BETTER MARKETS

15th Anniversary Lehman Collapse Conference

Wednesday, September 13, 2023, 9:30am – 5pm

PANEL DISCUSSION: Avoiding and Resolving Failures of Systemically Important Banks: Why Didn't the Dodd-Frank Act Provide Satisfactory Answers for the Problems at SVB, Signature, and First Republic?

Cantrell Dumas, Better Markets
Thank you, Chair Gensler and Brooke. That was a fascinating conversation. Hi, everyone, I'm Cantrell Dumas, Director of Derivatives Policy at Better Markets. I hope you all are enjoying the conference. The landmark Dodd Frank financial reform law included many important provisions intended to prevent another financial crisis. While it's clear that the progress has been made in some areas since the crisis, it's also clear that Dodd Frank didn't provide satisfactory answers for the problems at SVB, Signature and First Republic Banks. And next panel will dive into why. The moderator for this panel is Politico's Victoria Guida, who I'm sure everyone's familiar with. Victoria is an economics reporter, covering the Federal Reserve, the Treasury Department and the broader economy. She has spent a Washington career writing about bank regulations, monetary policy and trade negotiations. You also may recognize her from Chair Powell's press conferences. Victoria, over to you.

Victoria Guida, Politico
Thanks so much, Cantrell. And thanks so much to all of you for tuning in. We're going to continue our Too Big To Fail discussion like Cantrell said with a panel about what happens when a big bank does fail. We got our latest case study earlier this year, when Silicon Valley Bank collapsed in dramatic fashion, leading regulators to jump in to protect uninsured depositors. I have an excellent group here with me to dig into the role that Dodd Frank didn't play in these events and what might be done to improve this process. We have Art Wilmarth a professor at George Washington University Law School, Patricia McCoy, a professor at Boston College Law School, Saule Omarova, a professor at Cornell Law School, and Simon Johnson, Professor of Global Economics and Management at MIT. We're going to first hear from each of them and then have a broader discussion. So, Art's over to you.

Art Wilmarth, GW Law School
Thank you, Victoria and thank you to Better Markets and Dennis Kelleher for organizing this conference and inviting me to participate.

The preamble of the Dodd Frank Act says that the Dodd Frank Act will end Too Big To Fail and protect the American taxpayer by ending bailouts. So those were specific promises made by Dodd Frank when it was enacted. Unfortunately, the bailouts of Silicon Valley Bank, Signature Bank, and First Republic Bank earlier this year, broke Dodd Frank's promises. Regulators failed to protect taxpayers and smaller banks from the costs of rescuing uninsured depositors and those banks. And in my view, regulators acted in a way that made the Too Big To Fail problem much worse. The three bank failures confirm that banks with over $100 billion of assets can indeed be systemically important and their failures can create systemic dangers. SVB and First Republic had over $200 billion of assets, while Signature had over $100 billion. Regulators rescued the uninsured depositors and all three banks, because they feared the likelihood that there would be panic runs by uninsured depositors and other large, troubled banks. Regulators

decided as they also did in 2008 and 2009, that the banking system was not strong enough to withstand disorderly failures of banks with more than $100 billion of assets. Now, the Dodd Frank Act created something called the Orderly Liquidation Authority, the OLA to resolve failures of large banks. The OLA requires that banks and other financial companies with more than $50 billion of assets must cover the costs of resolving such failures. And the OLA was specifically designed to protect the Deposit Insurance Fund and taxpayers from being exposed to losses from failures of large banks and financial companies. But regulators never applied Dodd Frank, during the Spring of 2023. They did not use OLA to resolve the failure of SVB. Instead, regulators used something called the systemic risk exception, the SRE, and the Federal Deposit Insurance Act that was enacted back in 1991. So, they use the SRE to protect both SVB's and Signature's, uninsured depositors.

Now, it's worth noting that Signature did not have a parent holding company, nor did First Republic and so those two banks would not have been subjected to OLA because the Orderly Liquidation Authority applies only to holding companies. That's a big problem. And, in my view, Congress must amend the Dodd Frank act to require banks with more than 100 billion dollars of assets to establish parent holding companies. So, they will be subject to the OLA. And in addition, the Federal Reserve would have continuous supervision and oversight over the parent holding companies which they did not have over either Signature or First Republic. But the OLA should have been applied to SVB. By applying the systemic risk exception, what the FDIC has done is to require banks larger than 5 billion to pay for the costs of protecting uninsured depositors, and the costs have been charged against the Deposit Insurance Fund.

Now again, the Orderly Liquidation Authority would have said that all of the costs of protecting the uninsured depositors of Silicon Valley Bank should have been charged against the OLA and should have been paid for by banks, larger than 50 billion. The Deposit Insurance Fund and taxpayers should not have been exposed to any of those costs. Now what's even worse in my opinion, is that when First Republic failed, regulators did not invoke this systemic risk exception. That was a clear and rather shocking error in my opinion. They accepted JP Morgan's bid to buy most of the assets and assume all the deposits First Republic. By the way, JP Morgan, recorded a profit of over almost $3 billion on that transaction. The Deposit Insurance Fund has recognized a loss of at least $13 billion and it may be larger on that transaction. That's a hard result to justify. And I don't think the FDIC has not attempted to justify it. I don't think they can. The FDIC's responsibility, unless it invoked the systemic risk exception, was to use the approach that would be the least costly way of protecting only the insured depositors of First Republic. Not protecting the uninsured.

I think it's very unlikely that if they had done that, if they had liquidated the bank and protected only the insured depositors, I think it's almost impossible to conceive that the FDIC would have suffered a loss of more than $13 billion. They have not presented any justification for their calculation. So, what they did is to impose a loss of $13 billion on the Deposit Insurance Fund, which must be reimbursed by all the banks not just the big ones, not even the banks larger than $5 billion, all the banks. Meanwhile, handing JP Morgan a $3 billion profit. Increasing JP Morgan size by more than 200 billion and allowing JP Morgan to grow to a size of more than $4 trillion. By the way, also waiving any antitrust review, because First Republic Bank was a failed bank, so there was no antitrust review. So, what we've had as a result of these failures is the Deposit Insurance Fund being weakened. Its balance has fallen by several billion dollars as a ratio of total insured deposits. It's fallen from 1.25% to 1.10%. So, the Deposit Insurance

Fund has been weakened. Taxpayers who back up the Deposit Insurance Fund have been placed at much greater risk of loss. If there are further failures, they will be on the hook. Big banks have gotten bigger, most certainly JP Morgan has become much larger, much more systemic. So, what we see in the handling of these three failures was that effectively, Dodd Frank had no impact at all.

Regulators chose an approach in dealing with Silicon Valley Bank that protected banks larger than $50 billion from bearing all of the costs of that failure. Regulators preferred using an approach where failed banks are sold to even larger banks, most notably in the First Republic case. Also, the Federal Reserve created a new section 13(3) authority called the Bank Term Lending Program, which essentially provided a lifeline to large banks on extremely favorable terms, which we can discuss during the Q&A period.

So essentially, the regulator's pulled off the same playbook they used in 2008 and 2009, before Dodd Frank was passed. They protected all uninsured depositors of big banks from suffering losses. They encouraged the sale of failing banks, even larger banks, thereby intensifying Too Big To Fail issues. They provided unlimited liquidity lifelines to large, troubled banks. And as I think the first panel quite rightly said, does anyone believe any longer that a bank larger than $100 billion will be allowed to fail without protecting all of the uninsured depositors? I think the answer is certainly no. No one would believe that now because the regulators did exactly what they did. In 2008, and 09, they protected all banks larger than $100 billion. So why wouldn't those banks be incentivized to take greater and greater risks, knowing that the federal bailouts are behind them? Lastly, again, as the first panel indicated. Where is the accountability for the officers and directors of these failed banks? So far as I know, no action has been taken against the officers or directors of any of the three banks. There's, as far as I know, been no clawback of the bonuses that they collected from their high-risk strategies. Again, where is the accountability? In my view, Dodd Frank's promises have been made a dead letter by the events of this year, and urgent action is needed to change that situation. Thank you very much.

Victoria Guida
Thanks so much, Art, plenty to dig into there. Next, we'll turn to Pat.

Patricia McCoy, Boston College Law School
Thank you, Victoria. Thank you so much Dennis and Better Markets for its important leadership role in helping keeping the financial systems safe.

Today I'm going to talk about the crypto industry angle of last March's bank failures and their lessons for systemic risk oversight. It's really easy to forget that last March, Silvergate Bank, a small bank that catered almost exclusively to crypto companies, was the first domino to fall. Silvergate tends to fly under the radar because it opted for liquidation under California law instead of seizure by the FDIC. There were at least two notable things about Silvergate's collapse. First, it was a smallish bank, its assets were only about $11 billion, and the bank barely broke into the ranks of the 900 largest US banks. And second, Silvergate's collapse on March 8, was systemic in nature, because in two days it triggered a run it SVB and in four days a run at Signature Bank. Signature Bank also heavily targeted crypto depositors. And as Frank Partnoy pointed out, Silicon Valley Bank has had its own crypto involvement as well. So, it's worth an important to examine these crypto client activities, and consider whether these activities shed light on gaps in systemic risk regulation. The two banks interacted with crypto companies in a number of ways. The most important was taking deposits. Both Silvergate the Signature Bank positioned

themselves as the bankers for the crypto industry at a time when most banks were wary of doing business with crypto companies. Both Silvergate and Signature aggressively solicited wholesale deposits from crypto companies. These large deposits were uninsured. Both banks maintain that the deposits were sticky and not prone to runs because they maintain such tight relationships with crypto companies. But they were wrong. The Crypto industry suffered a slump in 2022 and crypto customers demanded their money back to pay those customers off. Crypto companies stepped up withdrawals of their deposits at Silvergate and Signature starting in late 2022. Neither bank had enough liquid investments on hand to meet those redemptions. So, they started to liquidate their longer-term bonds. But interest rates had gone up, the market value of those bonds had gone down. And both banks sustained large losses on their bond sales that led to their failures. The flight of the crypto deposits at those banks caused the other more conventional depositors, those banks to panic as well, setting off broader runs at those two banks. And of course, in Silvergate's case, the panic spread, first to SVB and then to Signature.

The second crypto related activity was that both banks pioneered digital payment platforms that allowed crypto clients to tract it transact business with each other 24/7. Now, these two banks were the only depository institutions in the US to offer these platforms. The platforms served as a magnet to attract more crypto depositors at the banks, and in fact Signature required customers to be depositors of a bank in order to use the platforms.

The third activity, at least for Silvergate Bank, was making loans backed by Bitcoin to crypto companies. Now, as it happened, these loans did not suffer losses. But when news of the lending got out, it may have helped scare off conventional depositors.

And then the fourth crypto possible activity was alleged bank involvement in wrongdoing by crypto customers. In early 2023, both Signature and Silvergate were hit with investor lawsuits alleging that they had been involved in the commingling of customer funds by FTX.

Now, these interactions raised risks that the banks failed to recognize or manage. First was lack of diversification. Neither banks' deposits were sufficiently diversified. Crypto client deposits made up more than 90% of Silvergate banks deposits. At Signature they made up 20% and included many of its largest depositors. A second risk is volatility. Both banks fail to understand the inherent volatility in the crypto industry's business model, and that led to the third risk was which was liquidity risk. Because both banks played down the run risk posed by crypto, they did not recognize that their lack of liquidity posed a problem. And they also didn't understand the implication of rising interest rates. A fourth risk was the legal risk. Both banks crypto clients ran many of their fund transfers through their depository accounts at Silvergate and Signature. This put both banks at some legal risk of aiding and abetting possible criminal activity. And then finally, and most importantly, was the reputational risk. In 2022 and 2023, both banks were the subject of negative press reports questioning their involvement with crypto clients that created growing reputational risks for both banks. And the more that this negative press drumbeat continued, the more that conventional depositors, particularly at Signature, became spooked by the bank's involvement with crypto customers and they yanked the money as well. So, the reputational risk helped to widen the contagion.

Finally, what lessons does the crypto involvement of Silvergate and Signature Bank tell us about any holes in systemic risk oversight? First of all, Dodd Frank, as amended is wrongly fixated on asset size as a

marker of systemic risk. Again, I want to stress that the first domino to fall, Silvergate Bank, was only $11 billion in size. In this conference, we're talking about lowering the threshold to $100 billion, but that still would not have picked up Silvergate Bank. Even though it was small, its fragile balance sheet, put a spotlight on larger banks with similar balance sheets, and in Signature's case, crypto industry involvement. Secondly, as result of this fixation on size, both Silvergate and Signature escaped the higher liquidity requirements expected of banks with $250 billion in assets or more. And even Dodd Frank's original threshold was $50 billion that would have captured Signature but not Silvergate. Third, Dodd Frank lacks a workable system of overseeing special risks posed by emerging industries, who are customers of insured banks. In the case of the crypto industry, those special risks include financial volatility, which we've seen, increases run risk. The fact that most crypto client deposits are uninsured magnified that run risk. Another special risk is because the industry lacked robust regulation that spawned legal uncertainty and eroded public trust. And the last risk is that the industry had a questionable reputation that further eroded public trust. In my mind, cryptocurrency is good for Tuesday's speculation and criminal activity. It's not conducive to public trust. And that increases the risk of runs and panic by other depositors.

Now, as Jeremy Kress spoke about. Dodd Frank does authorize activities-based oversight. It's very weak and it is not worked for crypto. All the Financial Stability Oversight Council can do is recommend activities-based regulation. They cannot require agencies to adopt those rules. Anyhow, the FSOC barely uses this power, except with respect to mutual funds. And it has not issued any formal recommendations to regulate crypto activities for systemic risk.

I'll just conclude with one last observation, which is, to the extent that new regulation would entail restricting the crypto client activities of banks. That would be an incredibly hot potato politically. You would dredge up all the controversy associated with Operation Choke Point during the Obama administration. So, I think it's necessary, but unfortunately, politically, it's a nonstarter. So, thank you so much.

Victoria Guida, Politico
Thanks so much, Pat. And next we'll turn to Saule.

Saule Omarova, Cornell Law School
Well, thank you, Victoria. And thank you Better Markets for organizing this very important and timely discussion and giving me a chance to join my esteemed colleagues on this panel. It's always a tall order to follow Art and Pat, who have covered a tremendous amount of ground with respect to these issues.

So, I thought that I might take the discussion to a slightly more general, broader level, and think about, you know, some of the overarching issues that we're all seeing here. Well, first of all, I think it's clear that the SVB and Signature failures were only a symptom flare up, and the problems in the financial system are much bigger and much more fundamental. And the Dodd Frank Act unfortunately has not resolved the structural problems within our financial system. Our financial system is still speculative and unstable. It is still too concentrated and too much power is focused in these large financial conglomerates. And the public subsidy net seems to be expanding continuously and the markets expectations of government support are now fully entrenched. And the financial system still remains largely disconnected from the real economy. But the financial system at the same time is also changing,

mainly as a result of technological advances. So, it's becoming bigger, more diverse. There are non-traditional financial services providers entering the system. It's becoming much faster, which means much faster downward market spirals and contagion in crisis times. The system is also fundamentally more technologically dependent, which makes it more opaque and less governable, at least through the traditional means. And this financial system, this financial markets, defy borders, jurisdictional borders, but also sectoral and product lines that we have come to rely upon. And this is a fundamental shift in the dynamics of the financial system, which requires a fundamental shift in the very paradigm of financial regulation, not simply a change in the specific legal rules.

Yet our existing regulatory framework is still based on pre-2008 notions. And the big part of this problem is in the attitude or what you might call regulatory philosophy. The regulatory mindset of our policymakers is still fundamentally reactive and self-limiting. And the agenda and the narrative or meta narrative of what's happening in the financial system, are still fundamentally shaped by the private industry. Policymakers and regulators, for example, continue to approach structural macro systemic problems in the financial markets from a fundamentally micro transactional and technocratic perspective, and that creates a familiar forest behind the trees problem. So, the focus, for example of many policy discussions these days tends to be on what supposedly happens between the transacting counterparties in a particular market setting. And it tends to leave out the broader dynamics connected to that, which often are critical. And of course, now, one of the best examples was the pre-2008 subprime mortgage securitization. It definitely was about lenders and borrowers. But more importantly, it was also about the growing secondary and tertiary trading markets and risky structured products. So, this kind of microtransactions approach creates a strong preference for the narrowest most surgical formulation of the problem at hand in technical and often quantitative terms. And it requires, or it preferences, the most narrowly tailored technical solutions. For example, you know, we're searching for the right formula for calculating whatever it is the skin in the game requirement or the specific capital ratio or whatever. These things are absolutely important, but they should not be the end goal, and yet they often become the end goal. So, the result of this approach to regulation is the production of technical complex rules.

Those rules usually have long timeframe to fruition. It's a very contentious process of rulemaking and implementation. The regulatory agencies get bogged down in fights with the industry over multiple narrow and technical points. And the interesting thing about it is that the industry has a natural edge in that process, on that turf, because they have the technical expertise, they have the resources, and they have the specific interest in, for example, getting a particular formula through. And regulators, on the other hand, lose their strongest weapon, which is basically the public support and the public interest that they represent. Because the public simply doesn't understand, doesn't care, isn't interested in all of these technical debates. So that leaves regulators open to attacks on their legitimacy, which by the way, are already going on so many fronts. And this complex technical rules, even when they're finally enacted, in whatever watered down form, they can be enacted, are very easy to arbitrage around. And that results in an ever more complex financial system that policymakers need to oversee. So, in effect, because of this particular regulatory mindset, that kind of quietly pre shapes our approach to each individual issue, we end up effectively wasting a lot of political and intellectual energy on creating this hyper technical rules that don't change the fundamentally bad dynamics in difficult crisis times where, you know, it matters. So, for example, as Pat and Art noted, the Dodd Frank Act, Orderly Liquidation Authority regime, right, it did not get invoked in the SVB crisis, and most likely it will never get invoked.

So why did we even bother with fighting over its specific characteristics. So, in the time of crisis, we always see the same thing, which is socialization of losses, and the only question becomes, how much the losses are, and where exactly they come from.

So, what needs to be done. There are, of course, many, many specific regulatory instruments, many specific rules that need to be changed, perhaps rolled back, perhaps, you know, expanded or whatnot. But behind all of this specific activity, ultimately, we, all of us, need to recognize the fundamentally political nature of finance and financial regulation. Financial regulation is not about efficiency, or technical efficiency alone. It always reflects policy choices. And so, policymakers must learn to approach the problems in the financial system and the solutions to them from a political economy perspective. And in simple terms, it means that every time they have to ask the simple question, what kind of a financial system, or what kind of an economy do we want to foster? And that is actually not so simple. So, for example, very quickly, one example the current debate on regulation of stablecoins, or CBDC, the central bank digital currencies, right? It's framed in terms of fast payments or efficiency of the payment system. But it's not simply about fast payments, or, for example, making private stablecoins safe for individual people to use while paying for coffee. The real debate here ultimately is about the potential new ecosystem of finance, and who controls it? Would it be the sovereign public that controls it? Or would it be a handful of huge private tech financial platforms? That's the mindset that needs to be carried into that debate. More generally, we need to think about rethinking financial innovation as a public policy problem. Financial innovation rhetoric perennially covers a lot of the destabilizing movements and destabilizing changes, and the regulatory arbitrage, the leverage, and risk creation in the financial system. So instead of basically allowing that to continue, we need to focus on developing a more robust framework for sorting publicly beneficial innovation, from merely new means of destabilizing speculation. We need to develop an explicitly normative lens on technology. And the more powerful and the more fascinating and promising the technology is, the more important it is for the policymakers to be able to step back and take that larger view of why we want to facilitate this technological development. So, policymakers need to think dynamically. They cannot keep fighting the last war. Instead, they need to really figure out to see where all the new quote unquote bottles are, before all the genies are out of those proverbial bottles.

So, to conclude my remarks, you know, to some of you these points may seem too broad and too philosophical, and they may be. But the most important thing that I'm trying to say here is that we will not be able to fix the many individual specific technical problems in our financial system today, unless we start reprogramming our collective thinking about what matters in the big picture of finance. Thank you so much.

Victoria Guida, Politico
Thanks so much, Saule. And last but not least, we have Simon.

Simon Johnson, MIT
Thanks very much, Victoria. What an incredible pleasure it is to be with you all today, and particularly to sit on a panel with three of the country's or perhaps the world's most distinguished lawyers and specialists on financial regulation. I'm not a lawyer. I'm an economist. I was previously among other things, Chief Economist of the International Monetary Fund. And I've worked on economic and financial crisis and including, of course, the problems that banks around the world over the past 35 years. And I

have some positive and encouraging things to say to you that I think will make many people here feel quite good about themselves. And I have some rather negative or less pleasant things that I think have already been alluded to, but I am going to in the best spirit of the IMF Victoria, pull no punches on this instance.

So, I think that the good news is, well, sorry, the news is ,obviously, this is not good, and the headline we're all focused on is it Too Big To Fail is not over. I think that might have been obvious for a while. But we have two very powerful manifestations of this phenomenon just now. One is Silicon Valley Bank and the other regional banks we could talk about separately. But the other is, of course, something we talked about less today, which is Credit Suisse. Now, by my calculation, Silicon Valley Bank was a $200 plus billion-dollar bank that's headlined total assets. Credit Suisse shrank a bit, of course, before it went out of business. I think it peaked around $850 billion there. Was down around $700 billion. And there were there was grave concern about the consequences for the Swiss economy, for the European economy, for the euro area, for the global economy there. The Silicon Valley Bank concerns were mostly about the US economy. So Too Big To Fail is undeniably a phenomenon in the country. Absolutely. But it's not the same as before. Something has changed. In fact, I think three big things have happened, Victoria.

First of all, the aura is gone. I listened with fascination to the panel this morning with Frank Partnoy, Bill Cohen, and the other, some of my favorite analysts of the pathologies of the financial sector. And it's really interesting to remember for those who can remember 15 or older more than 20 years ago, how Frank Partnoy, for example, was a voice in the wilderness. If you remember his book Fiasco, very few people knew what he was talking about, or took him seriously. There was this aura. This Masters of the Universe, the geniuses of risk management that pervaded all public perception, and of course, policy approaches, including from the Federal Reserve, but I mean, we could make a long list with regards to Wall Street and financial magic. That's all gone. It was self-inflicted. It was destroyed by those people themselves by those banks and quasi banks. I was really interested to hear Bill Cohn say that he thought Goldman Sachs was the best of the best of the best in 2008 because I went back and checked my notes. They almost failed in September 2008. They were rescued by allowing to become a bank holding company and getting unfettered access to the central bank discount window, so Master of the Universe no more. And that changes everything, of course, because that changes how you think about them day in, day out, and it changes what the rules are and how the rules can be applied.

The second thing is, of course, Dodd Frank. So, thank you very much to everyone who worked really hard on Dodd Frank, I know it was a massive lift. I know it was hard work. I know implementation was even more difficult. It has indeed made a difference, let's be very clear on that. The problem of Too Big To Fail was articulated. There was a great deal of effort and really sensible, good faith effort put into the legal structure and the regulatory structure. These are things that needed to be tried, and they were tried. And so thank you for that.

And then the third thing is, of course, we ran a natural experiment under the Trump regime. I'm not going to say thanks for that. I think it was unnecessary. I testified against it. If you want to understand the dichotomy of use and how clear it was ex ante Victoria, everyone go back and look at the hearing of the Senate Banking Committee. I think 2015, 2016 I testified. That's not the interesting part. Look at the letter sent by the President, the CEO of Silicon Valley Bank to that hearing, saying you need to relax the

rules and regional banks, in order to, I don't know what it was save civilization it was productivity growth, whatever it was it was hogwash, obviously. Right? That that led to big, big additional risks. So, we've run the experiment, we've relaxed the rules of mid-sized banks, we've encountered disaster, we averted the worst of the problems, arguably. So, I think we know what we need to do now. And I'll come on to that in a moment.

Now Art is very powerful and very clear always on you know, the dangers and the bailout. The word bailout, I think thing is very large and what it says and I'm not gonna fight on that whatsoever. But there are some differences I think Art and others, which is, first of all, the shareholders in Silicon Valley Bank, were wiped out to my knowledge in the bank. Silicon Valley Financial Group is a different matter. But in the bank, shareholders are gone. Now remember, a lot of the rescues that were put in place in the Fall of 2008, and the provision of cheap capital, as the CEO of Citigroup said, when the final Geithner package was unveiled, he said, This is cheap capital. That was a rescue for shareholders. We don't rescue shareholders anymore Art. Shareholders are in the line of fire now.

Caveats, of course, in the case of Credit Suisse, the shareholders were not wiped out, they wiped out the 81. That's the additional tier one contingent convertible bonds, which is fine with me, because, hey, it says contingent convertible in the title. Actually, that's a better title than 81. Contingent convertibles are supposed to be wiped out. They were wiped out. But they didn't wipe out the equity. All right, we can talk about the political economy of Switzerland, if you want. But I think the shareholders are in the line of fire out the people who got protected. And here's the key point. Law is important, regulation is important. I understand how the United States works. I'm an immigrant to the United States. I love the United States. It's a really great country. But this is not about law. This is about game theory, okay. In the game theory, formulation of this problem, when your bank fails, the CEO of that bank, their friends, allies, whatever, will go to the White House and various other governments and say if you let us fail, global catastrophe will follow. You lose out on national security, China will win whatever, whatever the story is, right. So, the game theory, is this. Is that a credible threat? Right. If the uninsured depositors had taken losses in Silicon Valley Bank, what would have happened? Now, I spent a lot of time that problem I'm sure a lot of other people did. Over that weekend, I looked at, I talked a lot of CFOs, I was mapping out with various people that potential cascading bank runs across other small and regional banks. You know, I think Frank, may have made this point this morning. We don't know what happened. We haven't run the experiment. You're not gonna run that experiment. Honestly, you might want to, but honestly, if we put anyone, any reasonable people, any of the very reasonable people of this panel or any of our panels in the room advising any president, the question is going to be what's the economic cost? What are the additional financial risks? What is this going to do to millions of people in their homes, in their businesses in their jobs, right.

And so what you need, and this is what you're not going to like, understand this is getting zero traction. I understand people are going to shout me down. I understand that this is really an unpopular idea, including on Capitol Hill, is fix the transaction account guarantee program, the tag program that the FDIC used in the fall 2008. It was reauthorized in Dodd Frank. It was actually included in the COVID legislation without any controversy, but now you can't get it through. In that instance, you would have been able to say, right, uninsured depositors and Silicon Valley Bank take a haircut. It would have been about, they would have got about 90% recovery, who would have had access to about half the money, then three or four days, but they would have taken a haircut. But we're going to protect everybody else. All other

transaction accounts for small and medium sized business across the entire economy. Right. Couldn't do that. The FDIC is locked out of that from, from Dodd Frank. Oh, and this is the one, I'm afraid complaint, I have about Dodd Frank, the Fast Track authority for reauthorizing tags with the House doesn't work. I mean, the people who listen to this know what I'm talking about. The fast track in the Senate was drafted. Right? The fast track in the House doesn't work. You have to fix that come on. I mean, seriously, without that you've got nothing, absolutely nothing ever, for any of these banks. Because the in the game theoretic situation, in that showdown when responsible people have to make the right decision for families across this country and for our role in the world, they're not going to take the chance. Not unless you've got a tag or a program that you that you can put in place.

JP Morgan or UBS, JP Morgan's balance sheet they tell me today is about $4 trillion. UBS has over $1 trillion, Citigroup, which was much smaller was before is about $2.3 trillion. We could go on if any of these banks were about to fail by themselves in a calm, in a relative calm like we have today, would you, would the people you are advising, would you let them fail, as in default on their derivatives as in default on their bonds as in not pay their uninsured depositors? That's the question. That's the only question. Only question that matters. And the answer is of course you wouldn't. Resolution plans are performative, Living Wills are absolute waste of time at full employment for white collar professionals. What works? You know, what works. You know very well what works. It's higher capital requirements. It's always higher capital, much higher, simpler, loss absorbing capital. And you know what the industry wants. The industry wants zero or close to zero capital, and they'll tell you that it's the end of civilization if they don't get it and it's complete and utter nonsense. We need higher stronger capital requirements. Sheila Bair was right on this before the crisis. Amati was right about this after the crisis. Dennis Kelleher has been brilliant about this consistently. Thank you, Dennis, for setting up Better Markets. Thank you for working the politics. Thank you for making all of the sensible things happen in terms of implementation. Of course, there's more to do, there will always and everywhere be a fight for stronger, more resilient, loss absorbing capital. And let's never ever, Victoria in any of our publications, use the verb hold capital, please. We do not hold capital, we fund ourselves with equity or debt. And that's the question, how much equity versus debt? Do all of these banks, including the very largest banks, have to have on their balance sheet? Thank you very much.

Victoria Guida
Thanks so much, Simon. And thanks to all of you for setting the table so nicely. So, Simon, I wanted to stay with you for a second because I feel like when we talk about Too Big To Fail, usually the way that historically people think about that, I think is, the big banks, the mega banks that are deeply interconnected with the economy. Whereas it, you know, Too Big To Fail , that we're talking about what happened earlier this year is more of just sort of like a panic. And then, you know, as people kind of touched on these guys didn't necessarily face all the same rule that the bigger banks do. They don't have the same capital requirements, the same liquidity requirements, they didn't have TLAC or long term debt requirements.

So, I guess, part of my question is, how much do the events of earlier this year actually tell us about the rules for the bigger banks and we just need to extend them to the regional banks? And how much of this is just sort of like, fundamental flaws in the way that we expect the system to work? And I'll start with Simon, but I'm also interested in everyone's perspective on this,

Simon Johnson, MIT
Right. Yeah. It's a very, very good question, Victoria. Actually, this this came up at the time of Dodd Frank. I think it was brought up in a rhetorical, distracting way by some people who should know better, but they would say, look, you're talking about Too Big To Fail on the mega banks, Simon, but what about these other banks that could also fail? To which my answer was? Yes. That's why you have safeguards across all banks. Having gradations, though, does make some sense I think, Victoria. I testified back in this Senate hearing 2015, 2016 saying that, you know, $50 billion, while you might say, it was a number plucked out of a hat, I think it is an interesting and somewhat sensible threshold, even today. And I was opposed to saying that banks between $50 and $250 billion, I think we were focused on that discussion should be regarded as sufficiently safe, so you could relax the safeguards around them.

I still hold to that view. I think there are banks that are small enough that under many circumstances would and could and do fail without consequences for the system. That was true before 2008. And it's true in many instances, but maybe not every day since then. Look, there are sometimes moments of systemic crisis. Those can be caused by circumstances inside the bank system or outside of bank system. I am fine with the Fed having the authorities that it has. I wish the FDIC still had the transaction account guarantee authority, because I think they made good use of that. I think these are fair responsive people with the right incentives because a lot of banks are breathing down their necks not to put excessive charges into the Deposit Insurance Fund. But I think Silicon Valley Bank has woken us, re-woken us hopefully, to the to the risks that you can get in that $100 billion dollar $200 billion range. Long Term Capital Management, that Chair Gensler talked about at lunchtime, was, of course, about $100 to $120 billion in total assets. And that was a serious issue in 1988. So, these sizes matter. But to your point, Victoria also matters, what's the what's the nature of their business? What are the customers they have? And what's the signal this sends to other people in the financial system, including, I think, Deborah made this point on the on the earlier panel, you know, in a highly digital world of mobile communications, but people can run very, very fast. Yes, of course, we have to take that into consideration.

Victoria Guida
Saule, I'm also interested in your views on this, because I know you were talking about sort of the shortcomings of having these rules in general.

Saule Omarova
Well, right. You know, I think this is a this is the multi trillion-dollar question, right?

So, it's interesting to think about the possibilities from a game theoretic perspective. But it's also important to keep in mind that who the players are in each game also may change dynamically depending on the context and on the outcomes of the previous round of another game or a similar game. So, with that, you know, with that in mind, I think that the size alone, of course, is not a dispositive matter and it should not be with respect to contagion and systemic risk. It is a proxy, however. It is a proxy for the ability of a particular financial institution, for example, to occupy such a critical place in a particular market and that market itself being such a critical part of the larger financial system that simply the calculus of allowing some shareholders or, you know, other stakeholders to take a loss completely precludes you know, those kinds of decisions. So, I think it is important to, of course, institute the safeguards across the border, regardless of the size. This is what we've always, you know,

all of us have warned against back when the deregulation started. But I also do think that we kind of need to start thinking about bigger issues because we can create, you know, for example, the guarantee, whatever temporary guarantee authority and whatever and solve one set of problems. But it's important to kind of look forward and see how it will change incentives in the future because there will always be some kind of a powerful constituency that will come and say that well, we also need saving, and at what point do we stop? At what point do we run out of the tried-and-true sort of tools like this particular authority? That is, I think, the forward-looking perspective we need to adopt.

Victoria Guida
Yeah, and Art you talked about how, you know, do people really believe that if you have a bank over $100 billion in assets that people are going to let the uninsured depositors take losses? And it seems like the regulators, at least partial response to that is by proposing these long-term debt requirements where the debt can be bailed in? And so, they could take losses before the uninsured depositors? I mean, do you think something like that is the right approach and will help? Or should we fundamentally think differently about uninsured depositors taking losses?

Art Wilmarth
Well, as soon as you go back to February 2009, which most people believe what actually ended the crisis in February 2009, was, Tim Geithner, and the federal regulators announcing that they would not allow any of the 19 banks larger than 100 billion to fail, full stop. In other words, they basically said we will provide them any additional capital they need. We will not allow them to fail. So essentially, to me, that created $100 billion, Too Big To Fail threshold. And when S 2155 came up, I wrote an op ed and I said, you know, look what happened in 2009. You created this threshold and pretending that you can now, you know, increase the threshold to 250. And it won't matter. It's just nuts. If you go back to 1984, Continental Illinois had about $40 billion of assets, that's probably about $100 billion give or take in 2010 dollars. Clearly, when Continental Illinois was about to go under, they decided it was systemically important. What happens is when these banks get into trouble, they manifest problems that are also manifest in larger banks. That all the banks, to some extent, have been taking these risks, and some are more exposed than others. But they know that the dominoes will start to fall, if a bank that large goes under in a disorderly way.

Now the long-term debt requirement. This gets back to Simon's problem. Why is an equity requirement? In other words, to me, who are you going to sell the long-term debt to? Well, the regulators seem to say, oh, let's sell it to pension funds and mutual funds, because they're stupid investors, and they won't know the risks they're taking. You know, my view is, if you're going to sell long term debt, you better sell it like high yield bonds and say, this is incredibly risky stuff it’s going to get wiped out if the bank goes under, it's not going to be protected, you're not going to be like the uninsured depositors. In my view who's going to want to buy that debt if they're honest about the risks they're taking, but why not? Say you have to have equity. You have to have, you know, as Tom Hoenig said, you have to have at least 10% equity on a leveraged basis if you're going to operate this kind of a business, and 15% wouldn't be bad. In other words, that with equity, then the people who are getting the gains are also bearing the risks. I'm afraid that the regulators are afraid to touch equity, because equity is the basis for all bonus stock incentive plants. The smaller the equity, the bigger the bonus, the bigger the stock option returns. And just I’ll note, I'll stop with this, which is, isn't it interesting that one of the rules in Dodd Frank, that has never been completed, is the rule requiring that the six federal financial agencies adopt rules

designed to prohibit compensation plans that encourage excessive risk taking? They will not finalize that rule. This goes to the whole issue of accountability of officers and directors and managers and why won't we hold these people accountable and force them to internalize the risks they take?

Victoria Guida
Thanks. And Pat, I also want to give you a chance to weigh in here on things that you think you know, what this tells us about the current rulebook and what it does.

Patricia McCoy
Sure. Well, Victoria, getting back to your question about should we apply, let's say, the liquidity standards across the board, regardless of size. The situation we're in right now is that for smaller banks, they do have liquidity regulation, but it tends to be discretionary that is applied during examinations. And so, the examiner will come in look at the balance sheet and say, tut, tut, you're not holding enough cash and you should get your you should increase your liquidity and issues a matter of requiring attention or maybe a matter requiring immediate attention. And then if we're lucky, the bank pays attention. But time passes, and maybe the bank complies with the letter, maybe it doesn't. What we saw was a repeated cycle, in the case of Silicon Valley Bank and also Signature Bank, where these types of matters requiring attention or immediate attention were issued and disregarded. And the regulators at that point did not escalate to enforcement action. So, this is another way in which there was a failure to impose consequences on banks and their managers by failing to invoke enforcement action. And what that points to is either we have to revamp our supervisory system, so that there is automatic escalation instead of at the discretion of the agencies, or we extend, in advance, liquidity rules that are binding across the board to all institutions. That's really the choice. And the choice was opted for is to depend on supervision for smaller institutions. And when it breaks down, it breaks down in a very, very damaging way.

Victoria Guida
Yeah, we have some, some questions coming in from the audience. And actually, Pat, one of the questions kind of relates to the point that you were just making it says: Accountability for the 2007, 2008 financial crisis has been a topic of debate. What are the key challenges in holding individuals and institutions accountable for their roles in the crisis? And how can the regulatory framework be strengthened to ensure greater accountability and deter risky behavior in the financial sector?

Patricia McCoy
I was really shocked and appalled to see the reluctance of federal regulators, excuse me, and prosecutors to hold top bank managers to account coming out of the 2008 financial crisis. I think one person went to jail and that person was not by any means a top manager. You saw the Attorney General Eric Holder, completely gun shy about initiating prosecution. So, this is a bipartisan reluctance. And if we're not willing to put people in jail, let alone bring civil actions against them and seize their assets, then we're not going to get very far in terms of accountability. Now, I understand that it can be very difficult to put together a criminal case against the CEO. There are layers and layers of decision making. And those layers are designed to provide perfect deniability to top managers, to CEOs, to Chairs of the board. But it's not impossible, and I think we have to make the effort.

Victoria Guida
Yeah Art that also relates to the point you were just making that executive compensation. Did you want to weigh in?

Art Wilmarth
That we haven't required accountability at any level. In other words, that there's been no meaningful clawbacks of compensation and bonuses for managers whose institutions have failed after very strong evidence of excessive risk taking. The existing laws certainly provide for the possibility of clawbacks. I mean, I agree with the RECOUP Act, which would strengthen the laws, but there are existing laws in the book that allow for clawbacks, and they simply weren't done. I mean, one of the most I thought shocking decisions was that they didn't even bring a civil action against Angelo Mozilo when there was strong evidence of insider trading, at the time when he knew his institution was going down. And that was a civil action. It wouldn't have required proof bought beyond a reasonable doubt or criminal standards of conviction.

So, my view is, if you won't even bring civil penalty actions against people with a such strong evidence of self-dealing, and excessive risk taking that essentially there, we have to understand the incentives on the other side. So, if you look at the CEO of a typical bank, you know, he's being told, Look, if you don't make a return on equity of at least 10%, or 12%, or 14%, or 15%, whatever it is on a regular basis, you'll be removed, you'll be fired, you know? And if you tell him, well, you know, you, you can stretch the risk and take excessive risks to meet those targets, and oh, well, your bank may fail, but you know, you'll lose your job, but in the meantime, you'll be able to cash out all your options, and nothing will be clawed back. What's that CEO's going to do, right. He's going to try to preserve his job.

And it's clear, if you look at the record of SVB, that CEO was doing all sorts of things to try to, you know, enhance return on equity on a very short-term basis, including, as Frank pointed out, not having a chief risk officer for 10 months when you're doing all these things. So, I think we, you know, there are many different tools regulators have to create these incentives that by penalizing people without necessarily having to put them in jail but penalizing them. And the regulator's, simply, they'll do it for small banks. I've seen small bank executives get absolutely hammered. And in fact, they just recently convicted some folks of the Chicago Savings and Loan of fraud, they're going to jail, but they won't do it for banks, even above $50 or $100 billion dollars. I don't understand it. So

Simon Johnson
Yes, so I'd be happy to be wrong about this. My understanding is that the legal measures between the clawbacks, which I fully support along the lines Art said, I believe those legal measures were never turned into effective final regulations. And I asked one of my friends who's worked a lot on Capitol Hill why this was, and Simon said, Why do you think they gave it to five separate agencies to coordinate on Simon?

But on the point about fraud, Victoria. I understand fraud is important. And I'm not countering any of the points by Art or by Patricia. I do think, however, you need a financial system that's robust to situations in which major banks are in trouble for whatever reason, and there isn't fraud. Right, I think the fraud, you know, everybody should follow the law. And that's important. But I also think that the key, we should not be distracted from the key. And the key to all of this is bank capital. It's all about how

you fund the banks. I explained how we're talking about how banks work to a class at MIT recently, and we talked about being compensated on the basis of return on equity, unadjusted for risk, which is still the basis for a lot of compensation plans. And I asked the students how much capital they thought they would like to have in a bank if they were founding it, and they could choose the capital as opposed to being regulated. And one student raised his hand and said, zero. And I think that is, unfortunately, what the people who run banks would like because. They'd like to run it with tiny, tiny amounts of capital. They get the upside. So, he said, the downside is someone else's problem. That's your fundamental problem. The incentive there, clawing back could be helpful, certainly could be satisfying, but without the big increases in capital requirements, real loss absorbing buffer is not nonsense type of regulatory capital, but real loss absorbing capital leverage ratio for like, that is the heart of the matter today. It was the heart of matter of 15 years ago. It'll be the heart of the matter in 15 years time.

Saule Omarova
Well, not much to say. I think everybody said all that needed to be said, but I do agree with Simon, on the point that there are structural problems with what we have here. It's not about people who are breaking the laws and lying and defrauding. The real scandal is that a lot of these problems can be done perfectly legally.

Victoria Guida
So, another topic that I wanted to ask about that's that sort of came up, you know, Art you mentioned it earlier is the Least Cost Test for the FDIC and then we obviously have the systemic risk exception. And one of the things that I've been curious about in the wake of all this is, you know, is the Least Cost Test, is that the way we should think about it? You know, this is obviously controversial, as it relates to First Republic.

Art, you were saying that you thought they should have invoked the systemic risk exception. But you know, as with JPMorgan being the least cost bid, even that was sort of controversial, as opposed to whether it should have gone to a non, you know, global systemically important bank. So just kind of curious about whether you think that the Least Cost Test should be calibrated any differently, or we should think about this any differently?

Art Wilmarth
I mean, I think the Least Cost Test is appropriate in the current regime, which is, at what point does the Deposit Insurance Fund, you know, should it bear losses for noninsured liabilities. And the statute was amended, I believe, in 1991, when they put in this requirement that that the FDIC must follow the approach that would result in the least cost to the Deposit Insurance Fund, from liquidating the bank and protecting only the insured depositors or possibly selling pieces of the bank. But again, protecting only insured depositors, unless the FDIC invokes a systemic risk perception, which basically is saying, it's too dangerous to do that. It's sort of Simon's hypothetical. If you don't protect the uninsured depositors, are you going to have essentially the likelihood of a systemic panic? Now, to me, Dodd Frank, came along, and at the time, I said it was a mistake to actually retain the systemic risk exception because my view was the Orderly Liquidation Act, Authority, I'm sorry, OLA should have become the systemic risk exception. And what was key about that was that the costs of resolving the systemically important institutions through the OLA would not be charged against the Deposit Insurance Fund. It would be

charged against something called the Orderly Liquidation Fund and would be paid for entirely by similarly large financial institutions, banks, and financial companies over $50 billion.

Now, at the time, Dodd Frank was passed, then FDIC chair Sheila Bair argued, and I strongly agree with her that, of course, you have to prefund the OLF in the same way you prefund the Deposit Insurance Fund. And they were proposals to maybe put at least $150 billion into the Order Liquidation Fund paid for, by large institutions, assessments based on their risk. So, they would be prefunding the fund, they would bear the risks of funding that fund. And when the fund was needed to bail out a large bank, they would be bearing the costs of replenishing that fund. So now you have the large institutions, essentially internalizing the costs and the risks that they're creating. What we've allowed to happen is, these giant institutions are creating all sorts of risks and externalities and the way that the failures are being handled, they are not being required to internalize the costs. So, this is, again, privatizing the profits and socializing the costs. And I thought Dodd Frank was supposed to end that. But to me, the Least Cost Test is an important part of making sure that this the little guys, the small banks, and the taxpayers who stand behind the Deposit Insurance Fund, don't have to pay for bailing out these big banks. But that's not what we're doing, which I think is very unfortunate.

Victoria Guida
We have a related question from the audience here. Why did regulators choose not to invoke Orderly Liquidation Authority in your mind? And what do you think would have happened if they did?

Art Wilmarth
Well, I think I've got two possible reasons.

One is that if they had invoked that, OLA for the Silicon Valley Bank, that would have made it clear that they would immediately had to borrow money from the Treasury Department, because OLF has no money. You'd have to borrow from the Treasury Department that would have made clear was a bailout, which at that time, the Biden administration was trying to say it wasn't and it was. Secondly, it would have made clear that only banks larger than $50 billion would have had to pay to cover those costs. And I think what we see here is the big banks specialize in privatizing their profits and externalizing the costs to everybody else, and they did not want to have to pay for that bailout. Now, unfortunately, with First Republic and Signature, they didn't have holding companies and the OLA didn't apply to them. And that's why I said before, we need to require every bank at least larger than $100 billion, if not $50 billion to have a holding company. That means the Fed also comes into the supervisory process. But to me, it's just another story of the big banks they don't want to pay for the costs, they create, they want to externalize those costs. In this case on the Deposit Insurance Fund, and the taxpayers. And I just think that's, that's wrong.

Victoria Guida
Simon you want to jump in?

Simon Johnson
It is interesting and remarkable picture at the time of Dodd Frank, and subsequently, though many voices from the community banking world, including Cam Fine, and I remember was very good on these issues. And I'm sorry, the Cam doesn't have the role that he used to have. And I'm sorry that we haven't

had other voices. Because I think those small banks have every interest in following exactly what I'm saying here because it's massively unfair. I mean, look, the world isn't fair to start with, including in US banking. All of these arrangements are exactly as I said, about pushing the big banks to taking risks. They're getting a lot of upside. They're pushing that downside onto someone else socializing it, sure. But putting it on the small banks is part of that socialization of the cost. Why do we allow that? It doesn't make any sense. It's not good for capitalism. It's not good for markets. It's not good for the legitimacy of the democracy. And I hope the small banks will once again find that find their voice on this. Thank you.

Victoria Guida
We have another question from the audience that feels like it's right up Saule's alley. Sheila Bair noted in her book, it's all about the bondholders. Since it is still all about the bondholders, can tweaking the existing system work? Or should banking be a public utility?

Saule Omarova
It's not a trick question.

Well, look, I do think that at some point, our current predicament that forces us to keep extending expanding the public subsidy system, right? Precisely because in every moment, when we actually are facing a very concrete problem, should we push the losses on specific parties or not? Right? We are basically rationally choosing to take the cautious route, right and avoid systemic disruption. So given that we keep every time pushing the envelope farther and farther in terms of the public subsidy, and politically, we've lost that initiative, or that strength politically, to also force on especially big banks, the proper equity, capital requirements, all these other safeguards that are meant to substitute for the missing market discipline, right. Given this situation, I think that we really ought to consider very seriously the possibility of offering a public alternative to this depositor services, and other critically important, publicly critical functions, that private banks perform. And this isn't about nationalizing the existing banks or anything of that kind. And this isn't about pushing the smaller community banks out of whatever they do. It is about however, changing the dynamics in the financial markets and perhaps protecting those constituencies about whom we care in a more direct way. And, of course, you know, this is politically extremely difficult to, to pass, or even discuss at this point. But I think every time we have a crisis of this type, I think it only underscores the necessity of at least considering seriously the possibility of changing our course.

Victoria Guida
Art you want to jump in?

Art Wilmarth
Yes, I think it's really important to focus on the cost that these bailouts have had on the taxpayers. So, if you go back, to December 2007, the federal debt was $9 trillion. After the crisis of 2007 09, after the pandemic crisis of 2020, and now the most recent one, federal debt sits at $32 trillion. As a percentage of GDP, we've gone from 60% of GDP to 120% of GDP. We're now approaching where Italy is. I mean, how many more times do people think we can do what we have been doing for the last 15 years before we literally break the buck? In other words, the dollar will lose credibility, we'll have a debt crisis that resembles some of what we went through in the 1970s and early 80s. I just think that this the cycle that

we're in for people to pretend that we can keep doing it indefinitely, I think they're just wrong. I think the federal debt numbers are just one big example of how wrong it is.

Simon Johnson
I'd like Victoria to challenge the premise of the question. Come on, it is already a public utility. It's a very inefficient, obnoxious, dangerous, massively unfair system, in which certain private individuals get the upside when they get lucky and or the world gets lucky and the downside falls under other people. Lemon socialism is a term that sometimes people use for it. This is a public utility, it's a really stupid way to run a public utility. There's much better ways to do it. This is not a, I'm a pro market person. This is not a market we're talking about. This is government. This is capture of government. By the way, Victoria, I don't think I heard this come up already today. But I do think I'd be remiss to omit mention of the San Francisco Fed, and the fact that the CEO of Silicon Valley Bank sat on the board of the San Francisco Fed. And I asked the question to you to all of you today, and I just like ask it every time and for this one is, can anyone name any other part of modern American life where the regulated supervised person sits on the board of the supervisor? It's a ridiculous crazy relic of the 1913 Act. And it just, I don't believe that there's the heart of the problem here. I think it's a massively embarrassing for the Fed. I think it must end. It's awful for the legitimacy of the Federal Reserve for the effectiveness of central banking in this country. And that matters for everybody. But will it end? Will they take it on? Will they confront it? I don't think so because that's just a symptom, a small symptom Victoria of this ridiculous, inefficiency, stupid, crazy former public utility.

Art Wilmarth
We also have the Federal Home Loan Banks, right. The lender of next to last resort that have lent hundreds of 1000s of dollars to these banks. And as you say, Simon, their representatives sit on those boards, too. So, the federal loan bank is another prop to that right. Not a good way to run a railroad in our opinion.

Victoria Guida
Well, just as you all are opening up another hour-long discussion, I think that's all the time that we have. But thank you so much. This was a really interesting discussion. Hope the audience enjoyed it as well. I will now turn it over to Dennis Kelleher to introduce the next keynote speaker. Thanks everyone.