

Unlocking The Power of Asset-Based Finance

Hello and welcome to the final installment of our three-part private credit webinar series hosted by CFA Institute and sponsored by PGIM.

My name is James Adams at CFA Institute based in New York City and today's session continues our series with the conversation on asset-based finance.

Today, I'm delighted to continue the PGIM webinar series with our three panelists, Loren Sageser, Keshav Rajagopalan and Jon Holt.

Loren is a Principal and portfolio specialist at PGIM, supporting the securitized product platform and joining the firm this year with over 25 years of industry experience. Prior to PGIM, Loren served in senior roles at Schroeder's, Nuveen and PIMCO and worked in fixed income and structured products at Barings Capital and Wells Fargo. Loren received a BA and MA from Stanford University and an MBA from UCLA. Keshav is Managing Director, Head of Product and Strategy in PGIM's Multi Asset Solutions group. He leads the group's client-facing efforts including product and capability development, deployment, and client engagement. Keshav has had several other roles at PGIM since joining over a decade ago via Limestone Capital Advisors and McKinsey. He graduated with honors from UT Austin and has an MBA from NYU Stern. Keshav also served as an officer in the US Navy Reserve. Thank you for your service, Keshav. Jon Holt is Co Head of Portfolio Management for PGIM's Multi Asset Solutions Group, responsible for investments, hedging and asset liability management. Jon has managed PGIM's retirement and group insurance portfolios and served as CIO of Prudential Bank and Trust since joining PGIM via UBS Capital One and Freddie Mac. Jon has a BA from Miami University of Ohio, a master's from the College of William and Mary, and is a CFA charter holder.

Loren, Keshav and Jon, welcome and thanks for joining us today to be here.

Great. So in today's discussion, we're going to address the role of asset-based finance. You're going to hear the acronym ABF, so get ready. Unlike ABS, right?

So we talked about that, and we will be asking about those differences. We're going to be talking about the role of ABF in asset allocation, diversification, benefits of the sub asset class and the different forms that it takes. And so one thing that was of potential interest to our audience members is that according to a Pigeon white paper that was released earlier this year, the total addressable ABF market could be worth anywhere from 20 to \$40 trillion. And to quote the white paper, private credit investors have only scratched the surface of this sub asset class. So we're excited to hear more about it.

And I'd like to get us started with just getting an understanding of the market context, the scope of what we're talking about. So maybe Loren, I can start with you. Can I ask you to stage at this stage, you know, set, set the tone for us by explaining how your team defines asset-based finance. Why is it attractive? Why is it efficient? What is this asset class all about?

Sure, yeah. And I'll in my description, I'll try to get too heavy into the acronyms, but it's sort of unavoidable as we get into this space. But we define asset-based finance or ABF really just a form of fixed income investing where debt is secured by specific assets. That's really the most important linkage that you're pointing to, whether it's a pool of assets or a single asset or somewhere in between. That's sort of the defining characteristic as opposed to just, you know, this is a, a corporate obligation and some company is going to pay you back. So the assets can include anything from it can be residential, commercial mortgages or just buildings. They can be consumer borrowings such as, you know, buy now, pay later loans or personal credit lines. They can be business-related borrowing, you know, such as data centers or heavy equipment, forklifts, that sort of thing. Or even financial assets say, you know, if you think about subscription lines of credit for private funds, direct lending funds, PE funds, the list goes on. And you know, obviously it's a very broad spectrum. And as you, you probably guessed, there's actually a lot of overlap with the securitized or the structured product space. But when people talk about ABF, what they're really doing is, is, you know, there is that overlap with the structure product space, but you're referring to more private deals, more bespoke or customized transactions as opposed to the more broadly distributed transactions such as ABS, you know, asset-based, asset-based securities, CLOs, CMBS, RMBS. I promise you there would be acronyms. So I just threw a bunch at you, but you know, that's basically, you know, the difference here is that I'll use an example. So you've got credit card securitizations, which is really, you know, one of the biggest parts of the ABS sector. The ABF or the asset-based finance version of that would be something like buy now, pay later loans from a firm or Klarna kind

of bundled together. It's more bespoke. It's sort of a different animal. It's got a different, you know, sort of target audience. It's going to be a more sophisticated investor base.

And then another example I like to give is in the CS world, when you have, you know, 1000 commercial real estate loans which are bundled into a conduit securitization that sort of, you know, conduit CMBS, that's more of this, you know, kind of the public side of things versus a data center loan, which might be secured by just a handful of facilities. And it's going to have very bespoke customized repayment terms, tenant sponsor, you get, you know, way further into the weeds and that that's kind of what defines ABF.

Great. Thanks Loren, that's very helpful.

I'm going to turn to Keshav and ask him to broaden this out. So I'm going to ask you to discuss the evolution of ABF and some of the dynamics at play regarding issuers and investors. I'm sure some of our audience members would add to Loren's list. Intellectual property, you know, we all know about the well, some of us are dating ourselves knowing about Bowie Bonds and other artists that have, you know, turned their intellectual property into fixed income claims. And so love to hear from you about where these evolutionary dynamics look like.

Well, James, you know, I think you started somewhere at Bowie Bonds. While ABF is talked about a lot more these days, it's actually been around for a while, right? Bowie Bonds and Prudential and PGIM was at the forefront of it. So we've actually been investing in ABF now for 30 years. So it's not new, but I will say it is becoming more important. And that's both from an issuer standpoint and an investor standpoint. On the issuer side, and Loren touched on this, but just to build a little bit more, ABF is coming to become a core part of financing the real economy, especially if banks have retreated due to capital and other regulations in terms of financing opportunities.

ABF is turning to, is turning into an important tool to actually finance things on a very day-to-day basis. Loren gave some examples, right? But these are touching businesses, touching consumers and actually making the real economy function. So in many ways, there's growth in the asset class because of the issuer side. But then on the investor side, and we're going to get into this more as we continue the discussion, but it's a very compelling asset class for investors to look at.

Loren touched on this as well, but one, there's a spread premium because of the complexity of the bespoke nature of this asset class, investors seek and receive a complexity premium, but on a relative value basis, you're largely looking at investment grade security. So with proper underwriting, you're looking at an IG debt issuance, but getting again a spread premium, a lift over a comparable corporate and actually even a comparable public securitized products that Loren mentioned as well. Second, there's a lot of diversifications here. You can actually build an ABF portfolio touching many facets of the economy because it's multi sectored in nature inherently. So I think the diversification benefits are also appealing to investors. And third is contractual cash flows. They're predictable and we'll get into why that's important to different types of investors and specifically those that may be liability oriented and liability aware, but the contractual cash flows are a really compelling part of the value proposition.

Great, thanks so much, Keshav. So one of the things I heard Keshav say is investment grade credit spreads. And as all of us know that are following investment grade credit spreads, they're close to three-decade lows in terms of, you know, where, where they are. And so I'm sure investors are looking more broadly. And so Jon, let's bring you into the conversation. How is this rise in private structured credit, specifically asset-based finance, you know, reshaped the traditional fixed income markets? You know, I know all three of you particularly have a long-standing background, I'm sure in some of those things that would be very familiar to level 1 fixed income candidates. You know standing bonds that everybody knows and loves and are very clearly structured. What are some of the factors driving these investors and issuers from the traditional markets towards ABF? Yeah, so I, I think a lot of it comes down to exactly what you said, traditional fixed income markets, single name securities spreads are historically tight, right. And all portfolios, whether they're ALM based like insurance or pensions or, or just fixed income, you know, intermediate credit portfolios or whatever, they're struggling with that. And the reality is, as banks have stepped away from these markets, there's a huge demand for loans from all different diverse players. And so portfolios that are, that are ideally suited to take a little bit of liquidity risk, you know, because the ABF is a class that's pretty illiquid and they can understand the type of risk that they want. It offers the great attractive spreads that the Keshav said due to those complexity premiums as well as the illiquidity premiums that you can get from it.

Got it. No, that's great. Thanks.

Thanks very much.

So we sort of rounded the basis on what ABF is now let's talk about asset-based finance deployment. And Keshav, I'm going to come back to you. What makes so what makes private asset-based finance an effective tool for deploying large amounts of capital? We see, you know, bite-size investments in ABS transactions and other things. But what makes it useful, particularly for large capital piles? And also how does it compare with traditional private credit or other investments in terms of how scalable, how efficient it can be? So I think there's the what and then the how and the what side. It largely is the market opportunity

James, you started with, right. Our research and our white paper show that there's 20 to 40 trillion out there that could be part of this market. So we're only, you know, just scratching the surface kind of when you think about the market being just at 10 trillion or so today. So we're really coming up the curve in terms of the opportunity set.

So the what here is again, we're talking about financing the real economy and especially as banks are pulling back and some of their financing roles, I think will create what. And then it's the how. And I'm sure Loren will touch on this as well but really thinking about how ABF originated is kind of core to understanding the asset class and different asset managers, different investors in the space approach this differently. You can oftentimes see asset managers or investors own origination platforms and then firms like PGIM where we're more open architecture and relying on a diversity of relationships to source these opportunities. But the deployment is really transaction based, right? You are trying to ultimately structure and execute a transaction, and we're on the side of being part of that credible capital that can be deployed.

So we have to be there. One, it's important, obviously, in terms of actually making the transaction happen. Then two is that certainty of deployment that allows us to keep originating because a lot of these are repeat borrowers. So that's the size of the opportunity. So it's a little bit of a flywheel in the end, right? If you talk about the how, the what, it's the size of the market. But then in the how, as you think about origination platforms, whether they're owned by an asset manager or more open architecture like we do, there's a flywheel you're trying to originate, right? You're trying to commit to forward deployment schedules and the like. And that allows you to move with scale. But on your side, on the investor side, you have to be there to execute because that ultimately is what will allow you to do more business. But that's the scalability. So it's that flywheel you want to start generating.

Got it. Loren, maybe you have some perspective on it case you've mentioned your thought, what are your thoughts?

Yeah, absolutely origination is key. This is a very different market from, you know, if you're buying high yield bonds or investment grade bonds and there's many, many, many potential buyers, right? You have broadly syndicated bank loans, which can, you know, end up in the portfolios of literally thousands of institutional investors, you know, from large sovereign wealth funds all the way down to retail, you know, guys invested by the mutual fund. Asset-based finance is, you know, since it is, you know, more customized, more bespoke. And also, given the scale of the market, there's a much more limited investor base, you know, so that's that, that's a big reason for, for why we've been active in the space is, you know, we've, you know, for our Prudential general account, you know, that's an area that over decades, over years, you know, borrowers know that.

OK, you know, this is, you know, one of the small subset of, of investors who can look at this ABF transaction. There's, and there's also a lot of different, what we call collateral types. So it's not as simple as, OK, well, I'm looking at an energy company one week and then next week I'm going to be looking at a retail company. It's going to be, you know, more specific assets. You might be looking at data centers one week, but at the same time you're looking at shipping containers, right? You know, large markets and but again, more bespoke. So that origination side of it where you know, kind of the market players know each other, and you know who to work with and how quickly they can review transactions is a key part of it.

Got it. And I know Jon, you have a background going back to some other firms like Capital One, Freddie Mac, where you see a lot of originations coming from those firms. What strikes me about this conversation so far as we have a lot of non-bank financial institutions that are sort of originating this type of asset. I don't know if they have anything add to this evolution question Jon, but would love your thoughts.

Yeah, I mean we mentioned before banks stepped away from it, there is a huge market for this stuff. And so originators, you know, pairing with good asset managers and portfolio managers who, who can understand the asset class, can become a

very scalable asset in that sense. And you know, getting that expertise in order to expand this market can help a lot of, you know, institutions and portfolio managers to diversify and meet the demand of, of finding good attractive spread assets.

That's great, Thank you so much. And so before I launch into the next question, I want to mention to our audience members, we do have a Slido, you know, question place where you can post your questions. So I don't see anyone has posted any yet. So we're happy to potentially weave any thoughts that you might have into the conversation. So please feel free to post any questions you might have for our panelists. So let me continue.

Loren, you touched on this idea of collateral. Obviously in the ABF world, you have vast spread of different types of collateral. How you address these things?

Last week we talked about real estate finance that one is pretty easily put in a box, particularly if it's income generating real estate. But given these diverse forms of collateral that you have backing these asset-based finance structures, how should a financial analyst approach the valuation and risk assessment of these types of assets as opposed to say traditional corporate credit?

Sure. Well, obviously cash flow modeling is key. So you know, kind of breaking out the spreadsheet or more in our case, a more you know, kind of proprietary system is a big part of the process. And, and again, similar to securitizations where, you know, in the CLO, for example, you can, you know, take a system called Intex and it will, you know, effectively model a portfolio of bank loans for you and, you know, kind of model the cash flows that are coming from those loans. And from there you can start to sort out like, what is the, what's the real risk of, of a given tranche in the securitization? ABF is all that and more because, you know, again, it's, it's going to be more bespoke in nature. So instead of just, hey, I'm looking at another CLO portfolio, and it looks, you know, very similar to the one I looked at last week when I was evaluating the other deal. This is going to be more OK. So this week again, you know, I'll use the containers example. Yeah, we're looking at OK. It's a portfolio of, you know, a few thousand containers such as would be put on like the Maersk container ship. We have a leasing rate that's being paid for those containers over a, a period of years, you know, and you start to model all that together. So obviously, you know, across the ABF space, whether it's, you know, containers, mortgages, data centers, what have you, that cash flow modeling is key. You know, I think what's unique or, or I think more important with that with ABF and sort of understanding the risk and doing your assessment of risk is the documents and really getting into the governing documents of a transaction. Because you know, at the end of the day, you're trying to make sure that you the lender has a very strong claim on the underlying assets.

You need to when you're doing a cash flow model, you're stress testing, you know what can go wrong. You're doing the same thing with on the legal side of things as you're looking at. OK, well. This is a data center. And what happens if they don't secure enough power to provide electricity to the data center once it's built? Yeah. What can go wrong here? You know what? What sort of protections do I have in the worst-case scenarios? And that means bringing in teams of lawyers who can help you really look at. OK, you know what? What would I do?

What would my first phone call be if I didn't get an interest payment? How would I quote unquote, get my hands on these assets? What does that even mean in this case? In the case of the data center, is it the land? Is it something that's half built or is it a lot of NVIDIA servers, for example? So those guarantees have to be strong again so that you're protected in the worst case.

And then the another dimension of the of the kind of risk assessment that I would mention as well is just kind of understanding typically for an asset-based finance transaction, you do have a, a sponsor, you've got a lot of counterparties in the mix depending on the type of deal. And what you're trying to do is look through to OK, so let's say it's a Meta data center and everything goes pear shaped and you know, it's just that the investment pieces didn't pan out as planned.

What is my ability to go to the parent company or sponsor, whether that's a Meta or an Oracle or, you know, one of the, the PE sponsors who's involved in this and, you know, how can I make myself whole if the collateral isn't there? And those, those two levels of protection, I think are, are what really make this a resilient asset class where, you know, in many cases you don't just have the collateral package, but you have a, you have other counterparties in the mix who often will say at the outset of a deal, Hey, look, if, if this thing doesn't go according to plan, I'm a single A rated company or a triple B rated company.

And, and I will, you know, put my capital behind this to make you whole. And how strong is that guarantee? And how strong are they as a borrower at the end of the day? So you know, a lot of different dimensions, but you know, very, you know, it's a multi-faceted process and there are a lot of different protections which you can avail yourself of as a lender in this space.

Great, thanks Jon, I'm going to turn my attention to you now. Any thoughts you have to add on collateral risk assessment?

You know, one thing that comes to mind as Loren speaks is we see the surge in equity markets due to AI and yet this type of ABF gives me more senior claim to what arguably is that same trend in the market. So, you know, there are challenges for sure, but upside as well potentially. So what are your thoughts?

Yeah, I mean, I think Loren really hit the nail on the head. It's like there are such massive differences in the collateral. And you know, the key to this, this asset class is expertise and the ability to analyze that collateral so that you can structure portfolios and make it fit within that and, and get the diversification across, across the portfolio that you need.

Got it, got it. Keshav, have any additional thoughts?

You know, I mean, if you distill it down as investors are looking at the space, right, you got to understand the origination side and you got to understand the underwriting. On the origination side, it does come back to understanding, you know, are these owned origination platforms or is there a diversity of partnerships that a source may go out and get? I think we're in that latter bucket. And I think we benefit from being open architecture and really tapping into pools, which allows us to, 1, build diversified portfolios, but 2, frankly, avoid any conflicts of interest around owning a platform ourselves. But then it comes down to the underwriting. That's where Loren obviously walked through all the things that go into that. It's understanding the cash flows, understanding the collateral, understanding the documentation, and as Loren highlighted, really focusing on what the covenants are there, right?

When things go wrong, how are we as, as your manager and, and kind of your fiduciary going to work out of it? That could mean obviously working with counterparties in the ecosystem to figure out how we kind of make good on, on what's happened. Or it's actually then exercising some of the covenant covenants in the documentation and saying, okay, push came to shove here and we got to resolve this a different way. But that's where you do need a manager really to think about, you know, have the expertise, as Jon pointed out, but then to kind of think through all of the various scenarios that could occur as you're doing that fundamental underwriting. Because at the end of the day, it's still fundamental credit analysis. Our credit research analysts don't look at this differently than if they're looking at corporate credit. They there's a lot more complexity they may have to wade through as they look at documentation and structuring, but they're still doing bottoms up fundamental credit research analysis here, which is part and parcel to everything we do.

Great, that's super helpful. So all three perspectives on sort of how you analyze the individual asset. I think it's very useful. I want to turn our attention to ask Jon a question more about integration. Obviously, Jon, you've had, you know, you've worn the hat in asset liability management, been the CIO of Prudential Bank. And so how does ABF provide the diversification benefit that goes beyond, say, a sector, a geography? Obviously, I'm hearing a lot about data centers. We've got a lot of, you know, sector focus here regardless of location. And how's this going to influence optimal portfolio construction for some of your institutional investors?

Sure. I mean, if you think about it from a portfolio management perspective, what do portfolio managers love? They love great return potential. They like to understand the risk return profile, and they like to build portfolios that are uncorrelated, you know, asset classes that are uncorrelated with each other. And when it comes to like you just said, looking at geography and sectors and stuff like that, that applies a lot to traditional fixed income markets with single name credits. You know, you, you want to limit your exposure to certain industrials or, or that type of thinking, right? The beauty of ABF is that you, you get to pick and choose the type of risk you want, right? There's a great amount of customization there. It's very much like, like public structured products. We love those too because of structural protections and diversification. You're pooling loans together.

This is, this is taking it up a notch because you know, you can, you could say, hey, I believe consumer credit versus mortgages versus commercial credit, they all offer a different risk profile.

And you can go in and specify the type of risk you want like you can, when you analyze the pools themselves, you could say, look, I don't want any borrowers in the pool who have a FICO score of less than X, right? And, so for that you can, you can pick your risk spectrum, you can look at what that does to the, to the, you know, spread return that you would get and

you can tailor to your investment objectives. You know, with public structured products, you get a lot of liquidity, but not as much customization. This you give up some of that liquidity, but, but you get to do a lot of customization, right.

When it comes to portfolio construction, of course, you always, if you're, if you're an asset liability management player like insurance or pensions, you will want to see how it fits into your overall duration, the key rate duration profile. It is a shorter duration asset class typically, sometimes it's longer, but it's typically going to hit that, you know, in the, in the zero to five type range. So you just have to think about what your portfolio needs are and how much liquidity you can tolerate in relation to other asset classes. If you're managing long duration portfolios, you're going to need some long treasuries, long corporate still, but you can pair ABF with, with this in the portfolio construction just to really diversify and get a get a better risk return profile.

That's great. Thanks, Jon. Keshav, I'm going to come back to you, you know, building on this idea of the risk return profile, you know, and it's been mentioned, you know, buy now, pay later loans and among other things, right? I can't even think of anything now that I can't buy now and pay later. So I can only, you know, we're not talking about auto loans, we're not talking about credit card, just talking about clicking on something and a loan has been originated. So, how does this or any other area you want to speak about touch on this, you know, added layer of diversification that you're seeing in ABF?

Well, at the end of the day, it is kind of pool of loans, right? You're touching, you know, individual consumers, individual businesses. So at the end of the day, you already have inherent diversification when you think about the collateralization of these loans in the securitization and then you can build and customize that. So to Jon's point, you can kind of say, hey, these are the slices of that I'm looking for here as I build a portfolio for an investor of this type or that type. And then you can do the sector diversification as well, too, right? You can lean into and there's relative value even if you think about those sector tilts, you can lean into, you know, the data center boom if that's what you're focused on. Or you can stick to consumer finance or fund finance, right? Or you can build a portfolio across all of these. So there's resiliency at multiple levels. And I think that's what makes it an attractive asset class is just the ability to layer diversification on diversification. And then you talk about, you know, things that are investment grade with that spread pick up, you're really then at the end of the day dealing with complexity premium and illiquidity premium. And that's why it is, you know, for certain investors, not everybody is going to think ABF is the asset class for their portfolio, depending on their needs and their objectives. But there are a lot of institutional investors out there. Pension plans, insurance companies are two great examples that really can deal with the illiquidity and wade through the complexity to achieve both of those premiums. And that's what you're after.

That's great. Thanks. We're going to come back to the insurance company's perspective, obviously given where you're sitting at PGIM a little bit later. But thank you for your perspective. Loren, anything to add?

Yeah, no, I think it's definitely a market where, you know, there's a lot of room for kind of innovation in the sense of, OK, we're, we're we'll bring a slightly new transaction and we'll go back to the Bowie bond example where it's, well, hey, you know, what if we took a stream of music royalties, like that's a cash flow stream that can be modeled. And yeah, so there's a lot of room for innovation there. And that's where you get to kind of numbers like the 20 or \$30 trillion, you know, potential market side, you know, simply because there's a lot of stuff out there, right, that throws off cash flows, any of which can be sort of put into a financial instrument. But you do have to be a little bit careful that you're not creating something that's so innovative and bespoke and novel that it's, you know, and not just, it goes beyond just liquidity because you may be perfectly fine holding this instrument until maturity. And actually a lot of this has, you know, kind of shorter weighted average lives where you do get paid back and call it two to three years, which is a sort of a form of liquidity in and of itself.

But we do find that, you know, pretty most people want some form of valuation, right. Where it's OK, I'm holding this portfolio. What's it worth? I'm not trying to go out and sell it today, but you know, as a public pension, you might have statutory requirements for generating, you know, IRR numbers every year and understanding how is this performing relative to something out there in the public fixed income land.

So, you do have to keep an eye on, as I'm working together with sponsors and borrowers and putting together these intricate and innovative deals that it is something that can be valued at the end of the day. And there are that gets into a whole other discussion of like, OK, what are valuation techniques? Who are the players in that space? But we find that's very important to a lot of our clients who, at the end of the day, want to know how much the thing is worth.

That's great, very helpful. So, you know, that brings me to the idea of integrating these types of strategies, particularly ABF strategies into existing investment strategies. And we did have a question that I want to weave into this because we talked about it in our first webinar, but we glossed over it a bit today. We said something like I can't remember which one of us said

it. Banks are stepping away from traditional asset-based financing. And so, Jon, I'm going to come full circle back to you and I have some time under your belt at Capital One and other places probably have seen this over the course of your career. But what are, you know, the challenges that investors face when they integrate ABF and how they overcome? And maybe you can touch on this idea of maybe, you know, what was that traditional bank structure that we have sort of talked about and how we are stepping, or why are we stepping away from that?

Yeah. So maybe I'll cover that first, which you know, it goes back to the great financial crisis really there were, you know, the mortgage crisis that we had increased regulator focus on capital and you know, banks in particular with their underwriting standards, it became less of a of a lucrative business for them to stay in it based on based on their capital regime.

So that's how the market really started turning this way. And what, you know, you mentioned Capital One, Capital One is basically a great example of an ABF player, their entire businesses, you know, selecting credit card customers that they think are going to be ones that pay over time, right? And when it comes to the integration, this is, you know, since the bank stepped away, this is not really an asset class that you wake up as a, as a PM and say, oh, you know, give me \$500 million of this asset class now, right? It's a lot more complex than that. And you don't want to be a taker of general collateral, right? You need people who understand that collateral and the complexities of it. It is a very large market. There's plenty of opportunities here, but you need to understand that risk return profile and what your risk tolerance is.

It's a very difficult asset class to start from scratch in a portfolio team. You need some scale. And so really what comes down to integrate this, you need a strong originator, you need expertise in the modeling of the asset class so that they can analyze the collateral. You know, we mentioned the music royalties and stuff like that. That's an entirely different risk. That is different than mortgage risk or, or credit card risk, right? So, you know, few people are able to actually have that level of expertise to understand, understand those cash flows. The data on these types of asset classes is not always available. It's not like we have great index data for ABF. Now we have comparables that we can look at and of course with good models you can integrate the comparables into that to understand the cash flow risk. But with that, obviously you need a lot of technology. You need good models just like if you were a mortgage-backed security player, you need prepayment models. You know, prepayment models get very complicated in the mortgage-backed security market. There are specified pools that have geographic locations and, and different borrower types. All those toggles in the risk spectrum matter. So you need technology and models to be able to do that. And then of course, there are always regulatory challenges too, you know, for insurance companies, for instance, you need to get ratings on some of this if, if you want the capital benefits that could come from it. Or if it's Bermuda reinsurance, you may need to get regulatory approval to include as well.

So there's a large spectrum of integration challenges. That's not to scare people, but it's one of these things to, to take note that you need to be able to get the scale and, and work with partners who understand the asset class and how to get the deals done.

Great, thank you.

Thank you, Jon. So Keshav, I'm going to turn to you again. I can imagine, you know, when I when I reflect on what Jon just said, the secondary use of a data center, I'm not sure it's come to that anytime recently, but the secondary use of a data center has to be tough if it's not going to be used as a data center by someone else. And so, you know, maybe that that day is long in our future, but maybe you can shed a little bit more light on some of this governance and, you know, perfecting the claim. But then also if and when maybe there's a default or a potential need to, you know, to monetize an asset to liquidate it. You know, how what kind of infrastructure do you need to put in place to make this secure investment?

Yeah, I think for, you know, like any other credit you underwrite, you've got to be willing to take the keys, so to speak, on the real estate parlance side if you need to, right. And this isn't taking the keys. So it's very different. But that means there's a lot of complexity you've got to figure out and know upfront because ultimately as kind of a debt investor, if you don't know how to work yourself out of a jam, it's really hard to get into the asset class in general.

So that's where, as Jon pointed out, and Loren as well, you have to know kind of what to do end to end here. But at the end of the day, this is coming back to the basics here, right? This is a financing tool for the economy. And if you think about what's happening in different stages of evolution, right, especially in this is where maybe I'll bring out a little bit of that insurance company theme.

James, if you think decades ago, almost a century ago, insurance companies helped finance a lot of the real estate boom,

especially here in the United States. They were largely owning a lot of real estate in major cities around the country. Then 144a kind of private placement market took off, right?

Insurance companies would then step in and be a lender to finance, you know, small and middle market sized companies that are unable to access Bank, bank financing or public markets. This is now a third leg of this, right?

ABF is where again, you have a lot of the same themes of areas of the economy that are less banked, and we talked about bank retrenchment, but no matter what, this is a less banked area just because of the complexity. Two, it's borrowers that are looking for repeat business. It's kind of being able to come in and get that deployment at pace because that's what allows them to grow their business. And three, they want execution certainty and that's where capital that insurance companies, pension plans, other liability aware investors have been valuable because they can do all of those things. They can support kind of the less banked. They can be a repeat lender, and they can have execution for certainty. Underpinning all of that, you have to understand it, but there's a lot of characteristics here that lend themselves nicely to the type of capital that insurance companies, pension plans, sovereign wealth funds may have access to. What do they want in exchange for that? You know, they want obviously the spread premium and some of that we've talked about comes with complexity and illiquidity. They want some of the bespoke nature and the customization that Loren alluded to and the covenants, but they want the cash flow, right. And then underpinning all of that still is a manager that understands this stack. And coming to now your question back to it is at the end of the day, when stress inevitably occurs because it will in the system, you want a manager that can also handle that part of it as well.

Thank you.

And Loren, maybe you can shed a little bit of light on the structuring aspects and integrating integration challenges here into portfolios. You know, what kind of unique structuring things do you see in ABF that that lend themselves to better integration, say in a portfolio?

Well, I think for a lot of clients who approach us about getting access to the space, there tend to be, you know, a couple of the bigger questions that need to be asked.

You know, 1 is just sort of categorization. You can go to a client and say, you know, or a client might come to us and say, hey, we're really excited about the asset-based finance world. We want to have this in our portfolios, you know, let's go and, you know, tell us how to add that in. But when you get start talking about the more granular aspects such as sub sectors, you know, hey, you know, can we include anything ranging from, you know, music royalties to heavy equipment to containers to data centers to, you know, you know, stand alone real estate it, you know that that's where you, you, you tend to get, you know, a client who says, oh, time out, time out. Actually, I already have real estate going somewhere else in my portfolio. I don't, you know, I don't need more of it. And so you're, you know, which is fine, but you do have to make sure that's all you know very well covered.

We also get into a lot of times, you know, what does sort of, you know, the ratings picture look like. And that's a huge part of this because, you know, clients will say I don't need liquidity, but I need this to be rated. It doesn't need to be a public rating, but I need to, you know, recognize the name of the rating agency and, and at least have, you know, because I have a regulator standing over me telling me how much below investment grade exposure, how much triple B exposure I'm allowed to have. So that gets very critical as well.

I mentioned earlier valuation, obviously that's a key consideration. And then just performance measurement and benchmarking and, and figuring out like, OK, I can now see the performance of this portfolio. I now have a third party, you know, kind of check on, you know, what type of risk it's holding. But how do I know whether this manager is actually doing a good job and picking out good transactions and, you know, keeping me covered on the downside. And there are not a lot of great benchmarks in this space.

I think if you look at the direct lending world as just another, you know, kind of example in the private credit space, you do have benchmark, you know, providers like Cliffwater, for example, who have done a good job of actually, yeah, OK, this is this is a private market, but you know, I can give you a sense for how it's performing overall. That doesn't really exist in that asset-based finance world, you know there.

Yeah. So what you, what do you do? A lot of times we'll say to a client, OK, well what are your objectives here and what are

you using this for? A lot of times the answer will be, well, I have an investment grade corporate portfolio, I want an investment grade asset-based finance portfolio. SO1 natural approach there is to say, OK, well let's look at a corporate benchmark and we think we can deliver for you a spread of 150 basis points over this corporate benchmark. So it's different from, you know, daily, looking at your daily performance versus a benchmark, but you are getting closer to OK, yeah, I have a better idea of how this risk is going to perform. I have a better idea for whether my manager is actually delivering what they said they would deliver.

Got it. Thanks a lot. I'm going to turn our attention. Keshav, have you actually mentioned the question of insurance companies? Obviously, you're at an insurance company focused on, you know, this is an asset class of interest in particular. And we've seen a lot of growth clearly in the broad private credit space, not just asset-based finance in the insurance world. So I want to talk though about more about the alignment of asset-based finance to the liability structures of insurance companies more than anything else. And you did also loop pension funds into this as well, but particularly related to insurance companies, you know, what kinds of regulatory capital, you know, Loren mentioned potential ratings requirements and accounting considerations might expand or you know, constrain the adoption of this asset class in the in the insurance sector.

First, I think, you know, you started this at the beginning of the discussion, James, I think we're just scratching the surface and that very much as in insurance and pension land as well, right? Because I think there's a lot of attractiveness for those client types, again, based on contractual cash flows. If you're able to model the cash flows from an asset you own, it really helps you with asset liability management because at the end of the day, a pension plan and insurance company, they have liabilities that they have to, you know, make payments on. And to have certainty around cash flows that can meet those obligations is kind of what keeps you in business and keeps your credibility, right. You're trying to earn that a spread over that. And that's what ABF can deliver to you as an owner of an insurance company or obviously a sponsor of a pension plan. But there are challenges as you point out, Loren, you know, started here, obviously valuation, accounting, stress testing. We've been in a lot of regulatory conversations now on behalf of our clients where this is still early innings. I think regulators are quickly and thoughtfully developing a regulatory framework around this asset class because it's still relatively new in terms of the speed of adoption and where we are. Again, ABF has been around for a while, but in terms of how it's being adopted now and paced, I think we're still in early innings.

So regulators are having a lot of thoughtful discussions here. But I think ultimately that will pose some challenges, but we will come up the learning curve. It's part of what we're doing as an industry and as an ecosystem supporting those conversations. But ultimately, we'll come down to how do you model the cash flows, and can you explain them? How are you rating the company and can you explain that in the methodology around it if a rating is desired? And then how are you valuing the company coming to Loren's standpoint there and what is the methodology required? Because at the end of the day, you want to make it as digestible for these regulatory frameworks as another corporate bond. It's very different, but you've got to make it digestible. And that's where we're, you know, starting to have a lot of thoughtful engagement there. A lot of it is on our side as a manager and an investor in terms of the infrastructure support required here, which also lends itself to the technology that is required today and will be required in the future to support these types of asset classes.

That's great, thank you. I'm going to switch our attention to Jon and you know, Jon is a CFA charter holder. I'm thinking of all our candidates out there and you know, they're going to be thinking about this as a fixed income instrument. They're going to say, I need to, you know, I need to think about the effective duration, I need to think about the effective convexity and think about the prepayment risk.

If I'm going to put this in an ALM model. And you know, I spent many years myself at JP Morgan, spent a lot of time in auto ABS, you know, down to the model in the year and prepayment and other things. Obviously, the underlying macro economy, key factors. Now we're stepping into new territory, whether it's buy now, pay later or other types of assets. And so how are, you know, asset liability managers getting their head around this doesn't have to be in the insurance space, but just generally when they're thinking about this as an offset to a liability profile?

Yeah. So, from a macro perspective, you know, in an ALM position, you're thinking about your duration and key rate and your optionality risk on, on whatever liabilities you're hedging. But you also need to think about that spread duration or spread volatility risk. And this is an asset class that has a bit shorter and more predictable durations and spread duration as well. So when you're looking at your ALM profile, it fits nicely, especially in the front-end cash flows like we're always looking for something in the front end to meet liability payments that have good returns. And that's why public structured products have always been one of those asset classes as well. But you just have to pair it with the rest of your portfolio needs. If you're using a large amount of derivatives, you need liquidity. So you need some public bonds that you can repo or

treasuries that you could tap in case you need to cover collateral on derivative losses. But it's a powerful tool to be able to optimize not just your spread return, but also the type of risks you want across a liability stream.

That's great. Thanks. Jon. And Loren, turning to you, You're the newest member of the PGIM team. You know, you've been in a traditional asset manager for so many years. And here you are in an insurance company. And so what's your perspective stepping into this role within the past year of what the opportunities are is wearing now an insurance company hat?

Yeah, no, it's funny, you know, I haven't been in the structured products in the ABF space for most of my career. You know, it's always the insurance companies that have always been such a key fixture in the landscape of investors where you, where you would say you might be looking at a deal. Maybe you'll work for a boutique or a smaller manager, or just an asset manager who doesn't have a balance sheet, right. And you're looking at it as like, OK, imagine third party money. But I know that the insurance guys are looking at this transaction too, because of course they always play in this space. So it's cool to be, you know, actually at one of those insurance platforms and kind of seeing, you know, I mean, obviously, there's the origination and I'll try not to make this a shameless plug for PGIM and Prudential. But one thing that's really nice is actually, you know, the data. And because, you know, one thing again, this is a private market, you can't just go to Refinitiv or, you know, some big data provider and just start ripping huge spreadsheets worth of data all the way down to like row 32,000. Like it doesn't really exist out there, but you know, seeing kind of like, OK, this is what we've done over the sweep of history. This is how these transactions have performed and it's a different interaction with clients versus, you know, here's the GIPS composite that you can just see how we've done versus the big indices. It's really like, OK, here's the portfolio, you know, going back to 2000 or the 90s or whatever it is. And this is how all these private markets transact. This is the cash flow they threw off. This is the kind of the losses that they experienced.

So that's nice. It's a little bit of a sort of like a pulling back of the curtain as you will. And, you know, no scary surprises or anything, but just kind of good to see a little bit more of the history, kind of revealed there. And you do use that data to really understand, OK, you know, how is this new transaction going to perform in my portfolio and can make a little bit more of an informed decision there.

That's great. Well, Loren is the newest member of the PGIM team. I'm going to come back to you again with our final question and it's about looking into your crystal ball. Obviously, you've made a move within the last year. You see the opportunity, and you know, with the asset-based finance market evolving as we've discussed over the past hour, the way it has, what do you see happening in the next 5 years? What are the areas we should be paying attention to? What do you expect?

I think you'll consider to see capital flowing into this space, you know, particularly in the institutional marketplace, but also in the wealth and retail space as well. You know, people have sort of had their appetites whetted for private assets. There's more familiarity, there's more comfort. You know, there continues to be a source for diversification and yield. And you know, the, the, the first beneficiary and really the biggest one, you know, kind of more on the corporate credit side, you know, with the direct lending universe and the capital that has flowed in there. We're starting to see you've got webinars like this one, you've got kind of conference panels where people are saying, OK, let's talk about other parts of the private credit world.

And you know, that naturally brings you to ABF because it's so big, right? The scale is obviously there, but I think that will be disruptive in the sense of if you're doing an equipment asset-based finance deal, there's going to be more players who are there to lend money. And what does that do that that does bring spreads in a bit that brings yields down over time. It does make on the positive side markets more liquid, but it's something that has obviously happened in the corporate credit side as well on the direct lending side.

I do think though that ABF will be more resilient in terms of, you know, continuing to provide that complexity premia, continuing to provide that, you know, just that private markets premia simply because there are so many sub sectors. It's just not as easy to say, OK, you know what, I'm a new shop. It's me and two other guys, we used to work at Goldman together and we're going to go out and raise money and start investing in asset-based finance. It's just what part of asset-based finance, you know, is it going to be data centers? Is it going to be the resi mortgage space, the consumer lending space? There is just so much scale. And institutional allocators want managers who can look at the full spectrum. Not to say that there won't be a place for kind of more. You do have niche players that are just, hey, we do container lending better than anyone else and we're the best. But most institutional investors that's just too narrow. You know, they want something that's like, OK, this is going to be a diversifier for your existing credit exposure. That's a huge benefit that you can offer institutional investors. So I think you'll continue to see that, and you know, the continued growth and interest in the market.

Jon, let's get your perspective on what the next several years have in store for us in asset-based finance.

Sure. You know high spreads and a good risk return profile will always attract capital. When you combine that especially with institutions that can take that illiquidity risk and get capital benefits like insurance companies can get, you know, I see the asset class continue to expand and draw more investors. And I think along with that, due to all these complexities we've talked about, you know, there will be some dominant players who are able to assess the risks embedded in this asset class for potential investors. So I see it as a continued favorable place to be.

Excellent. And Keshav, I'm going to give you the last word and I'm going to ask you to maybe weave into your thoughts. Obviously, you know, we're in a strong market environment, but you know, how resilient is this in the event of a potential downturn? What are your thoughts for the next, you know, for the next credit cycle in asset-based finance area in particular?

I think my colleagues have framed it well. And James, thanks for a great discussion that, you know, I think it comes down to again, diversification, right? This, as I mentioned, offers so many levers and abilities to pull diversification levers. So that comes to your resilience point, James. But at the end of the day, this is going to finance the real economy. That is the opportunity set in front of investors, managers, and partners in this ecosystem. So at the end of the day, the economy has, whether it's here around the world, here in the U.S., around the world there's so many needs that other sources of capital and financing are not going to be able to meet. And this is a new tool to also finance the economy. And that's what makes this one really exciting, but also really tangible and executable.

Wonderful. Well, Keshav, thanks for your thoughts on that. And with that brings us to the end of our webinar series. So I want to thank our panelists. I want to thank Loren. I want to thank Keshav and Jon for a lively discussion on asset-based finance. I want to thank CFA Institute for hosting the event. And in particular, I want to thank PGIM for sponsoring the three-part webinar series that you've just heard. So thank you very much. All the best, and we'll see you soon.

Thanks James.

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