2025 Financial Stability Conference, Financial Stability in a Time of Rapid Economic and Technological Change

Panel Session: Institutions

Host:
Joe Haubrich, Federal Reserve Bank of Cleveland

Moderator:
Scott Frame, Bank Policy Institute

Panelists:
Mark Flannery, Univer of Florida
Marc Saidenberg, Ernst & Young LLP
Daniel Tarullo, Harvard Law School

Joe Haubrich:

Welcome back, everyone. Our final session of the day is our All-Star Financial Institutions Panel, moderated by Scott Frame of the Bank Policy Institute.

Scott Frame:

Yeah, that'd be perfect. Good afternoon, everyone. I can see my panelists online and on the screen. Perfect, perfect.

Technological advances continue to reshape all aspects of financial intermediation. Such changes, coupled with significant regulatory developments, has resulted in a greater share of this activity being conducted by non-bank financial institutions over the past two decades. Non-banks not only compete with banks to offer various products and services, but they're also bank customers. For example, you could be a non-bank mortgage originator and you will have a warehouse line of credit to finance your mortgage originations. Also, sometimes banks and non-banks are affiliated as part of bank holding companies, and I think a New York Fed Liberty Street Economics post this week presented some data on this. So, it's sort of a nexus between banks and non-banks.

Now, given that our focus today is on financial stability, we should ask whether the increased importance of non-bank financial institutions is a cause for concern. And if so, are these concerns limited to specific activities or particular markets, and under what conditions? Also, are there policy changes that may mitigate these concerns, while at the same time not undermining financial innovation and economic growth?

To further explore these issues and perhaps many others, I'm pleased to welcome our three distinguished panelists. Mark Flannery is the Bank of America Eminent Scholar in Finance at the University of Florida's Warrington College of Business. Marc Saidenberg is EY America's Financial Services Regulatory Lead and Principal US Services Consulting at Ernst & Young. And finally, Daniel Tarullo is the Nomura Professor of International Financial Regulatory practice at the Harvard Law School. Each panelist has agreed to speak for six or eight minutes, and then we'll open things up for Q&A. And I guess we'll go in the prescribed order here, so I will turn things over to Mark Flannery.

Mark Flannery:

Okay, good afternoon, everybody. I apologize for not being there, I'd love to come visit with all of you, but transportation things made it prohibitive. So, what I want to do today is pick up on a couple of the things that Scott mentioned, and I want to describe for you some of the things that I've learned recently and many of you probably already know, about changes in the way loans are made and financed and originated in the US financial system. Next slide, please.

Here's the outline of what I'm going to say today in the first few minutes, that there's been a shift in the relative importance of banks and non-banks in the loan business. Non-bank lenders are extremely heterogeneous. There was a time when all non-banks were called shadow banks, and the implicit inference one was invited to make was, all we need to do is to turn these shadow banks into banks and everything will be fine. But I don't think we think that anymore, because of the heterogeneity. We also, however, don't know very much about the non-bank lenders stressed behaviors, because they become of a great size only recently and we haven't had any particularly severe financial stresses since then. So, I expect we're going to see a lot of discussion about changes in the regulatory environment, and that's either a big risk or probably better stated as a big uncertainty in the near term for how financial stability will react in times of rapid economic and technological change. Change the slide, please.

So, this is a picture that comes from the flow of funds account. It shows between 1960 and 1924 what has been the assets under management for banks, which is the dark shading down at the bottom, and it's percentage of all assets. It's not that the bank balance sheets haven't changed. But the bank percentages and the non-bank percentages, and you can see that the non-bank percentages, the light blue, have grown fantastically. And many, many people know that I'm not telling you anything that you don't know. Next one, please.

What I can tell you is that here's a very early and very insightful paper by Buchak et al, where they plot over the '60s through the 2020s, they plot the proportion of mortgage financing that's done on bank books. Okay, so financing on bank books versus financing somewhere else. And you can see, for example, if you look around 1979 or so, which is when the securitization market started, you can see that that's when the fall off of on book bank financing started. So, that has been a very strong pattern in the last 30 years. Next slide.

The same thing can be said about personal loans. This is a graph from the CSBS study on the future of technological change. They've identified personal loans as not mortgages but other personal loans. And between 2013 and 2019, you can see that the big black line at the top is bank and credit union holdings, and that's fallen quite a lot from 70% to about 50, 45%. The blue line, that's sort of the middle line, is the traditional finance companies, and then the bottom line is FinTech. So, they've been growing increasingly, and that's another part of the pattern. We don't know very much about how the FinTechs are going to behave. So, next slide, please.

There's another early paper by Gopal and Schnabl in the RFS, where their headline result is what I've written down here, the market share of non-bank lenders is close to 60% of small business lending. And then the two pictures are not the financing, but rather they're the percentage of originations. So on the left one, we're comparing non-banks, which are the darker or the blue dots, against banks. And the non-banks have been bigger and they've been pulling away in terms of proportions. On the right-hand side, we split up the originators a slightly different way. The dark one is finance companies, the middle one, the gold or yellow one is other non-banks, and then the bottom one is FinTech. And that ends in 2016, which of course is now almost 10 years ago so we expect, and I'm sure the FinTech proportion has gone up quite a lot. Next slide, please.

Now, there's a very interesting paper by Isil Erel and a co-author in the JFQA last year, where they look at FinTech credit and they compare it to other sources of credit for small business lending. And so the first thing they say is, "Fintech credit has become an important source of loans for small businesses and they make loans accessible to companies that otherwise would not be able to receive credit." So, that's the first sort of explanation of what they're doing different. The paper concludes with some things that they'd like to know. They'd like to know about short-term funding constraints. They'd like to know about interconnections, and they'd like to know about how the Fintech firms and the non-bank lenders would behave toward their high-yield borrowers in the event of distress for the borrowers. So, I put that out there as something that we don't yet know enough about. Next slide.

Here's the same pattern again for all mortgage loans. There are different people's mortgage loans here, but the originations, if you look at the solid blue line that's kind of in the middle, the originations have risen from 30% non-bank originators to about 66% non-bank originators. So, not only are the balances moving, but the origination, the credit evaluation, and the control over the securitization functions has been moving. So, next slide.

Another way to summarize this is from a CSBS study in 2019, where they say that large banks currently have a smaller footprint of origination activity than the non-banks, I've already shown you that. And then down, the second quote, they are a primary source of mortgage originations, two-thirds of the market share, and they represent a growing source of mortgage servicing. And that's something that I haven't read very much about, but I probably haven't been reading the right things. But mortgage servicing is something that historically was the [inaudible 00:10:53] the banks, and then capital ratios requirements changed and they move out of it, and they're moving it into non-bank financial institutions. Okay, next one, please.

So an obvious question is, why all these changes? I think the balances moving can be largely explained by the past 15 years increase in the effective bank regulatory capital requirements. So the bank's cost of capital has gone up, the non-banks have not gone up, and financing has shifted. But the increase in capital requirements shouldn't have done anything to the bank's facility about originations and underwriting. So, I'm a little bit more puzzled about why that is moving the way it is. And I think that that's something we need to understand if we're going to make predictions about what the near-term mortgage activities are going to be for non-banks and also for FinTechs, particularly the FinTechs who are so new.

Well, let me shift to something else that Scott mentioned, which is the macroeconomic perspective. That's the next slide. And Viral Acharya with a couple of co-authors has been doing an amazing proselytizing job. He sort of says, "Look, time was when we thought if we kept the bank safe, then the whole banking system would be safe. And when we moved risks out of the banking system, we were sort of glad because then they weren't in the banking system anymore. And what Acharya et al have been pointing out is that those risks have never quite left the banking system. And if you look at this graph, the solid line that falls from left to right is loans to depository intermediaries. And the dotted line that rises in percentage terms much more rapidly from left to right is loans to non-bank intermediaries. So, an awful lot of risk that's in the non-bank sector now is owned to some extent by the banks themselves. Next slide.

All right, here's a list of the heterogeneity that's embedded in the non-bank financial intermediary sector. It's multifaceted. I think that it's going to generate, these kinds of developments I've talked about, are going to generate serious efforts to revise regulations. Well, you can't revise regulations the same way for all these vehicles. So it's a multifaceted job and that means it's going to take a long time. And it raises the question in my mind, of whether financial markets will remain sufficiently untroubled for us while we make the transition to new, presumably more protective kinds of regulation. Next one.

So, what are the threats? It's the re-internalization of the non-bank risks as Acharya says. I also already made a comment about shadow banks, and I think that the process of reforming regulation will be long and heterogeneous. And during that time, we could have unregulated expansions in certain kinds of activities that turn out to be dangerous and we're not going to be watching them or we're not going to have the data to know about them.

So finally on my last slide, let me make one more point. Interacting with all of this is the GENIUS Act, which may or may not be a misnomer, but it governs stablecoins' behavior and the issuance of stablecoins by financial institutions. The quantity of the shift out of other deposits into stablecoins has yet to be determined, and I confess to being a bit of a Luddite here. I'm not sure why I want a stablecoin instead of a deposit, a regular old deposit to a bank. But the enthusiast predict that this shift could be very, very large. Now, the GENIUS Act requires stablecoins to have 100% backing by high-quality liquid assets. And so with that sector, the stablecoin sector gets really large, it raises some new, different quantitatively different questions about what are the implications of this increased demand for HQLA? What are the implications for the availability and cost of private credit? And that's another thing I don't know about and worries me a little bit about the regulation. So, that's it for me. Thank you very much.

Scott Frame:

Thank you, Mark.

Scott Frame:

Thank you, Mark. Okay, I guess we'll turn to Marc Saidenberg. I don't know if you have slides, or are you going to talk off the cuff?

Marc Saidenberg:

No slides.

Scott Frame:

All right.

Marc Saidenberg:

I'd say talk off the cuff except the people in the room can see me holding a piece of paper, so that slightly undercuts the off the cuff statement. Although if you could read my hand writing, you would know this is more off the cuff than not.

I want to spend a few minutes actually following from Mark, but in a slightly different direction. In a lot of our consideration around financial innovation and the role of financial institutions in either contributing to financial stability or financial instability, has been around the question of whether the core of the banking sector, and I don't just mean DI's, but bank holding companies writ large, act as more of a dampening mechanism or an accelerant to shocks that occur. And particularly, if you take Mark's starting point, that the increasing amount of risk is being or originations and risk is held in principle outside of the banking system, then we should be particularly focused on a question of, how resilient would the core of the system be to shocks?

And it's an interesting time to be having that discussion. And so I want to actually spend a few minutes talking about a topic which probably will sound really off target, which is actually the role of regulatory fragmentation has on impacting financial stability, particularly in a, or not surprisingly in a cross-border sense.

And to frame the comments, I think as I said, a lot of the time when we think about financial institutions, do we think of them as a mitigant or as an accelerant? Now when I say mitigant, I'm not sufficiently naive. I remember back in 2009, 2008, there was lots of discussion about would banks be the ones to catch the falling sword? This is not a question of, will somehow banks step in and take on risk as risks are being repriced? It really is to me this discussion about whether banks are an accelerant or not, is whether the deleveraging or de-risking that we see at banks that occurs somewhat naturally or predictably at a time of increased uncertainty, increased volatility, is limited to a adjustment of their own behavior, adjustment of their own risk stance. Or, it is exacerbated because they're in a position where they're in a forced asset sale, forced liquidation, because they don't have sufficient capital to absorb losses or liquid assets to meet their contingent funding needs. So, that's the basic framing here.

And to get to that, often we have a discussion about the question of, well, what would contribute to that? One, to that more accelerant view is one is there is a view that we have somehow mispriced risk or we don't understand the risk well. The other is that we have misunderstood the capacity of the financial institutions, particularly at the core, to absorb losses and or to meet contingent liquidity needs. And it's actually the second of those that I want to spend a couple of minutes on.

And I think the basic idea that I start with is that risk goes from being risk to systemic risk when we have a sort of resetting of expectations, a fundamentally different view about what that capacity could be, relative to what it turns out to be. One way of saying that is for a number of us, probably almost everyone in this room, who spent a fair time either working on or thinking about policy around the time of the great financial crisis, a lot of the discussion could be characterized as two types of revelations. One of those revelations for this purpose was a recognition that mortgage secured lending was not as secure as we thought, not as, I won't even say risk, was higher risk and there was more interconnected it. That's on the vulnerability side.

The other revelation was it turned out that banks were not capitalized in a way that we thought they were. And a lot of the times it's framed as a levels conversation. It's easier to frame that as a levels conversation after the fact, when really at the time the first order problem was actually a misunderstanding of the capacity of bank capital to absorb losses and of bank contingent liquidity pools to be monetized in a way to meet liquidity. So, it was as much a discussion in both capital liquidity about composition as you might say about levels. I'm not understating the levels point, that was also there too. But for the purpose of today I'm going to focus on composition.

And you could say that the regulatory response, Basel III, was really in both cases really to address that in both ways. One on the liquidity side, was having a better recognition of what would be the liquid assets that would be available to meet contingent liquidity needs. And on the capital side, we talked about the quality of capital or the composition of capital and a recognition that if you want banks to not be fire selling assets, to not be for either purpose, then you really had to have both capital and liquidity pools that were able to absorb losses or satisfy needs in a way that was as a true going concern and not in some theoretical way solely in the context of failure or bankruptcy. And so, that was the good news.

So we look at that and you say, okay, so what does this have to do with the current situation? I think it's interesting that in time when we're very focused on, there's an active debate in number of jurisdictions about, how do we think about the financial system's ability to support growth and innovation? And how do we think about the frontier or the trade-off of promoting financial stability versus promoting growth? And I think we have to acknowledge there's as almost any mean versus variance, there's going to be some trade-off. I wouldn't even pretend to be able to characterize exactly.

But what I really want to focus on for a minute is what happens when we're in an environment where we seem to have across jurisdictions in particular, could even say across stakeholders, a fundamentally different view about where we want to be on that frontier? And so, one of the things that we're seeing is in response to a view that in some jurisdictions there is a more aggressive move to ease capital liquidity requirements either in fact or in practice, and provide for a different balance of that growth, you're getting a response which is locally optimal but not terribly great idea from a financial stability perspective, which is to really focus on localization of capital liquidity. That is, how do you preserve, or what could be characterized as, financial stability locally through imposing capital requirements for legal entities, specific legal entities, liquidity requirements at the legal entity level, and limiting the fungibility of capital and liquidity across entities in order to protect the local markets. Protect local markets, particularly as you're finding that other jurisdictions may sort of have a different risk appetite or different point.

The result of that, that fragmentation, is in fact what we're finding is significant trapped capital and trapped liquidity. That is liquidity that is maintained at specific legal entities that is not in fact, is not fungible the way we'd like to think it is. And again, there's a trade-off. It appears to be locally optimal, but I think most of us would agree that in a sense that financial stability should probably be looked at as a public good, trapping the capital may have the appearance of safety locally, but may actually lead to a result where we are in a position where in total we're actually achieving less resilience, less financial stability than our perception may be because of the policy response.

And so, the net effect is we may inadvertently have an environment where we have the appearance, back to the appearance versus the revelation. We have the appearance on an aggregated basis that we are in a position right now where we have significant amount of capital liquidity in the system, but it may not actually be as fungible or as able to meet the local needs at any given time, which may be resulting in a actually back to an environment where we are at risk of de-risking being an accelerant, unless there's some magical alignment of the shocks with where the resources are held. We can come on to it later when we talk about the sort of response to this and the fix. I'll be the first to say, it's not easy, but I would say in any discussion around the sort of resilience of the financial system and its ability to withstand shocks and not be a accelerant, it's probably useful to think about, how do we really understand this sort of capacity to absorb shocks? Thanks.

Scott Frame:

Thank you, Marc. All right, I will go ahead and turn to Dan Tarullo. Dan?

Dan Tarullo:

Thank you, Scott. And let me begin by saying, I think we've seen this movie before, although it's been quite a while. It's been more than 40 years since we've seen it. And what movie am I talking about? It is the issue of how to deal with bank regulation in a period in which non-prudentially regulated institutions are posing more and more competition to banks. I say we've seen that movie before, it happened in the early '80s. It was actually embodied in a really interesting back and forth between Jerry Corrigan, then President of the Minneapolis Fed, and a man named Richard Aspinwall, who at the time was Chief Economist at Chase Manhattan Bank.

Jerry argued that banks were special, a number of reasons why they were special, and made the argument for continued regulation of them. Mr. Aspinwall made the argument that banks weren't so special anymore, that competition from a variety of sources, money market funds, public debt markets, had changed the competitive landscape and thus, he argued, there needed to be some deregulation of the bank so that they can compete rather better. That was the argument then, and Corrigan maintaining we should continue the regulation, Aspinwall saying it was time to deregulate.

The deregulatory impulse proved to be the winner over the succeeding 20 years or so. Much of the deregulation that took place was very much warranted. I mean, getting rid of restrictions on branching and a lot of the underbrush from Glass-Steagall made a lot of sense. But first, there was never put in place a set of requirements, a set of regulatory requirements to take account of the new nature of banking, and we saw the consequence of that in 2007 and 2008. Nor though, was the notion that we should perhaps be regulating some of these non-bank intermediaries ever pursued. And as I say, I think we're in a similar position today, although as Mark Flannery detailed, the pace of this change may be, I think probably is, has been more rapid than it was 40, 45 and 50 years ago.

So, I begin by saying that I think the regulation of very large institutions has served the country well, that is the regulation following the global financial crisis. Our large banks did not show any shakiness through COVID, through the Archegos problems, in response to the failures of the three mid-sized regionals in 2023. They were a source of strength to the system and that is how it should be. I worry now that as we move towards stress testing being a predictable compliance exercise as there are talk of a significant reduction in GSIB surcharges. And as we apparently are moving towards hollowing out the supervisory function, that we may be losing some of that resiliency that was put in place after the global financial crisis.

To the degree that that's motivated by competition from non-banks, I think we're right back to that question that should have been asked in the early '80s, which is, to what extent should there be regulation of the non-bank institutions? As Mark Flannery quite rightly said, it's not going to be bank-like regulation and it's not even going to be a homogeneous form of non-bank regulation. The status and the activities and the business models of these intermediaries vary substantially. But where one sees the combination of substantial leverage and substantial reliance on short-term funding, alarm bells should be going off and there should be efforts to address those kinds of issues, whether they occur in hedge funds, or mortgage rates or, as I'll mention in a moment, stablecoin or some other venue. And that I would hope that that's the debate that's taking place, but it really isn't. We've got to be honest in saying that relatively little was done about non-bank potentially systemically risky activity either in Dodd-Frank or later.

And so, I have some sympathy for the banks who are basically saying, "Look, we're having to compete with these entities. You've put more regulation on us, but some of these entities pose the same kind of risks that we do and yet, you're not regulating them very much at all." So I am quite sympathetic to that perspective, but I'm less sanguine I think than Mark Flannery may be that we're moving towards actually getting that kind of regulation in place. As I say, it's been 15 years, there hasn't been too much progress.

So, let me mention briefly a couple of the particular kinds of non-bank intermediaries. And coincidentally, I had a chance to look at President Hammack's introductory welcoming remarks this morning. And her two top points topics are the same as mine, which is to say private credit and stablecoins. I know private credit has been perceived as posing a particular competition for the banks and thanks to the work of Viral Acharya, that Marc mentioned, we have more insight into the resulting connections between banks and private credit.

But let's look at private credit on its own. And I will say I've been paying a lot of attention to this for a year and a half, two years now, talking with my colleagues at the business school about it. And at this point, I still don't see private credit as posing financial stability risks of a very large magnitude. You don't have the kinds of runnable funding that should be setting off alarm bells. You probably do have a lot of cumulative leverage when you put together what people who invest in private credit funds borrow, the modest amount of leverage in funds themselves, and the substantial amount of leverage in the target companies that are borrowing the credit.

That leads me to have more macroeconomic concerns that, Mark also mentioned this, that we haven't really had a test, we haven't really had stress since the private credit sector moved out of being principally about IPOs into a lot of other kinds of lending as well. I myself have serious doubts that the valuations of many of the non-public funds are particularly accurate, and so we may actually have a more vulnerable set of institutions.

Once private credit reaches a certain level, if it becomes somewhat handicapped in continuing to extend credit because you have market changes, which means they're not getting as much investment, so they can't channel it, and they don't have deposits as a reliable source of funding. There could be macroeconomic consequences, because banks are not going to be able to step in to all those areas of lending. They'll step into some, but not into all of them. And so, I worry that in addition to a potential greater wave of defaults and bankruptcies once extended and pretend has run its course, that we could also see potentially a kind of credit crunch.

Okay, stablecoins. Stablecoins, I think this presents a particularly interesting problem because in my judgment, the appointees for the prior administration just took much too negative a view of innovation and financial services more generally, including with things like stablecoin. There, the digitization, the tokenization, that is coming to the fore, it's been growing regardless of the regulatory background. And to me, the imperative was to identify what the risks would be and to put in place a set of guardrails that would allow innovation while protecting against potential risks. I think the past set of appointees seem to me to just be trying to largely suppress it. The present set of appointees appears to be of the view of, let her rip, that we just want more and more of this activity.

I'm not particularly reassured by the GENIUS Act. The backing that's required for the stablecoin is not just treasuries, it also includes uninsured deposits at banks, what happened at Silicon Valley, it includes repo. And the credibility of that backing depends upon the implementation of a good oversight regime by the regulatory agencies. That's particularly important at the beginning of a process like this. Look, if JP Morgan or Goldman Sachs creates a stablecoin, I'm going to be pretty comfortable because there's a risk management culture there, there's consolidated supervision and I think both the bank and the regulators will address the issue. But I am worried that in new companies, institutions that have no risk management tradition at all, that where corners can be cut, they may be cut. And if the attitude among the regulators is, we want this to grow as much as possible because we want them to purchase as many treasuries as possible to help deal with the US debt burden, then I think we could conceivably be headed for trouble.

Now, if stablecoins end up not fulfilling the promise that some people think they have and they don't get very much bigger than $300 billion, obviously this is a secondary concern. But if there are use cases that we haven't anticipated or that are only now kind of conjectural which develop and which become attractive, which leads to much, much more purchases of stable coins, then I fear that we are setting ourselves up again for a potential run, potential impact on, is we have fire sales of treasuries with the stablecoin funds having difficulty monetizing them. And who are we going to turn to again? We're going to turn to the Federal Reserve and say, "Do something about this." And of course, that's the worst outcome. You don't regulate X ante, but you provide support when things go bad.

I mentioned treasuries and I just want to say a couple of things before closing on that. First, and this is especially for this conference, but I do wonder about how rigorously thought through the idea that stablecoin is going to have a big positive effect on US debt servicing actually is. For one thing, if we look at the potential audience or customers for stablecoin, presumably a bunch of those are people who currently carry around lots of $100 bills and attache cases. And ironically, is maybe a good thing as Ken Rogoff thinks to get rid of $100 bills or to make them less of a factor globally, but the US does get seigniorage on $100 bills, whereas it's paying interest on treasuries.

So, the impact that they'll actually have on debt servicing I think depends significantly on the composition of the purchases of stablecoin. Are they essentially taking their money from institutions that currently buy treasuries to stablecoin? In which case, it's just the treasuries effectively moving. Are these new investments where you're going to need net increases in treasury purchases? Or is it people moving from $100 bills to stable coin, which I hope it's better for AML purposes, but I fear that it may not be there as well. It'll be more convenient for the people who are trying to move money illicitly, but it doesn't actually help with debt servicing because as I say, you move from seigniorage to paying interest at that point.

So, I think if I had more time I would also talk about the treasury market, where I think progress is stalled, but it's critical in stablecoins, it's critical for hedge funds and for their basis trade. And people like Daryl Duffy and Nellie Lang and Pat Parkinson have laid out an agenda which the Biden people began to follow, but I haven't heard much about it lately other than, let's purchase more stablecoins.

Scott Frame:

Thank you, Dan. Let me follow up with Mark Flannery and Dan here and ask a little bit about with the growth, we'll focus on non-bank credit provision. Mark, you touched on it a little bit more with retail credit, but I'm particularly focused there on the small business credit aspect. You had some pretty striking figures there. And then I think Dan, over on the growth in private credit, and as we think about macro consequences of this, do I think about a lot of that lending as being a substitute for bank lending where they're just being outcompeted, or are these largely borrowers for which the banks would not be serving directly but perhaps this indirect credit provision by lending to funds or FinTechs can make more sense?

Mark Flannery:

Well, I think that that's one of the things we don't know very much about. There are stories about how new lenders, FinTech lenders are quicker, they're cheaper at the front end, they are willing to lend to people who can't get credit from the banks. That's what [inaudible 00:40:05] paper said. And I think we need to know more about that. I'm not sure I understand everything that FinTech does that makes it preferable as a product to what bank credit would do, but I think we need to know more about that in a more structured way than we do.

And to follow up on Dan's point, it's my point was not that we're going to get a lot of different regulations to take care of his concerns. My point is that regulations take a lot of time. I've worked in this sector, it takes a lot of time. And during that time, we're going to have a huge amount of uncertainty about who's going to be bound by what. And the longer it takes, the more potential there is for financial instability.

Dan Tarullo:

Scott, I agree with what Mark just said. I also thought President Hammack made a very important point this morning in talking about the absence of information about what's going on in a lot of private credit funds.

I will say, I think my colleagues at the business school with whom I've talked a lot about private credit, have at least approached convincingly that in some of its origins, the IPO space, it probably was doing something that banks in general were not going to be doing in a big way. The connections between private credit firms and private equity firms, just the nature of either taking a company private or dealing with that company when it's already private. So there, I think one could make a plausible case that there were some expertise and informational advantages which private credit had, which allowed them to get a higher return on that lending and still didn't invite the banks in.

I'm less relaxed as private credit extends into many other areas. When you try to do back of the envelope numbers, you say, "Okay, how much difference does it make that they don't have compliance costs, regulatory compliance costs?" And you try to back some of these things out without much information. I at least am still left with a gap and I can't quite figure out how that gap is filled. As I indicated earlier, I have some concerns that the valuations of these loans are actually not all that accurate sometimes, which would account for some of the gap that is, you don't have as much as you think they do, as you think you do. But it could also be that we're just seeing some sort of advantage in other respects that I hadn't anticipated before.

I'll just say as a former regulator, whenever any asset class is growing very quickly, you should be taking a long, hard look, because that is when people are moving from good credits to not-so-good credits. It's when new people are getting in who oftentimes don't know what they're doing, and that's when the bad lending starts to take place.

Marc Saidenberg:

And actually, Scott, if I could add.

Scott Frame:

Of course.

Marc Saidenberg:

Just picking up, Dan, on your last point, and Mark, one of your charts. I think the other source of uncertainty that some of us are trying to figure out or work through is not where the origination is happening, but where and how is the risk being born? So, if you take Dan's point that there's a valuation concern, if it's going to flow entirely through to equity investors in private credit, then depending on actually who those equity investors may be, that you may get a different perspective on it than if, and I could easily be accused of living too much in the past. But we had lots of confidence that the risk in 2005, '06, '07, '08, was not being born by the core of the financial system, but there was more indirect exposure or channels through which that risk in fact, not the exposure but the risks were being born. And I think to Governor Trudeau's point, we just don't know enough about how those risks are being... What is the end of, not the origination, which is the front end, but at the back end where the risks are being born.

Scott Frame:

Thank you. And I'm sure, Dan, you're familiar, but for the audience they may be less so. But David Scharfstein, Dan's colleague there at the Harvard Business School has a very interesting paper about private credit and the ties to banks, and I think tries to get at some of the things you were talking about, Dan, where doing some back-of-the-envelope calculations. And I know he's been really trying to pick at this, trying to understand where the value is and why it appears to be more profitable for banks to lend to the funds rather than the firms directly.

I wanted to ask Marc Saidenberg a question. As we talked about, certainly as I've talked to some of my friends in Europe here over the last several months and there's the overall tenor of relationship between the United States and Europe, but then getting a little bit more into the bank regulatory world and concerns about this regulatory fragmentation. I mean, you can definitely feel that.

In particular though now, as you were talking about trapped capital and liquidity, I think there was an article in the FT earlier this week about the possibility of UBS actually leaving Switzerland, for example. The Swiss Prudential authorities want to significantly increase capital that is on a global stage that's going to really disadvantage UBS, presumably. On the other hand, they're a very large financial institution in relative to the size of their economy, so you also understand where the Swiss authorities are. I mean, do you have any, I don't even know what my question is. I mean, I think an interesting thing, but-

Marc Saidenberg:

Let me... I think it's-

Scott Frame:

Part of this, there is trapped capital and liquidity there that would be difficult for them to maneuver around within their organization. No?

Marc Saidenberg:

Yeah, so a couple of thoughts. One, first and as my role nominally as the practitioner here, I would tell you in talking to treasurers and CFOs, their biggest concern is they're not the level of financial resources they have to hold in some conceptual or aggregate sense, but it is their ability to manage them effectively to meet the needs. And so, there's lots of discussion whether on both sides of capital liquidity results, discussion about, is it about some general easing of standards. I think if you talk to most treasurers, they would say that's not what they're looking for. They're looking for the ability to be responsive, have the ability to be responsive to where risks are emerging. To your point about, and sorry for those that know-

Scott Frame:

I just used UBS as an example.

Marc Saidenberg:

No, I will explain.

Scott Frame:

[inaudible 00:47:39].

Marc Saidenberg:

I can't talk about UBS, they're an not a client. Sorry, everybody, full disclosure. But I think that the question there, what comes up in that discussion is a financial stability version of what I was saying is, where is the risk being born? And as you said, it is pretty reasonable to think that FINMA and the Swiss authorities have to, as the, in this case literally, the lender of last resort, they have to consider their capacity and their ability to mitigate systemic risk as it relates to that organization and their jurisdiction.

Now, whether their answer is so Draconian as to essentially be way off itself, not on this frontier that I described theoretically of the growth in financial stability or there's an answer. I mean, there has always been a question for large cross-border institutions, that how did you balance both the supervisory requirements, the supervisory intensity, as well as the financial resources, depending on separate from where they are domiciled, at some level their home country, from where the predominance of the activity is. Pre-crisis, it was a lot of discussion, we used to refer to trilaterals, which were particularly around the largest Swiss organizations at the time. After the crisis, we spent a lot of time talking about college of supervisors. But I think we still never got to this where ultimately a version of our conversation a moment ago, where the risk is being born may not be aligned with where the resources are held or where the stability risk is born.

Now, an answer to that was in the US was, and people like talking about localization. US probably was one of the leaders in this, which is a recognition of given the predominance of dollar funding, that there had to be, it was an effort to better align the theoretical physical location of capital and liquidity to where the risk is being born. I think the problem with that has been, we have now seen that be replicated in many different jurisdictions. And we're in a world where the collective ability to respond maybe a lot less than the appearance of our... And I don't think any of us have seen, I know some have pointed to, look at the wonders of resolution planning. I think that's still... Dan's shaking his head and Dan and I are pretty agreement, a pretty clear agreement on this. Even if resolution planning theoretically worked, one aspect of resolution planning which is uncomfortable to everybody involved, is separability. And the idea that a large financial institution would be comfortable walking away from significant operations, excuse me, is not something I see.

Scott Frame:

Dan or Mark, do you have anything to add there?

Dan Tarullo:

Nope.

Mark Flannery:

Well, I will say that as Marc was talking about the way that the unanimity of risk-return preferences has changed between say Europe and here. I'm reminded of the 1970s, which is when the Basel Committee came along, because they said, "Hey, we can't have everybody setting a different price on risk because then all the activity is going to move to the place in the world where the regulators impose the lowest price." And it seemed like it was dejavu all over again when I was listening to Marc.

Scott Frame:

Thank you, [inaudible 00:51:23]. I want to turn to audience questions. I think the first one, we actually have one online that came in online, and it was directed to Mark Flannery, but I think also Dan, maybe even Marc Saidenberg as well may have something to say. But the question was, what are your thoughts about the implications of the skinny Fed account? So Governor Waller had proposed these two or three weeks ago in a speech about giving non-bank access to a master account in the payment rails that will enable FinTechs access to banking services without being held to all of the same regulations and compliance controls. Any thoughts?

Mark Flannery:

I'm not very informed about that, but it sounds like something a regulator is not going to like.

Dan Tarullo:

So, yeah, a couple of things. First, it's probably important, Scott, to emphasize that Governor Waller's proposal was not for FinTechs as a class, but only for chartered institutions. You still have to be, have a state bank charter to do it.

I think obviously what Chris Waller is trying to do is find a middle ground between the no, no, no approach of the Fed to master accounts on the one hand, and on the other hand, the argument that any entity that is eligible by statute ought to automatically get it. That's what Custodia argued in court, and both the district court and the Tenth Circuit Court of Appeals have rejected that argument. This is a good way, in my view, to try to get the points of disagreement better identified and crystallized, because I think what Waller is trying to do is to say, "Okay, we're not going to make this like an IDI. You're not going to have intraday credit, you're not going to be able to operate just the way an IDI would. But you can clear through here."

I guess for me, the biggest question is still about AML, which I worry about with stablecoin, I worry about in a lot of places, to the degree that these are tokenized or other forms of digital assets coming in and they don't have the kind of AML systems that our depository institutions are required to adhere to. I wonder whether you're opening up something that could be a reputational concern for the Fed. But as I say, I worry about that with stablecoin too, and one way or another, collectively we've got to figure that out if we're going to have all these digital assets out there. So, I'm a little, I don't want to say agnostic exactly. I come in with a bit of a bias against extending the master account, but it's only a bit. And as I say, I think Governor Waller's proposal is heuristically very useful because it makes us all focus on, what is it we are really worried about?

Scott Frame:

That's an excellent point. With that, I'm going to go ahead and open things up. We have six, seven minutes left of folks have any questions from the audience? Mark Carey?

Mark Carey:

So, the panel's last discussion about stranding of resources to deal with distress caused me to have a wacky idea, which I suggest is not totally wacky, which is really, the national governments could get together and settle this problem. Right? They could just implicitly swap the amount of guaranteeing they're going to do among each other. That is, they could take the assets that are stuck in Switzerland and transfer them to London to deal with distress that is somehow localized in London.

And if you go back to when the Basel committee got started, first it was to deal with Herstatt risk, right? But then the capital regulation thing came along. And I would say it was pretty bumpy for the first 20 years, but they have worked out ways to come to some kind of agreement. This would be a more pressured situation, right? Because the governments would have to be willing to help each other out when the world is on fire. But it's not impossible to imagine that they could work out ways to do that.

So, Dan, I expect you're going to laugh at this given your experience, but I just wanted to put it on the table.

Dan Tarullo:

Not to laugh, Mark, but just to rehearse for all of you the thought process that I and others went through when we were doing this with global resolution planning and thinking of all this. And let me just personalize it to some degree.

When I was at the Fed, there were no two financial officials in any other part of the world whom I trusted more personally than Mark Carney and Jon Cunliffe, the Governor and Deputy Governor of the Bank of England. And if they said to us, "In a period in which Barclays is under stress, we will fund their subsidiaries in the US so you don't have to engage in balkanization, trapping capital, trapping liquidity." I would've believed them, and that was their full intention and that they would try to do that even under stress. However, even central banks do not remain the sole decision maker once you get into a financial crisis and politically charged period. And so, I didn't think that Mark and Jon could guarantee Janet and me that in a stress period, the Chancellor would not change his or her mind, that the Parliament would not have a different view. And conversely, I couldn't guarantee them that the Congress or the Treasury Secretary would not take the same, more ring-fencing kind of approach.

So to me, that exercise became an effort to stop the worst forms of ring-fencing, which to me are liquidity, because I think ring-fencing liquidity is where you disable a big firm from being able to deploy it where necessary, and instead to find some acceptable hostages. And so to me, for example, the TLAC was a good acceptable hostage. You let host countries have TLAC in the local subsidiaries, which they can convert to equity if necessary, and that gives them an insurance policy against the home country, not properly taking care of overseas subs. But it doesn't stop the headquarters of that international bank from being able to redeploy liquidity to whatever part of their organization needs it, so as to stop you from getting into a resolution process.

Scott Frame:

Thanks, Dan. Other questions? Mark or Dan, any closing thoughts from you?

Mark Flannery:

I'm good, thank you.

Dan Tarullo:

Nope, I want to hear what you think, Scott.

Scott Frame:

I found this fascinating. I've learned quite a bit, actually, listening to all three of you. Marc Saidenberg, any final thoughts?

Marc Saidenberg:

I'm good for now, thanks.

Scott Frame:

Okay, all right. Well, thank you very much.