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WHY IS PRIVATE CREDIT GROWING SO FAST? IS IT A RISK TO FINANCIAL STABILITY?

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MODERATOR: DAVID WESSEL

Director, Hutchins Center on Fiscal and Monetary Policy, Brookings

ANA ARSOV

Global Co-Head of Financial Institutions and Global Head of Private Credit - Moody's Ratings

STEVE KAPLAN

Neubauer Family Distinguished Service Professor of Entrepreneurship and Finance - University of Chicago
Booth School of Business

AMANDA LYNAM

Managing Director, Head of Macro Credit Research – BlackRock

FABIO NATALUCCI

Deputy Director - International Monetary Fund

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David Wessel Good afternoon and welcome. I'm David Wessel, director of the Hutchins Center on Fiscal and Monetary Policy here at Brookings. I want to welcome you all to this event on private credit. Why is it growing so fast and is it a risk to financial stability? And I'll introduce our panelists later. But our panelists seem to be of the persuasion that everything needs to have slides. And our system here doesn't so much, allow for slides because then you end up with people, you know, doing this thing. So, I want to talk a little bit for a minute and share some of their slides, but I want to assure you that they're all on our website so you can see the whole deck. And Fabio's work from the fund will be published on Monday. So, why are we doing this? Private credit, sometimes known as direct credit, is generally defined as lending by non-bank financial institutions, including private equity firms and alternative asset managers. Although some banks have gotten into the business mostly to small and mid-sized businesses who are often very highly leveraged, some of them, can't borrow in the corporate bond market. Some of them choose not to borrow in the corporate bond market. For borrowers, it's an alternative to going to the bank, basically. And although it's a relatively small part of business financing, it's been growing very fast. And as we've learned in the past, when something grows very fast, it sometimes can turn out to be, much riskier than we understood. And so there's been some concern among regulators here and in Europe that this is growing so fast, and we don't have an enormous amount of insight into it. So, these are things that I've seen in the past, mostly in the last two weeks. I loved the one, private credit firms battle over talent. So all of you who are in private credit should be asking for a raise. Bridgewater talking about how it's reshaping lending. I'll talk about that in a minute. Goldman Sachs buying into a firm that originates, private credit insurance companies, bigger shadow banks and so forth. So this is a big issue. And, so, one of our panelists from Blackrock, this is a good chart that shows us just how much private credit has grown in their estimation, will grow. And you'll hear, I'm going to try my best to keep these people speaking English. You'll hear the phrase dry powder and that's the yellow. And that means the money that the private credit funds have that they haven't yet invested. And the concern is that if you have all this money that you've taken from investors and you want to get a return on, you're going to get really anxious, you're going to start lending it maybe ways that are not so constructive. This is a good chart also from Blackrock. That puts it in perspective. The private credit market is somewhere in the 1.6, \$1.7 trillion, range now. And that's about 13%. That's the, green. You can see it's growing, but it's still not as huge. Steve Kaplan, who will join us online, has picked up this chart from, one of the private credit, data providers. And you can see in there just how rapid the rate of growth has been. The last several bars are projections. And, I wanted to share this chart, which comes from not somebody at this panel, but from the Brookings papers on economic activity. One of the consequences of the growth of private credit is that banks are getting squeezed, particularly regional banks. And this chart, the blue line shows the fraction of loans to corporations that come from banks. And you can see it's kind of sloping down. The bottom line adds to the denominator of the bond market. And you can see that's also sloping down. And as they pointed out in their paper, this in part reflects increasing competition from non-bank lenders. So one concern people have is that who if the money is not being lent by the banks and instead being lent in the private credit markets, is that risky or is it less risky? Does it pose, unanticipated risk? And do we really know where the money's going? So that's all my slides. Let me introduce my panel and bring them up. Can you get them to turn off the screen? So we're very lucky to have with us today Fabio. Natalya. She was deputy director of the IMF Money and Capital Markets Department, where he's been since 2017. He previously worked on the staff of the Federal Reserve Board, and we're particularly glad to have him here, because on Monday, there's a chapter of the IMF

Global Financial Stability Report, which focuses on private credit. And so, while he can't reveal any of the secrets in that report, he's promised me he'll give us a preview of some of the themes. Amanda Lehman, is the head of macro credit research in the portfolio management group and private credit at Blackrock. So. They are in the business of private credit, and she joined Blackrock at the end of 2022 after 16 years of Goldman Sachs. And then our Sofi's global head of private credit and co-head of financial institutions at Moody's, the credit rating company where she's been so since 2013. They rate private credit. So they're looking at it from the credit rating side. And before that she worked at a number of banks UBS, Morgan Stanley and Lehman Brothers. So why don't I invite you all to join me up here and here's Steve. Welcome, Steve. Did you go there? Yeah. All right. So excuse me. My call here today is to. For people who are not as engaged in the business as my panelists on the stage. You'll come away with this, understand? A little more like, why has private credit growing and whether we should worry about it now or whether it's potential risk in the future. And I ask in Fabio to start to sort of give us the big picture. You spent a lot of time doing research on on this. So help us understand what's going on here and why is it interesting?

Fabio Natalucci Okay. Thank you. First of all, thanks for for having me. We will be publishing the report on Monday, so I'm going to try to my best to give you an appetizer of the report without being yelled. When I go back to the front that I said too much, I'm going to try to do in English, we are always reminded that we should try to do in English. I think the big question was exactly that starting point. This sector is growing so fast. And so the obvious question from a financial stability perspective, is it just the rapid growth, not just the size but the speed of growth, the financial stability concern per se. And if so, what are the mechanisms, the vulnerability that could be an issue. And so I think it's helpful though to framing the broader picture. This is in the longer trend of move away from public markets. That total private markets by credit is the latest arrival in that trend. But private equity preceded that, for example. And there are a number of reasons why that trend in private credit, one of them being that the returns for investor has been quite strong, obviously, because the underlying asset are illiquid, so you're benefiting from some illiquidity premium there. But that from an investor standpoint there are also some conjuncture or issue. For example, in zero low interest rates since the the GFC, the financial crisis that's been the search for yield by investor. They've been one place to well, there are also other issues that relate, for example, with the, behavior of banks post financial crisis, more regulation, capital liquidity, maybe more conservative risk managed by the banks. So there's a number of structural conjunction reasons that may explain why the growth in particular. But again, the speed of growth, it's what I think called out of our interest. Now there are benefits. I think it's important to highlight those even from a financial stability perspective. I think for a big picture, one, it's the, the variability of funding. So you expand the set of funding opportunities. So that's concentration of funding from the banking sector, for example, that has been at the center of a number of financial crisis. So that's the benefit in some sense from a financial stability perspective. There are others that relate to more to, if you want benefits to borrowers. So if you talk to his firm, they'll tell you that they are more flexible, they are more willing to follow them to a period of stress. For example, the terms are different. You deal with one lender instead of a number of lenders. And so there are benefits to the borrower itself, why they want to go there and maybe pay, if you will, until your interest rate. And then people point to the behavior of the sector during Covid when the banks retrench and that the private sector, the prior credit was still open for business. I will caveat there that it was a very unique period. The recession was prolonged, was very short. Central banks and policymaker, both model policy and fiscal policy jumped into providing some sense of floor to risk assets. So I think I would put some caveats in terms of extrapolating too much from that experience. But there are clearly

some benefits from a financial stability perspective. Then we try to think about what could be the financial vulnerabilities, the amplification or shock. One is looking at the borrowers themselves. So we try to do compare the borrowers in the private credit world relative to the borrowers in the leveraged loan market. This is the broader market where banks and number of banks provide lending. And then, if you want to utilize, institutional investor to actually sell some of these loans, like those, the borrower syndicated market with different structure, that's the idea. It's a combination of banks and institutional investors or the public markets or the yield bond market. So we compare the riskiness of borrowed. That could be one channel. If you find out that borrowers in private credit are more level. They. They're smaller. They're riskier. Another channel has to do with liquidity mismatch. I think here we came away, with more, less concern in the sense of some of the capital that they're insured from. This investor is locked in for a number of years. So the typical run dynamics that you would see in banking, for example, you have deposits policy. You don't see it here. There could be other liquidity mismatch if you want. For example, some of these products are sold to retail. So I think selling to return raised the bar for concern about liquidity. But that's a smaller part of a sector. A third channel I think has to do with leverage. And there's different levels of leverage. I think that's where we are concerned. We look at leverage, the borrower level. We look at leverage that could be utilized by the investor themselves. So the pension fund, the insurance companies. And then we look at leverage that could be utilized by the private fund themselves. So they lend money to a number of corporations and they use banks for example, to obtain some leverage themselves, some funding. So that's another channel. And then the third one, the last one is more on the interconnectedness side. So there's a number of players here. You have probably credit funds and other structure. Then you have these borrowers but you have a number of financial institutions. You have insurance companies. You pension funds. You have private equity linked to insurance companies. It's the opacity of these linkages that I think. It makes us a little uncomfortable. We don't have good data on leverage. We don't have good data on exposure of this institution to other institution. Some of these aggregate numbers may not be large per se, but without exactly knowing what the distribution, for example, across financial institution is, I give you an example. The Federal Reserve in one of the Financial Stability Report in May of last year, they had a box on private credit and using filing to the SEC, they tried to estimate the size of the exposure of the banking sector to our credit funds. They came away with a number was about 200 billion in terms of actual lending collateralized by loans, another 200 billion in terms of derivatives, notional value 400 billion compared to the capital base of the larger banks in the US, is not a large number. I just don't have visibility. Whether this is two banks that ten banks, 20 banks, maybe other panelists have more information. Okay. But that's one question to ask. I think the opacity and lack of data. And then finally, the last channel possible financial stability transmission we look at is valuation stale valuation. But they don't adjust very often. There are pros and cons. One pros is that you are less subject to the ups and downs of the public market, or even the syndication market. The the cons is that during periods of stress, it's not clear why that those markets don't move those price because they are not there. Still, they are no value because there's no information. And so if it is a prolonged recession, you could see little move at the beginning. But they're in much sharper decline as investors catch up. So to close I think we don't see a financial stability risk. But we have a concern about what we call micro and macro financial, level of interconnectedness if you want. How critical from a macro financial standpoint, we don't know this sector given this size would operate under a severe or prolonged recession. And we see some signs of increased competition from the banking sector in the upper part of the segment. That could have implications for the then risk taking of the more finance.

David Wessel So we understand that last point. Use the word macro critical. You mean that a financial stability risk means that what we saw during SBB, where the markets go crazy and the government has to come in and pour a lot of water on the fire, you don't see an immediate risk of that from private credit you are concerned about if it keeps growing. We don't really know how much how interconnected it is. And that was a lesson we learned during the global financial crisis, that it's the connections that are not obvious that can cause problems. Because if you don't know which banks are exposed to private credit, you get afraid of all of them. But macro critical. What do you mean? If we have a recession, could this make the recession worse? Yes, that's the issue.

Fabio Natalucci That's what I mean. There could be an amplify or a credit shock. So not only, for example, the banking sector retrench, but then this segment also does. And given that has been a shift from banks to these guys, that sector plays a more important critical role in terms of credit provision.

David Wessel And your point about we did have a little recession during the Covid, but it was so unusual. It was short and we got just massive government intervention. So we didn't. And I have pointed this out to me. We didn't see the usual bankruptcies we see when we have it.

Fabio Natalucci Was unusual, I think, along three lines. Right. The shock or the unusual? The period of I watch the recession, if you want to call it that way, or the economic slowdown lasted, but also the massive response. Fiscal policy side, but also central banks. So the fed stepped in and bought yield ETFs that providing a floor if you want to listen.

David Wessel So it hasn't really been stress tested.

Fabio Natalucci Hasn't been stress tested in a prolonged recession where where the authority would not react that massively.

David Wessel Okay. So Amanda can you tell us how do you look at private credit as an asset class. Who is it appealing to? How does it work and why has it been so popular with so many institutional investors?

Amanda Lynam And I would echo my thanks. Thank you for having us. So I touched on on a few of the points, but basically we see four main growth drivers behind this asset class. One is investors desire, in many cases for diversification to borrowers desire for certainty of execution and flexibility. And in some macro backdrops that matters more than others. The third is structural shifts in the public markets that are become large. They're becoming larger and larger. Just to put some numbers around that, according to deal logic, the average deal size in the U.S. high-yield bond market has been above 700 million for the past few years. According to LCT, the average deal size in the U.S. syndicated leveraged loan market has been above 450 million. And if you look at bar chart, you can see kind of a trend up into the right. And so for many middle market companies that say need 500 million, that's a fine market for them. But if you're a middle market company that needs 50 million or 100 million, that may not be where you're going to get your best execution. And then the fourth is kind of ongoing tightening in bank lending standards. And that could be for a variety of reasons. But if you look at the Fed senior loan Officer opinion survey, the ECB bank lending survey standards remain tight. And so we do think that there's a kind of a natural evolution into the private markets to pick up more and more of that of that lending. I think probably one of the big changes in the past few years has been that now that private credit is a sizable and scalable asset class in its own right on a

standalone basis, it's competing in areas where it wasn't previously. And so at 1.7 trillion, around 500 billion of that is dry powder. So that's a global figure. It's now able to do bigger deal sizes. Whereas maybe if you looked at this market 7 or 8 years ago, it was more reserved for niche financing opportunities, much smaller. So that that overlap of the addressable market is what we see as kind of being one of the most significant changes in the past few years, overlapping with the syndicated markets. And that's a trend that we expect to remain in place. And we think that that will ebb and flow over time. So in the second half of 2023, there was a fair share of syndicated market debt that was refinanced in in the private markets.

David Wessel Syndicated debt, meaning...

Amanda Lynam Leveraged loans outstanding

David Wessel A group of banks.

Amanda Lynam So so basically actually a company that had previously issued, say, a high yield or leveraged loan in the syndicated markets that came time to refinance that, and they actually chose to refinance that in the private markets. LCD tracks that data that has shifted. However, in the first quarter of 2024, as the syndicated markets have become very receptive to even lower rated borrowers. And I think a function of that is clarity on monetary policy and optimism that we will avoid a recession in the US. So this is this is a nuanced asset class. At 1.7 trillion, it has grown, pretty significantly. But actually, our forecast calls for a 15% kicker from now through the end of 20. Compound annual growth rate, no acronyms. Yes and yes. We are expecting a 15% compound annual growth rate from now until year in 2028. To get to that 3.5 trillion global assets figure that you cited, that would actually be below the growth rate of the past five years. So so we're expecting some moderation in the growth. And as you noted appropriately, it's still quite small and not just in the context of the overall alternative universe, but also relative to the syndicated debt markets relative to loans on bank balance sheets.

David Wessel Give us a sense of who are the investors in private credit.

Amanda Lynam Largely long term investors that, as Fabio mentioned, that kind of illiquidity premium. These are, assets and asset liability matters, as we call them. So these are these are insurance companies, pensions, endowments, family offices with generational wealth, folks that don't need this capital on a high frequency basis, that they're they're able to lock it away for years, and they truly need to not need it. So maybe it's a life insurance company that's managing a, a policy payment for a life policy that's maybe 15, 20 years out. And they'll they'll take the illiquidity risk to do that. But those are largely the types of investors that that we see.

David Wessel So this is quite a contrast to the bank depositors who can take the money out right away, which is the run risk.

Amanda Lynam Yes. And I think one of the, the key, developments from our side that the episode of March 2023 showed us is that. There is an asset liability match mismatch in the banking channel in many instances. Whereas in parts of the private markets it's really long term assets matched with long term investments or long term funding.

David Wessel For better or worse, they're not doing maturity transformation. Banks take short term liabilities to lend it out. That's their function. You're squeezing them out. And so.

Ana? Okay. Sounds great. Tell me what you think the 3 or 4 biggest risks are for the growth of private credit that we should think about?

Ana Arsov Thank you for hearing me as well. And in my role, I think of both of this side. And you showed the banks, insurance companies that oversee the ratings. Just to clarify of the whole financial system, if you will, on a global level. So have to think about where risks are coming from one side and the proliferating on another side. And it's sometimes it's more obvious when you look at the full picture. So I want to also be a little bit I know the question is about risk, but I do want to give some of the benefits. And I agree pretty much 100% with Fabio. I was just going to give a little bit of a different angle. So when you think about the key risks. Leverage, liquidity, transparency, governance and regulation as well. So let's look about, you know, I bifurcate obviously some of the themes on on liquidity. I agree. I'll just start with that because I think that we have a consensus. There's no, liquidity transformation in a way that was, dangerous for the, global financial system. In 07908. There's a lot of comparisons about, how the proliferation of structured finance type complicated structures or the CDO squared, if you will, that we've seen a number of movies now, Donald, the financial crisis. Is this the same thing? We always asking that question. We are seeing some complicated, obviously more complicated asset bank private transactions coming for ratings, etc., but it's still very much a minority. If we think about the biggest space here, it's really this middle market lending. And that's just like any other bank or traditionally regional bank or community bank, even in the small and middle market space, or even to globally systemically important banks like the large cold banks of this world who do leverage finance transactions. It's just a capital provisioning to a middle market borrower. Yes, that minimal borrower has increased in size and therefore the transactions have increased. So there is that competition with the banks. And we have, published a report, earlier this year saying that this opening of the leveraged finance market will create more competition, particularly on terms which will be good for the borrowers, because for two years there was no other game in town. If you were if you're leveraged borrower except to go to the private credit market, the broadly syndicated loan market, which is basically what we called the Wall Street leveraged finance market, exists. Only one kind of is priced for perfection. What we mean by that, when the market knows the monetary cycle, when the market knows that there is a geopolitical stability, when we know how, potentially growth, economic growth is going to be in, one can argue the last two years with unusual monetary policy that was less of certainty about pricing those risks. So therefore there was no collateralized loan obligation formation. So the broadly syndicated loan market basically kind of shut down. And this is when the big private equity funds who have big private credit funds, as well as raised with private credit funds over the last three, 4 or 5 years, really deploy their capital very fast. So we always worry about on a micro level what's going to happen to these loans in 2021 in particular? Because 2021 was a year, when was the last year where both the Wall Street traditional Wall Street development banks, probably syndicate loan Market and the largest private credit funds were deploying capital, and that was the biggest wallet, if you will, of deploying both M&A investment banking fees but also high yield bond and loan fees. So obviously when there was a lot of supply of capital, some term software and it was also weaker terms, what happened once the syndicate loan market retrenched? Private credit for the last two years was the only game in common. They were able to command good terms. And we've done analysis then from a terms, conservatism of terms, if you're a traditional middle market power, and that's when it goes to the leverage point. Those terms cold quite nicely meaning to the benefit of the lender, they're more conservative than a transaction that will be done in the Wall Street market in the syndicated law market. But on these larger transactions that now they're competing directly with investment banks, meaning particularly 500 billion and above, which typically could have been priced on Wall Street or

be a political brawler, syndicated. The terms are actually pretty similar. Yes, private credit still has more conservative terms and but those are weaker. And particularly now, we think with this liquidity opening on both sides, there is going to be we know from a macroprudential perspective, more leverage in the system. It's not good. Then we talk about, overall leverage. You know, we debated. A little bit before we came here as a group that if we did not have this liquidity provisioning of 3 million plus that the private credit market allowed, we may have had a very different default cycle in leveraged finance. I mean, think about a shock of deals that were priced at 0% base rate and then going within a year or so to 5%, that usually would have, you know, we are just talking about we had a 5% or so default cycle, and we were projecting that to go lower, maybe to 3.7 or so. So it's pretty mild default cycle considering that most probably, difficult rate shock, particularly for leveraged borrowers. And we think that happened because private credit came in with all this liquidity. So it was good from that perspective. But therefore but also at the end of the day, increase leverage in the system. And also with terms of potentially the restructurings that we don't know how much of that are healthy or not. Probably not, because they simply couldn't refinance in the syndicate in a low market. So there's more hair, if you will, and transactions that were done in private could just.

David Wessel Interrupt to make sure I understand what you're saying. So we had this unusual period, we what you would have expected, given the shock to the system that would have seen more bankruptcies in default. We didn't see that. And we didn't see that in part because the governments were so aggressive, but because this private credit was available. And you're worried that the net result of that is we have more leverage we would have had anyways. And very weak companies that might have fallen in, in a downturn were allowed to survive. And so now we're keeping them alive in.

Ana Arsov The short term. Positive I would say. Yeah, but we don't know if long term, you know, that will be necessarily positive for the economy. And then when you think about the governance, we think about the governance a lot, obviously up in the private markets. And that's the point of being private. It's more opaque. We don't know about what kind of governance structure to have from, let's say, valuations, you know, when you were a bank and it goes to a regulation point when you're a bank and you underwrite a certain loans, you also so you can value and say this loan is classified. This one is criticized and a horizontal review among the banks. And I say if you have, 5 or 6 syndicate banks on a certain loan, we're looking at a cross and let's see how you evaluate. And then also C comes back and tells them we think you should be reevaluating decisions, etc. there's no system from a regulatory perspective at least, that is imposing this onto this private credit lenders. So therefore we are we think the governance is weaker. And when something is growing very fast with weaker governance and less transparency, we are worried about what will be the ultimate shock, as you say, in that amplifying effect, we don't know to what degree may be in a highly distressed environment, which we haven't seen. It hasn't been tested.

David Wessel I see, Steve, you've been very patient. But thank you for joining us remotely. I'm interested in your reaction to what's been said, but let me ask you a couple of specifics. One is you've done a survey of of private credit. So you have a good sense of, of what the market looks like. And if we haven't covered what your survey shows, please say it. But also I've read that you think that actually this is financial stability enhancing because there's no run risk in the private credit. And so maybe this is not an amplifier, but maybe it's a cushion. And I wonder if you could talk about that.

Steven Kaplan So let me it's a it's been a great conversation. And I agree with much of what's been said. I want to apologize. I am in Washington, but I'm unfortunately in Seattle, Washington. Okay. So, thank you for, for having me remotely. So there's a couple things that haven't been said. And I want to go through an example where I wish I had slides. So I'm one of those slide people. But but bear with me in, in the example. So there are three players here that we're talking about. We're talking about the banks. We're talking about the syndicated loan market, which is really close, the collateralized loan obligation, entities that that are the people who buy the syndicated loans from the banks. And then the third group are the direct lenders who we're talking about. And one thing that is super important and hasn't been said is the leverage of those entities. The banks are leveraged, we know, 85%, right. It's 15% equity, 85% debt. And that's where the depositors are. And that's the risk to the system. The close or leveraged 89% highly leveraged. And the direct lenders, their lend their leverage is 50 or 60%. So they are much less leverage. They get they get their money from the pension funds and insurance companies endowments. Those are the, you know, call it they're providing the, direct lending capital. And then they do leverage it up from banks, but it's like 50 or 60%. And the other thing that's worth mentioning you. Got the leverage differences. You also have incentive differences. The banks, the people making the loans do not have very high powered incentives. The people making the loans in the direct lenders. They're paid a management fee and a carrier. So they actually care. I'm going back to this governance question. They actually have an incentive to make sure these things work. That is a bit greater, in my view, than the banks where they're they're, you know, they're sort of in the middle of the organizations and they're not paid for performance in the exact same way. So now let's take these three structures, and now let's say there are 20 loans in the structure. And this is where I could use slides. And let's say that you get a really bad shock or a worse shock than the GFC and worst shock than we had during Covid. And half of those loans default, a 50% default rate is pretty high. And let's say that the loans that default, you lose 50% of value. Okay. And that's also that's maybe okay as an assumption. So 50% of your loans default you lose 50% on them. That's a 25% loss of your capital. Well in a bank which is 85% leverage, you lose 25% of your capital. If it's all in leverage loans, you've wiped out your equity, closed exactly the same thing because they're more leveraged 11% equity, 89% debt. So if you lose 25% of your capital, you're you're gone. And you have all these. That's where you get systemic risk on the direct lending funds. They're only leveraged. 50. 60%. They're okay. They're not. You don't get a run. The insurance companies, the pension funds, the endowments, they're going to take a hit. But they're also will have taken a hit on their private equity, on their, public equities if there's this kind of thing and, and that's that's bad. But because you don't have this duration mix mismatch, which we talked about earlier in the banks and your your money is committed. It's the run ability is is less. So you know David you asked me you know what I thought this is like awesome. The regulatory environment that pushed that. I mean this is a success of regulation. Regulation wanted to get these loans out of the banks. Yeah after the GFC. That's what's happened. It's terrific. And now everybody's wringing their hands. Oh you know it's like do the baseline. Like the alternative is this leverages and the banks or maybe the close. It's actually good that it's moved. And you do want to ask these questions which we've asked in which Ana was concerned about what the you know, what the systemic risks are now that we've moved there. But let's not forget, the fact that we've moved here is really a good thing.

David Wessel And let me ask you two questions about that. One is so there's no social value to maturity transformation that the banks to taking my deposits and lending them out.

Steven Kaplan I assume there is that still going on to to some extent they're not out of this market, but, there's what's, what's interesting. And this also, this is a question going

forward, which I think, was raised is the, the private the direct lenders have been able to generate, you know, good returns, doing something with less leverage without the maturity transformation. And that's sort of a puzzle, right? If the banks if your story is that you need to have this leverage, you know, in the deposit insurance to do the maturity transformation. And the banks are always saying we need to have all this leverage. You can't have us hold more equity because we can't make money. It's kind of a puzzle. But the direct lenders can do this with a lot less leverage. And which suggests they're more, you know, that they have some, efficiency in doing it. So you're sort of maybe going from a system that's a little less efficient to ones that's more efficient, but that's a it's a very good question. And I think we don't have.

David Wessel And I you're not are you. Not a little uncomfortable that we don't really know how what the interconnections and how much they're maybe tied into the banks and the insurance companies because it's kind of opaque.

Steven Kaplan The interconnect. So we know that the bank interconnections we know right there they're borrowing. And I think the fed I mean this is also the thing that the the fed gets gets data from banks. So the fed has has a lot of information about what's going on now. You know it didn't help them with security, you know Silicon Valley Bank but that they had all that information. But they do have they had information, the interconnectedness, I think the, the issue would be, you know, the pension funds, if they're invested in, in private capital, I don't see their, the systemic, you know, issue. They, they take losses. And it's painful on the pension funds, but, in a recession. But we had that in the GFC and you know, it was and that, that that was a pretty bad shock. And now the world went on. The insurance companies, I think, are the place where I think you'd want to look at exactly what they're doing there. And those are the ones that are, that are tied in with the private equity firms. Now that the private equity firms, you know, have investments, you know, many of the mega funds have investments in insurance companies. So that's the place that that I would look where there's some opacity. Yeah. And try to understand what's going on. But again, I, you know, I come back to the, the what I mentioned earlier that there's, there's less leverage to kick off a crisis and it's you move from you've moved the money from more leveraged entities to less leveraged entities. You've moved entities where there's this duration right on with. And so that's that's a net positive.

David Wessel So there's a lot of uneasiness on the panel here. Ana I want you to start and then I'll let you I love the debate.

Ana Arsov I'm having this with all the entities we rate. And it's always very hills to have this debate. And I and I think you have some wonderful arguments. Absolutely agree that, I like to say, you know, from a highly levered complex transaction, the private credit, structure is a better mousetrap. I agree, because, the funds are less levered in a bank and there's no that could be the liquidity risk. I'm going to go back to the retail fundraising, because the point that we both concerned, Bobby and I and why that's changing, but let's assume that if it's institutional capital, what we call professional investors, pension funds or transport, family offices, insurance companies, etc., less levered are we believe that if you take 3.7 how we break it. It's 3 billion in the US of that dry powder being unused 200 billion to 700 billion. That's basically exists. It is middle market lending. And we believe that only 50% of that uses leverage today. And the most of that leverage, 50% of that 50% comes from the banks. So there is a interconnectedness with the banks. This is usually the largest, most systemically, big banks globally. We've talked about the size the fed estimate around 200 billion. If you take the global banks and you add some other structures, let's

say 350 to \$400 billion for the largest ten, 15 banks. So they're also now this is a favorite asset class of a typical regional bank as well. So we have to ask ourselves, when you look at the fed balance sheet and loan growth, we basically have no longer theory was the last one that was growing and that one is coming down.

David Wessel Commercial real estate.

Ana Arsov Commercial real estate. Thank you. So the only two lines that are growing in bank's balance sheet is credit cards. Not so great. As we know. Credit card balance is about at least that's another discussion about where we are in the economic cycle and why. And it's really exposure to non-bank financials. So okay, so what have we created. We created basically a structure where yes, the exposures are elsewhere, but the banks are the largest lender and the most important customer of the banks are exactly these funds. And the leverage comes from these funds. The banks, most of them not all have prudential, risk management standards, but they're not consistent, by the way. And again, they're a peak. So when you have a lot of lending the structures of the funds are who has more power. Which bank I'm going to get a better or no margin terms on these transactions. Some have valuations where the bank has to go combination. So the bank will have to do an evolution getting the loans from the funds. So that difference to some of the risk management centers or the banks. So again that it's to that lack of transparency. So we have to ask ourselves the social contract. Is this and is this a type of asset class that's an investment because the private lenders are saying this is an investment asset class. I'm a fund, I'm an asset manager. I earn carry, as you say, this is an investment or is this and I can't say it's regulated as an investment or is it a lending activity and should it be regulated an activity based like a bank? And your point is, it's a miracle how these funds realize the returns where there's some form of something called illiquidity premium, which we talked about, which we think is around 300 basis points, 250, 300 basis points for the same loan, there would be the public market. So that's one.

David Wessel So just define your terms. A liquidity premium means that I can.

Ana Arsov I can basically lend you and hold that loan. I don't need to [inaudible].

David Wessel So I can charge you a lower interest rate

Ana Arsov [inaudible] depending on where in the lending cycle over the last three, four years has been, that has fluctuated between 200. All right. So that's one week how to make more. But let's get back in again. On the macro level. Do you know what JP Morgan did after the financial crisis. They hired 2000 compliance people. Do you think this sponsor above 2000 people. So let's talk about the efficiencies. And by the way JP Morgan is one of the most profitable global banks. Even with the 2000 extra compliance people that had to hire to comply with Bill Frank, they're still pretty profitable. So yeah, it's all about regulatory costs and operational costs, I think. Okay, if you allow JP Morgan, let's say Goldman, whoever you want on a more regional bank ABC to be having be concentrated in one asset class don't have, you know, have 2 or 3 compliance people, five underwriters. Most of these funds are 100 people operations by the way. So of course you're going to have operating efficiencies and higher profitability and you're going to have equity like returns is what they say with a senior exposure. Can the banks do that with regulatory and operational costs? Do we want the banks to do that right. We want the banks regulated. And okay. So again go back to philosophically that's not on Moody's. That's you know the policy makers to decide it should should it be an activity based regulation or to this investment.

Fabio Natalucci Okay. So I'm going to make two specific point, picking up on what Steve was saying, that a more broad philosophical question. I don't disagree necessarily with risk moving corner of the financial system that is better equipped to deal with it. I think I'm okay with that. But one, there is a growing size of this is being marketed to retail. I think when you send it to retail, then the bar for transparency and how you deal with this should be different. It is true that there are liquidity management tools that gates they are infrequent or quarterly, say withdrawal. But I'm not sure that the perception of retail putting money into this instrument is exactly matching the reality. 100 billion is not a huge number, but it's not small either. And those don't behave like pension funds or insurance companies. So that to me that's conduct risk should be dealt differently.

Ana Arsov But also and that that's the fastest.

Fabio Natalucci Yes.

Ana Arsov Avenue of fundraising.

Fabio Natalucci Yes.

Ana Arsov Now comes from the retail investor.

David Wessel And these are ordinary investors, not, family offices or pension funds.

Ana Arsov Dentist money if you will.

Ana Arsov Dentist money.

David Wessel And just so when you say liquidate, they can't take all their money out right away. They can only take out 25% each.

Fabio Natalucci Quote and so on. But it's not obvious at all to me that the expectation of those who put the money there is aligned with reality in times of stress. The second point on leverage. I agree that this this number percent are smaller. My concern is the layering of this right is the leverage at the borrower level. At the private credit through some form of structured finance, is the leverage the insurance company may use through some fund and securitization structure. I don't know in terms of stress how this plays out in terms of delivering. Right. Should they all deliver across this different layer? It's not obvious to me because I don't have enough information nor has been tested in this size. How will the play out? Just because a financial institution doesn't behave and go down like Lehman does not mean that there's no impact. The macro economy, right? There are channels of propagation of shocks. If I can't sell this, I need to sell something else, for example. Then I'm going to have contagion in public markets, for example. So it's not just what they take a loss and just suck it up and move on. The other things that could propagate the shock. The final point, I think it's more a philosophical point. The entire supervisory or regulatory approach to this has been centered around the banking sector. And if you want. And I'm going to simplify by the the stick. The characters I give you does more regulation, more supervision. You have access to a central bank balance sheet at times of stress. These guys have a lively regulator, let's put it that way. But they don't have access to the central bank balance sheet. It will be okay if he works out this way. If you start losing money, you're on your own. Unfortunately, history in the last 20 years has been very different, right? Take the LDI in the UK a few a couple of years ago that involved banks and

insurance companies, forced the Bank of England to step deeper into the gilt market. They didn't say, oh, and that's too bad, you're going to lose money, so you require the central bank to step in. So if you want to have access to the central bank balance sheet and the fed is similar, right. They didn't buy just Treasury security during Covid. They bought primary secondary market corporate bonds. They both high yield ETFs and they provide a floor to us. So that's helped or saved the financial system not just the regulated sector also the lightly regulated. So if the expectation is the central bank would step in every time and provide a floor to asset prices, I am not sure that then the supervisory regulatory system is designed as it should be in terms of incentives.

David Wessel In other words.

Fabio Natalucci I don't have the answer, but it requires some more thinking, I think, as opposed to just expected.

David Wessel It seems to me the bigger private credit becomes, the more likely it is that the authorities will feel they need to step in because it's become such an important part of the.

Fabio Natalucci Yeah. So I think then at the minimum, some thinking should be we should spend some time thinking, well, what is the regulator the best designed from a regulatory supervisory perspective. If we move to a world where some of this risk goes to a different segment of the financial system and align the incentives appropriately.

David Wessel So what do you think of that Amanda? Are you ready for more regulation?

Amanda Lynam Well, I think that that's not.

Fabio Natalucci What I said.

David Wessel Yeah, I said it, I said it.

Amanda Lynam I think the one thing that maybe we we haven't mentioned yet, which I think is important to address, is that this isn't a one size fits all asset class, right. So when we're talking about just even middle market private lending, which is that 3.5 trillion, that does not include kind of asset back lending or anything that's kind of outside of that direct corporate lending when we're talking about that, within that 45% of it globally is direct lending, then you also have opportunistic mezzanine distressed. You have different parts of the capital structure. One of our key themes, again, we're expecting an environment of dispersion but not widespread market disruption. That dispersion presents itself across three dimensions. The portfolio. So what size companies are you targeting? What sectors are you lending to? Vintage. And I made the point when you if you're a capital structure that's formed in 0% interest rates versus 5.5% two years later, what has that done to your valuations? You see, using data from Lincoln International, significant dispersion across vintages. And then again the strategy point are you senior secured. Are you venture are you anything in between. So so that that really matters when we think about where does this asset class go from here and what sort of macro backdrop does it thrive in? What sort of macro backdrop is it more challenged? The other point I would make is that just like direct lending as a as a loan is not one size fits all. The lenders are not one size fits all. It's the markets are efficient in that way. New entrants have generated 2% of capital in 2022 and the first nine months of 2023. Compare that to direct lenders with vintages four or

more in the market. They've captured between 83 and 85% of fundraising in 2022, in the first nine months of 2023. So the markets are telling you they care about that expertise.

David Wessel That's another way of saying that it's increasingly concentrated. It's hard.

Amanda Lynam It is hard for new entrants to come in. But I think that's a healthy thing. I think being a new entrant, when the risk free rate is at 5.25%, should be higher than it was. That's tough. Yeah. And I think that's right.

David Wessel And you I should know this and I don't. Do you are you doing retail with private credit?

Amanda Lynam Well so we target a. Yeah. I mean, just like the industry is both institutional and retail. Sure. There's a but what.

David Wessel Do you say to Fabio's concern that like, well, we have an investor protection here too. The retail investors really understand what they do well.

Amanda Lynam Well, I mean, I think there's a significant amount of education that needs to be done. And I think that is taking place in the market. But really, I think the key thing is, are you committing this capital over a long term period and are you understanding of that? And I and that's that's really the key issue is that by design this is capital that is long term in nature. And that needs to stay that way no matter what sort of investor type. You're right.

David Wessel I think we have time for some questions. I'm going to take 2 or 3 and then we'll see. So, wait for a minute because there's a lot of people online. Can you stand up so she can find you? Tell us who you are and remember the questions end with the question mark.

Audience member Hi, I'll be brief. My name is Evan Dankworth from Milken Institute. Great question is, who is the end of the hockey stick private credit product for? Because it's getting closer. The deals are getting bigger, but the yield is getting comparable to the T-bill are not cheap, but comparable to government bonds. At some point it's just getting lower and lower and lower. Who is that for? Because it's not the traditional 12 to 15% meat and potatoes private credit products we saw years ago? So I'm wondering,.

David Wessel You mean that on the borrower side or the investor side?

Audience member Investor side.

David Wessel Okay.

Steven Kaplan Yeah. I mean, the the returns that that they've gotten their floor is going to be, you know, the not Libor, but the replacement for Libor, which is now 5 or 6% plus there is a spread so that that has been 5 or 6%. Now it's that may be coming down. That's a question of competition, but you're talking about a 10% interest rate, that they're getting that's that's not a pretty rate. And they've, been able to, you know, realize reasonably good returns. So I'm not sure I understand the question.

Ana Arsov Yeah, yeah. So just, the presentation that I have, it's just uploaded, on the website has exactly, an explanation of the spread and is actually for, up to 13.5%, even 14

if you're a non sponsor transaction, because for sponsors, that's \$150. So the median of the deals that were executed over the last two years was around 12.5%. The deals that are being refinanced within the public market now as the syndicated loan market is opening, the refinanced at 8.9%. So so there is a spread compression and so but if you really want to see the components of exactly what the professor was saying, it's broken down in my presentation.

Amanda Lynam There's there's also another index that says directionally very consistent with what Ana mentioned, the Cliff Water Direct Lending Index, which is an index. It's 13,000 plus, actually 14,000 middle market loans, 315 billion in assets. The 2023 interest income was 12.08%. And the realized losses for that same full year period were 86 basis points. So that data came out earlier this week. So that gives you some context of what the actual full year 2023 performance was.

David Wessel Right in the back.

Audience member Hi [inaudible] with the CFTC. Excellent presentation. I'm curious about the third channel of risk transmission that Fabio identified, which I guess in simple terms is stress hits the market lender retrenched and doesn't feel comfortable lending into the economy again, and that if the private credit markets, the big source of lending to the real economy, could be a systemic transmission channel. My question is, how prone do you think the private credit market is to that retrenching risk? And is it more than the banking sector? Is it less the same? What's your take?

Steven Kaplan Well, let me.

David Wessel Steve let Fabio respond. You can start. It's not. Okay. Go ahead. Steve.

Steven Kaplan So we know in times like the GFC and I think, during Covid the banks freeze the banks. So the banks getting this out of the banks is, is great. And then the question is what are the private credit funds do. And I think what they did in the GFC or at least the distress funds they invested. Right. That's why Oaktree did spectacularly because they put a lot of money to work. And I think that's, you know, on the margin in the private credit funds, particularly if they have dry powder, which they do now, they're going to step in much more than the banks would.

Fabio Natalucci Okay. So I think that's the way to answer two dimension, right. One is the the speed of banking versus different behavior. Banking versus private credit. We know how banks behave. I think this size of this sector. We don't have a data point to do it. Again, Covid is an example. I think during Covid, at least anecdotally based, I spend quite a bit of time trying to talk to these people. They stayed in the market. If anything, they did provide credit. It was not cheap or free at all. But they were there. But I don't want to extrapolate too much for the reason I mentioned before. That was a very unique short, short period and a lot of government support. The other dimension, though, is the relative size, right. This they're getting bigger. And so extrapolating how they behave when they were smaller, nimble, more distressed into the more mainstream, the upper part of the market where you compete with banks, I think that's a much more difficult exercise to do. Another way to look at this is to think about price. Cyclical is that the sector more or less cyclical. There is work done by the BIS that shows that they are as cyclical, as public markets. I don't remember when he was just one of their quarterly, the BIS, without anticipating too much the work that we have done, I think we have found that looking at different measure, they can be less cyclical. I would not go as far to say, though. They are

countercyclical, meaning that when the bank retrench, they're going. I think this speed in the end, and this is just my own personal opinion now, will depend of the source of the shock and will depend on how long the shock is going to be. If it's a shorter shock, I think probably because of the valuation in frequency for a number of reasons. Probably they would stay in, they would retrench after the banks. Let's say if the shock is longer than I think, then then I'm not sure exactly. That would be.

Ana Arsov Just when I at that point, that goes back to the 50% of the funding for this private credit funds comes from the banks. So you're not, I fully agree with the thesis that and it's proven. And we actually wrote a report when the syndicated loan market was very functioning. This is in late 2021, 22. And we said if the bank market closes, the private lenders would provide liquidity, which is exactly what happened. But because the private the banks still provided liquidity and capital to them, which I said the only line on the Fed's balance sheet that was growing was loans to non-bank financials. If we have distress at the banks. And again, we didn't have a distress of the largest banks ignoring Credit Suisse obviously in Europe. But we really the distress was at the small regional. So the big banks are the ones who actually lend to this funds. And they were very healthy. So we don't know a scenario where we have a large capital markets that lands these funds in distress and what will be the impact. And indeed they will be countercyclical for maybe short period of time to medium, but not long term in a more prolonged particular bank, stress induced, scenario.

David Wessel Right. As my understanding from this is something I read from Bridgewater, is that the banks are increasingly partnering with the private credit funds, selling complex debt instruments and synthetic risk transfers and other things so that it might be they might be more exposed then over time than less reputation. I thought from an answer to your question. Answer I thought you're going to give Fabio was we don't really know.

Fabio Natalucci Well I ended there.

David Wessel Well, yeah. Yeah. And that's the that's the thing. It doesn't mean that we're going to get a bad outcome, but we shouldn't assume we're going to get a good one.

Fabio Natalucci I was going to add one quick example, I suppose to be honest point that I have a portfolio of these loans and I borrow from my own the large banks. Right. And I only buy my leverage is like one time or 50%. My point about the length of the stress is like, right? If it's a short stress that those loans would not reprise, that collateralization is not going to change much. So maybe their banks is not going to cut me off if it's a larger shock. And at some point those loan will be mark to market. And if the value goes down, it's probably likely that that banks will at some point just knocking on my door.

Amanda Lynam The other the other point too, on that question is that illiquidity premium that we mentioned is not fixed. So in an environment like that where banks are retrenching, if if private capital decides that they want to write that business in exchange for holding that on their balance sheet, they will charge more, right? So that that you should expect that that illiquidity premium at a time of stress like that would go up just like it did in late 2018, just like it did during Covid, just like it did during the energy disruption of 2015. So that that is not a fixed premium.

David Wessel Right. That could be amplifying a problem.

Amanda Lynam Or I think more broadly, it would it would just it would need to make economic sense for the direct lender to say, I'm willing to adopt this uncertain environment, lend into it, keep it on my balance sheet for years at a time, and I need to get paid for that.

David Wessel Right.

Ana Arsov And I would suggest again, if you look at to a presentation, it has exactly the impact of that illiquidity premium of 300 basis points, how much impact means to interest coverage, which was significant negative.

David Wessel Nicola. And then the gentleman here. And I think when Steve turns into a pumpkin at 2:30 I think Right?

Audience member Yes. thank you Nicholas Veron of the Peterson Institute and Bruegel. My question is probably mainly to Ana, but maybe also others. We've been talking mostly from a US perspective, which is appropriate because we're in the U.S, but can you tell us a little bit about the other markets where you see private credit being a thing? Does it grow as fast as it raised, the same kind of issues or different issues in terms of financial stability? Is where where is it growing outside of the U.S? Just a little bit of mapping.

David Wessel Can you pass that gentleman in the middle there?

Audience member Hi Andrew Park with the Americans for Financial Reform. So my question is, to follow up about this whole point about, the liquidity transformation. Is it possible panelists believe that instead of the liquidity being provided by the banks, you've now shifted that instead that burden to the insurance companies? And so what we're seeing instead is that let's say we have an instance where the all sudden do you have a lot of, let's say, life insurance policyholders who suddenly redeem. So instead of a bank run, you have a run in a non-bank. And that is. Potential issue. And then you have some price discovery with a number of private credit loans that have been made. So curious about kind of whether we've just seen the transmission shift from the banking side to Non-banks in that kind of way.

Ana Arsov Yeah. Happy to kind of answer both the let me just go first on the where is it growing, as I said, of the 3,000,000,000,000.7 trillion in the U.S., roughly 600 billion or so plus is actually in Europe, most of the largest funds that are actually top ten we published most recently are in annual private Credit European Report. So invite people to go and see that. It's the same half of those ones are the same funds from the U.S., but they're subsidiaries in in Europe. And there's some specialty Europe funds very concentrated, I would say in the UK less than continental Europe. What we've observed is that the leverage in Europe for these transactions actually less and but it's growing and it's not growing with the same pace. It's very similar dynamics insurance company and pension funds still you know, the investors but again kind of replicating the U.S. model to a lesser degree. And we don't believe it's going to go as big as, as, as the U.S. because, technically, there are some intricacies in the report covers between the insurance regulation under solvency two and the NRC regulations in the U.S.. So definitely invite you to look at that report. And then on the second question, back to the assurance industry. Absolutely. Insurance risk has been elevated to the insurance sector, but insurance sector is still relatively under-invested in private assets relative to where the ambitions are. Is it a systemic risk today? No, but definitely growing from that perspective, roughly, we're talking about 70% of assets in private assets that equals private equity and private credit. There was a recent survey that was published by, about that that will go and, you know, but the

withdrawal risks, we haven't seen that much. There was one insurance company that was owned by private equity in Europe last year, Italian based. We actually mentioned that in the report that actually experienced that withdrawal risk. Indeed. But it has a special he had a really interesting, I would say, very weak governance that we wrote about as well of why that happened and concentration risk.

Fabio Natalucci Can i add one thing on digital and.

Steven Kaplan I just went, so first of all, Europe, it's right. And actually the funds themselves are a little less leveraged in Europe, as well. In terms of the insurance, this goes back to my my initial point. You've seen this risk move from the banks to the direct lenders that has less systemic risk on all of these dimensions than it did before. So it's not to say there are no risks that they're you know, there are not things we have to look at. But just be careful. Don't throw the baby out with the bathwater. The regulators kind of got this right in moving the risk out. There's much more of a, you know, duration match in the run ability. You know, the insurer life insurance run ability is just never going to be at the same place where bank run ability is.

David Wessel Fabio?

Fabio Natalucci So one might be following up with this. So we had a piece that came out before Christmas last year on this, the link between private equity insurance and lifers, the share of life insurance business at its own, directly or indirectly by private equity. Now it's about 10% of the industry has been growing quite rapidly.

David Wessel Who owns who?

Fabio Natalucci Private credit slash equity. But you from an equity firms owning insurance.

David Wessel Companies because they have these nice balance sheets with all sorts of money.

Fabio Natalucci Because inflow of streams of money to be reinvested. This company about about 10% of the life assets. So it's not small. We looked at whether those we call them private equity influence insurer. You can use whatever name you want, but they seems to have a higher share of illiquid assets, for example, compared to other life shares that are not owned by private equity. Now, you can take a view of whether from a financial stability perspective is better or worse, but it seems to be a growing trend that they invest more in this world. And some of this also, they reinsurer the business through their insurance business that tends to be located in, other jurisdictions. That's up there on that. The last point on the geography, I think that one of the fastest growing geographical area for particular is Asia. But the base was very small, so it's about 100 billion now. But what is called private credit, they are it's primarily essentially distress like a special situations. So the direct lending that we are discussing here in Asia, it's it's a very small number.

David Wessel My impression is the Bank of England is expressed more concern about the financial stability risks of private credit than U.S. Authorities.

Ana Arsov Not not they are more focused. They're more vocal on. I was attending a Europa conference recently with the one of the heads of systemic stability for Bank of England. And as I recommend reading his speech as part of that very balanced view, I

would say it's just that they're more focused on it and are ahead of in terms of some of the solutions and the things that they are looking at is really the linkage to the regulated sector and the banks. And, it's going to be a data driven regulation. But I do think that the liquidity and the need for economic growth that comes from private credit is actually welcomed, and it shouldn't be stifled, but it's way of a how do we regulate it. And particularly the linkages are and transparency to the regulated sector is what they're focused on.

Fabio Natalucci I think I mean, to put that in perspective, right. So there been discussing for a while now, opening up the Bank of England balance sheet tool and then on bank financial institutions. So I think that discussion on on once you open up the balance sheet and the discussion of risk, I said take a. So I think at the broader point I was making before in terms of like what is the optimal design of regulation and supervision,.

David Wessel I see, so, meaning if we might lend to these guys in a crisis, we ought to have more visibility and supervision.

Fabio Natalucci Correct, But part I think, the trade off, if you want.

David Wessel They're great. I think we're going to leave it there. Thank you all. I appreciate your time and your clarity. I invite everybody to see Steve, Ana, and Amanda slides on our website. And on Monday, you can read, Fabio's magnum opus on the IMF website.

Fabio Natalucci Thank you all.

Amanda Lynam Thank you.

Steven Kaplan Thank you.