning into the way that important information, perhaps the early surveillance information, can come forward is important.

Similarly, I think we had a very open door to anybody that would come and tell us. Director Cordray met with lots of people. We met with lots of people—industry groups, industry participants, consumer advocates, consumer groups, other research organizations. I worked very hard to build a porous border between our research office and the academic community that was working on consumer finance so we could share ideas, data, research findings. So, a lot of those institutional aspects of the bureau, I think we got very right.

YPFS: **You spoke of supervision and governance—oversight. In the FCIC report, some of the conclusions involved the feeling that there was maybe a lack of proper governance leading to the crisis. From your vantage point, has any of that changed, especially after your time at the CFPB? Is there a sense that some of the lessons from the crisis have been absorbed?**

Borzekowski: I think we have built some of the structures to do that. The CFPB has a robust enforcement of supervision program. If they use those tools and use them wisely, I think that is a good thing. Like I said, I was not involved in the strategies around those particular divisions. More broadly, I had the honor to serve on the Financial Stability Oversight Council (FSOC) deputies committee for Director Cordray for two to three years.

I think structures like the FSOC, like the Office of Financial Research (OFR), are necessary and useful to get inter-agency sharing, to try to foster that environment, to try to foster vigilance. I think at times it was working. Clearly, those agencies are less active now than they had been three or four years ago.

I hope we do learn lessons of the crisis, because coming out of it in those first few years, it's interesting: what you'd see if you talk to folks that lived through those crises, they would tend to be more willing to look carefully at a firm, to dig deeper, to use supervisory authorities and the like. Folks that come along a little bit later—that sense of urgency, that not having been there on a Friday night when a large bank is failing, seems to correlate with slightly different judgments.

I think we have the lessons. We must keep remembering them, and we have to maintain this vigilance. I would like to see institutions like the two I mentioned use their authorities to continue to monitor. I'm not saying we should hamper capitalism or interfere or make decisions for businesses, but I thought it was important to maintain things like non-bank designation and the like, to keep our eye on firms.

Consumer financial regulation has now been consolidated largely at the CFPB. Safety and soundness regulation are still spread across a number of agencies. I think that is going to be important to monitor that and for those agencies to really work together and to maintain that vigilance.

YPFS: **Rounding up our lessons, you spoke earlier about manufactured housing troubles, and now we hear about bubbles in student loans and the payday industry. We know that asset bubbles precede crises. Is the CFPB able to act if a crisis unfolds?**

Borzekowski: I don't know if it's the CFPB per se or the broader regulatory apparatus, but student loans are a good example. There is a huge amount of student debt out there, $1.6 trillion I think, as we last checked. But that is on the balance sheet of the United States government. The issues there are basically households and whether they can make their payments and the financial stress that that puts on the household, which is significant; I'm not diminishing it at all.

We have seen evidence even where policymakers have chosen to relieve those stresses through public service programs and the like. Those are not widely diffused. The servicers are not implementing them as efficiently as they should be and as widespread as they should be. It's more of a fiscal issue than a systemic issue because we know where the credit is being held; it's on the balance sheet of the United States government, most of it. There's $100 billion now, $120 billion or something it's in private hands.

The question there: that is not a systemic issue, that is a consumer finance issue—an important one. The CFPB and the Department of Education are going to have to work that out.

That has been a rocky relationship for many years. So that highlights the fact that there are still overlapping jurisdictions or some particular gaps that policymakers should probably step into, to be honest. Because you have two agencies with two different missions, and there is this nether region in the middle I think that is troubling.

Payday loans, similarly, are about households living on the edge who need these loans and this form of credit. But on the downside, we looked very deeply when we passed the 2017 payday rule into what the evidence shows. There was very limited new evidence when Director Kraninger proposed repealing that rule.

I think the story's consistent with what we thought originally, which is: while these loans may be useful, the evidence is mixed for short-term borrowing. A huge fraction of industry profits was on the long end (i.e. repeat borrowing), and those loans are not helpful to consumers, and in fact harmful. That is why the rule tried to maintain that balance. It allows for a limited number of short-term loans, but it cuts off the long-term of repeated borrowing.

So, in both those cases, I do not think those are issues that were systemic the way the mortgage crisis had started with housing credit. But they do point out that you still need, from the point of view of the household, a vigilant regulatory state in consumer finance; I think that is critical.

YPFS: **To sum up, if you were to write a memo to future policymakers wishing to avoid another crisis, what would be your top line point in terms of hopefully avoiding, but mainly managing, another systemic crisis like the Great Recession of 2008?**

Borzekowski: I think it is to take the stance of basically a risk officer. What I mean by that is if you're in a position of public authority, or you're a regulator, or even a legislator of the sort, someone who's part of the regulatory apparatus, part of your job or part of your staff's job is this notion of vigilance. And that means to listen to the stories, not to dismiss them. This could be the stories of the sub-prime borrowers. It'd be the stories you referred to of the impending bubble, to take them seriously, to go a level or two deeper than your instinct would tell you.

It's easy to say: "Sure, so-and-so firm, why would they ever do that? That's not in their interest. Why don't we look?" Because maybe they're doing that. Maybe it's a large broker dealer that's continuing to hold the unsold tranches of CDOs on their balance sheet. Or it's a firm that's running at incredible leverage that doesn't seem really sustainable. Or it's in the syndicated loan market, and all of a sudden all the covenants are being stripped away, which is the corporate equivalent of people taking out mortgages in the 2000s without finance contingencies, or waiving appraisal contingencies or the like.

I watched a number of people before the crisis say things like, "Yeah, sub-prime can't be that bad. It's just X," and not say, "I wonder who holds that mortgage credit." Or to say, "We haven't had lots of bankruptcies in insurance companies for decades. They have always been sporadic. So yeah, they're probably fine." Well, maybe we should look carefully if they become a particular source of credit for particular markets—whatever that might happen to be, I don't know if it's the Treasury market, the repo market, other places. But this notion that we should distrust our instincts to say everything's okay in the good times and dig deeper is the stance we should take.

Now, you can do some of that institutionally with higher capital limits and the like. But those are complements, not substitutes. I do not think you can just say, "We have the right liquidity, and we have the right capital, so I don't need to worry what humans will do."

We should do both of those things because the costs of such crises are huge. So, a little bit more investment among the public sector and the public sphere to maintain this vigilance, to maintain this skepticism, is probably the lesson that I take away from what we learned in 2008.

YPFS: **Thank you.**