NWX-FDIC (US)

Moderator: Andrew Carayiannis
February 18, 2020
1:00 pm CT

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode. Today's call is also being recorded. If you have any objections you may disconnect at this time. I would now like to turn today's meeting over to your host Miss Irina Leonova, Chief Capital Market Strategist. Thank you, you may begin.

Irina Leonova: Thank you. Again, my name is Irina Leonova. I am from Capital Markets Branch of FDIC. And today we will cover the so-called standardized approach for contract budget credit risk final rule that was recently approved by the board of directors of FDIC as well as other provincial agencies and published inside validation system.

In today's Webinar we will provide a high level of review of the derivatives contracts counter parties, scope of the final role as it applies to risk-weighted assets and leverage ratios, comparison of the current exposure method versus the standardized approach for counterparty created risk method, the new final rul. And we also will look at the termination of replacement cost and termination of potential risk exposure. And finally we will have a walk-through example of their SA-CCR calculation.

To save you time and kind of manage expectations, the first 15 slides will be forecast on definitely high-level overview of the current approaches to derivatives as well as the gist of the SA-CCR rule netting. And Slide 6 to 28 will be forecast on an example of walk-through step by step of how a SA-CCR would work in a hypothetical case.

Having said that so let's get going on the high-level overview. In general, derivative contracts represent agreements between budgets either to make or receive payments or to buy sell an underlying asset at a certain date or dates in the future. Budgets generally used derivative contracts to mitigate risk also such transaction risks of other deficits.

For example, an interest rate derivative contract allows a party to manage cities associated views a change in interest rates while a commodity derivative contract allows the party to fix commodity price in the future and thereby minimize any exposure attributable to unfair loan movements in those places.

The value of a derivative contract and that a party's exposure to its counterparty changes over the life of the contract based on the movement in the value of the reference rates as is indicated so indices in the line of conduct sometimes referred to as reference exposure.

A party with a positive current exposure expect to receive their payment or other beneficial transfer from the counterparty and is considered to be inter-money. A party that is in the money is subject to the risk that the counterparty will default on its obligations and fail to pay the amount owed on this transaction which is referred to as counterparty credit risk.

In contrast the party risk is zero or negative current exposure that would expect to receive a payment of (unintelligible) from the counter party and is considered to be at the money or out of the money. A party that has no current exposure to counterparty credit risk might have exposure to counterparty credit risk in the future if the derivative contract becomes in the money.

Budgets to a derivative contract often exchange collateral to mitigate counterparty credit risk. If a counterparty defaults their non-defaulting party can sell the collateral to offset its exposure. In the (unintelligible) context collateral might include variation margin and initial margin. A delay is also known as an independent collateral.

Budget exchange variation margin on a periodic basis given the term of a derivative contract is typical as defined in the variation margin agreement or by the regulation. Variation margin offsets change in the real – in the marketability of the derivative contract and the way it covers the potential loss arising from the default of a counterparty. Variation margin really not always be sufficient to cover a budgets exposure due to delays in receiving collateral are the reasons. And thus budgets may exchange initial margin.

Budgets typical exchange initial margin at the outset of the derivative contract and in amount expected to reduce the likelihood of the positive exposure amount for the derivative contact in the event of the counterparty's default without an (unintelligible) authorization. The facilities, the exchange of collateral parties may enter into variation margin agreement that typically provide for assessed hold amount in the minimum transfer amount.

The threshold amount is the maximum amount by which the marketability of the derivative contract can change before a party must collect a post variation margin. In other words, the threshold amounts will provide an acceptable

amount of under collateralization. The minimum transfer amount is the smallest amount of collateral that the party must transfer when it is required to exchange collateral of this variation margin agreement.

Budgets generally apply this count known as a haircut too non-cash collateral to account for a potential reduction in the value of the collateral during the purple between the last exchange of collateral before the closeout of the derivative contract as in the case of default of the counterparty and replacement of that contract on the market.

There are two general elements of the counterparty credit risk, the counterparty credit risk this year or default risk such that we're talking about here. If a transaction has a positive value what is the risk that a loss occurs before the final fed settlement if the defaulting counterparty is a question for a (unintelligible) of risk. It is driven by market's value and counterparty's probability of default.

The second type is Credit Valuation Adjustment or CVA or market value of expected SA-CCR. It's actually convenient to think about CV and CCI in the context of what's being measured here and were like to use this shorthand of reference in to a CVA as how to ultimately price some of the SA-CCR. What - CVA is asking the question what is the risk that the positive value of a trade deteriorates because the counterparty credit risk which is a rate without a default? CVA is driven by market value and the counterparty's credit spread.

So how they all relates to the topics of today conversation of SA-CCR? SA-CCR is a new methodology for calculating the exposure amount of derivative contract under the agency's capital regulations and provides important improvements to risk sensitivity in collaboration relative to the existing current exposure methods. You probably have heard the term (SAM).

In addition a SA-CCR is less complex and model dependent than the internal model sensibility that could be used by advanced approaches bank organization subject to regulatory approval. Under the final rule for non-advanced approaches bank organization a (safe) SA-CCR is available as an option to (SAM) because implementation of a safe (unintelligible) internal system enhancement and other operational modifications that could be costly and present additional burden.

A non-advanced approach is bank organization that elect to use a SA-CCR must use a SA-CCR to determine the trade exposure amount for it's clear derivative contract and for purpose of calculating the risk-weighted assets amount of the default fund contribution of a central counterparty or qualified central counterparty.

The federal bank regulatory agencies has jointly issued a final rule on November 19, 2020. Also it was published in the Federal Register somewhat later. The effective date of the final rule is April 1, 2020. That means that early adopters can start to use a SA-CCR starting from April 1, 2020. The mandatory compliance date of the final rule is January 1, 2020 for advanced approaches bank organization. As I mentioned before for non-advanced approaches bank organization there is a choice of whether stay the same or transition to SA-CCR.

The final rule replace the same as an alternative method for purposes of calculating advanced approaches total risk weighted assets under agency's risk-based capital rules. The final rule also requires big organizations subject to the territory one and two standards to use a SA-CCR for purposes of calculating the standardized risk weighted assets.

All other banking organization category three, category four and all other banks use of the risk-based capital (unintelligible) may elect to use the same or a SA-CCR for purposes of calculating the standardized risk weighted assets. As noted before, non-advanced approaches bank organization may elect to use a SA-CCR or (SAM).

The final rule also updates supplementary or leverage ratio for (unintelligible) to permit the use of SA-CCR in the determination of the exposure amount of derivatives included in a banking organization's total leverage exposure the (unintelligible) of the supplementary leverage ratio.

Those requirements are applicable for category one, two and three banks. The use of a (SCC) allows bank organizations to recognize client collateral in the calculation of derivative exposures and in the supplemental leverage ratio to the same extent a banking organization might (unintelligible) collateral for risk-based capital services.

So now let's a little bit skim through overall framework of same SSC and SSCI just to get the feeling of the differences between two approaches. On the current exposure method (SAM) the EAD is determined as a sum of the current regulatory exposure and potential future exposure.

Current regulatory exposure means with respect to a netting set it's the larger of zero or the fair value of a transaction or portfolio transactions that seems that the native set would be lost upon default of the counterparty. I see no recovery (unintelligible) of the transactions.

In this part I would like to direct people's attention. Current exposure is also called replacement cost. And sometimes in the context of (SAM) you will - sees a reference to a replacement cost while SA-CCR also uses this term but it

has a quite a different definition. So when you hear the term replacement cost you may immediately check under what approach has been used because it may mean a bit of different things.

In terms of both PAC for instance government agent set first percent of trade it's quite easy as the determination is first step you determine the asset class, maturity date. Then you go to get all table that is in the capital rules and figure out a word going to use it add on and then you multiple notional set rate by set percentage of add on and you are done.

Things are a bit more complicated for portfolio of trades but here again it's relatively straightforward. We calculate a gross system of the base amount of each individual derivative contract subject to the Qualifying Master Netting Agreement and GRR, the ratio of net current rate exposures to gross current rate exposure. Then we figure out a gross current rate exposure which is the sum of the positive current credit exposure of all individual derivatives content subject to a Qualifying Master Netting Agreement.

And finally, if the net current rate exposure is the greatest of zero and the net sum of all positive and negative fair values of the individual participate in this content subject to the Master Netting Agreement. It is a very straightforward method and I'm pretty sure that everybody on the call knows very well how to operationalize it.

Now let's look at the SA-CCR the input for SA-CCR are quite different and that's what we're going to spend the rest of our time today. The EAD and the SA-CCR is a product of (Alifer) times the sum of replacement cost and potential future exposure. As we will cover later, (Alifer) typically be set at the level of 1.4 unless it is applied to commercial end user counterparties. In that case the value of (Alifer) is one or millions. There is no (Alifer) there.

Replacement cost captures the loss that would occur if a counterparty were to default and be (unintelligible) out of a transaction. Multiplier allows partial recognition of excess collateral and as we mentioned before that SA-CCR utilizes (unintelligible) and offsetting the much larger degrees in (SAM). And finally add-on derived from add-ons developed for different asset classes. And the last to LMS and multiply and the (unintelligible) the result in the PFE add on.

Now let's look at those individual concepts that we covered in the previous slide. Replacement costs generally is the cost of replacing a given contract if the bank organizations counterparty defaults. A (CCTF) provides separate formulas for replacement costs depending on whether the counterparties or bank organization is required to post variation margin for an agent set. And I want to focus on this distinction.

SA-CCR is quite sensitive to both recognition of where the derivatives is margined or un-margined. And if we go further, we will see that there are different treatments for margin and on margin derivatives. In general, when a banking organization records a net positive amount of financial collateral the replacement cost would be reduced.

Conversely when the banking organization requires a net negative amount of financial collateral the replacement cost would increase. A replacement cost calculation of a (unintelligible) subject to variation margin requirement is designed to reflect the maximum possible unsecured exposure that would not trigger a variation margin call.

If the netting set is not subject to variation margin requirements or the counterparty of the bank organization is not required to post a variation

margin the replacement cost is agreed off, is the song of the fair value of the derivative (unintelligible) in terms of agent set whereas the net independent collateral amount applicable to severity of context or zero.

If the netting set is subject to a variation margin agreement such that the counterparty of the banking organization must post variation margin the replacement cost is generally the greater of the sum of the fair value of the derivative contracts within the netting set less the net independent collateral amount and the variation margin applicable to such derivative contracts and the sum of the variation margin threshold and minimum transfer amount applicable to the derivative contracts within the (agent) set less the net independent collateral amount applicable to such derivative contracts are zero. Overall replacement cost is the easiest part of the SA-CCR formula. And as we - well go further the deck, we will see the things becoming a bit complicated – more complicated quite fast.

(EFC) potential future exposure. The potential future exposure of a derivative product reflects the possibility of changes in the value of the derivative contract over a specified period. And the SA-CCR is the potential future exposure amount is based on the notional amount and maturity of the derivative construct.

Volatility is observed in the financial crisis for different classes of derivative contracts and here we have in mind interest rates, exchange rates, created equity and commodity. The exchange of collateral as I mentioned we distinguish within margin and margin data (unintelligible) and full or partial second (unintelligible) derivative contracts to chair an economic relationship.

BFE multiplier, BFE is – it's a product of multiplier plus aggregate amount where BFE multiplier decreases exponentially from a value of one to

recognize the amount of any excess collateral and the negative value of derivative (unintelligible) set. The aggregated amount accounts for full or partial offsetting amount derivative context within a hedging set the share an economic relationship as well as observed volatilities in the reference asset.

The maturities derivative contracts and they correlation between the derivative contracts and their reference exposure long and short. Generally speaking, the offsetting will be applicable within each asset class and if you go to federal you will see that a calculation for PFE will be driven by titles of different asset classes.

The PAC calculation allows a bank to fully or partially observe a derivative contract if it's in the same netting set that share similar risk factors based on the concept of hedging set. A bank then determines each hedging set the market is an asset class specific formula that allows for full or partial offsetting. And that's what I was referencing before.

So what are the asset classes asset we touched upon in the previous slide? Interest rate contracts full offset provided for contracts is in the same kind of category and there are (tenants) present, below one year, one to five years and above five years otherwise partial offset is provided. For exchange rate contract FXs full offset for contracts that are for instance, same currency payor and there are some complicated treatment for conversion of currency payers if multiple currencies are being used.

Create and equity products full offset and for credit or equity contracts that reference the same entity and partial off setting when aggregating across distinct reference entities. And finally commodity contracts. Based on commodity categories (NRG) asset and allows full offset for all derivative contracts within the same commodity category so to reference the same

commodity type. And also well so you cannot offset your grain, wheat or contracts with energy oil contracts.

Now let's go to the example and kind of trying to put this all together in a simple case that we can walk step by step. So we have a (unintelligible) set that consists of two fixed versus floating interest rate swaps that are subject to the same qualified Master Netting Agreement. And I assume that audiences familiar with the concept of the qualified Master Netting Agreement for the purpose of their (history) agreements and other purposes.

So our two derivatives, derivatives number one is interest rate swap with a future maturity of ten years and it pays a fixed (unintelligible) has a notional of $10,000 and fair value of 30. And the second derivative is interest rate swap with residual maturity of four years the (unintelligible) again the same notional of $10,000 and fair value is minus 20.

The netting set is subject to a variation margin agreement and remember it matters for us what is the rate duration margin loss, so in this case we assume that it is. And the bank organization has receipt from with the counterparty as of the calculation date variation margin and the amount of $10,000 and a usual margin in the amount of $200,000. And both the variation margin threshold and the minimum transfer amount are zero so we just assume that they don't exist and we'll slightly simplify our calculations.

So first let's do the easy step, figure out the replacement cost. The replacement cost of a netting set subject to a variation margin agreement would equal the greater of (unintelligible) members, the sum of the fair value of excluding any valuation adjustment of the derivative context within the same netting set whereas some of the net independent collateral amount of the variation margin amount applicable to such derivative contracts or the sum of

the variation margins that hold the (unintelligible) transfer amount. I shouldn't say all plus applicable derivative contracts they can set plus the net independent collateral amount applicable to such derivatives and zero.

So putting it all together from our previous people with the data we have 30 minus 20 as this is our value 200 plus ten. We as I mentioned we don't assume that minimum transfer and so hold the set at zero. So after we all – we add up all this together we are receiving the replacement cost of zero. So we are done with the first part of the SA-CCR formula.

No we have to deal with next more complicated step is to determine the potential future exposure. And here we're going to spend a bit of time. In order to determine first we need to figure out just the derivative contract amount and in order to do that we need to determine the adjusted notional amount. The adjusted notional amount has somewhat complicated formula.

But I wanted to address your attention to parameters S and E with a number of business days from the present day until the start date for the derivative contracts are zero and E is the number of business dates from the present day until they end of the derivatives contract. Those two values are handy because they will allow you to figure out the residual maturity of a contract.

So now we again just are purely plug in the numbers in the formula and we have the same notional but different tenants. And we get our adjusted notional amounts of 78,694 and 36,254.

After that now we need to look at supervisory delta adjustments. And the supervisory delta adjustment accounts for the sensitivity of a derivative contract scaled to unit size to the underlying parameter risk sector including the correct time for the different negative which accounts for the direction of

the derivative contract amount relative to the primary risk factor. Derivative contract one is low in the primary risk factor and is not an option. And being an option matters a lot in this context. Therefore this (unintelligible) delta equals one.

Derivative contract two is short and the primary risk factor is not an option therefore the (unintelligible) of data is equal to negative 5. So let's remember this week when I need this information that our supervisory delta for swap fund is one and four swap two is minus 1.

We keep going with the (unintelligible) calculations and now we need to determine the maturity sector. Assuming a margin period of risk is 15 days we again plug in 15 days into the formula and obtain the maturity factor of four and – of 0.3674. Now we can look at supervisory factor. Supervisory factor is less the volatilities observed in the derivative markets during the financial crisis and reflect potential variability of the primary risk factors of the derivative contracts over a one-year horizon.

The supervisory factor for interest rate derivatives contracts is 0.5%. And this is a set value. And if you got this role, they're all going to be listed in a table. So at this state we determine the adjust (ability) of contract amount for both swaps which is 144.57 for swap one and minus 66.60 for swap two.

After we've done this set of calculations we go to the next step. We are ready to determine hedging set amount. We plug in the numbers from Slide 23 that we just discussed and there's a hedge and set formula and obtain the hedge and set amount of 108 and 89 cents. This is probably the easiest part of the presentation because the netting set includes only one hedging set if the aggregated amount is equal to what we calculated before the hedging set amount is 108 and $.89.

If you're still with me we are getting close to finish our PAC calculations. Now we can determine the PAC multiplier by using data from Slide 25 and we again plug all in the formula of value and collateral and adjusted amount as we calculated before and get our PFE multiplier. And finally we are ready to figure out what is our PAC. Once we know the PAC multiplier, we can determine the call the product of the PAC multiplier and the aggregated amount. And in our case it is $44.79.

So where we are with this, after all those steps we finally can figure out what is our EAD for our top derivatives of SA-CCR methodology. The exposure amount of a netting set would equal the sum of the replacement cost of the netting set that we determine in Slide 17 and the PAC of the netting set that we determined on Slide 27 which multiplies by 1.4. So putting it all together gives us the number of 62.17. If those swaps are entered in the discounted parties which are commercial end-users then the value of 1.4 turns in one and as a result the EAG will be 44.79.

So if I haven't put you asleep yet let's look at some other provisions of the rule that will discounted by the credit risk. I mentioned a number of times right now is that the rule introduces the concept of commercial end user. The final rule provides relief to commercial end users by removing the I4 factor for exposure between a banking organization and commercial end users. For more derivative context the alpha vector equals 1.4 higher where no alpha factor applies to derivative context and commercial end user account (unintelligible).

I know that we received some questions about commercial end users and I will talk about it in more details later. But as a general comment commercial end user definition has been used by (unintelligible) regulatory commission

for quite a while. And the definition in adopted in the SA-CCR largely is consistent with the definitions that are present in the margin requirement on the prudential framework as well as the (CFTC) commercial and user requirement. There are variants where there are differences but generally speaking those recorded going to be quite close.

Other elements that I would like to reflect that are present in the final rule. The final rule also incorporates SA-CCR into the determination of exposure, amount of derivatives for total leverage exposure under the supplementary leverage ratio and clear transactions from work on the capital rule.

I touched on supplemental leverage ratio calculations before which apply to category one, two and three institutions. And the key element here is the for the purpose of a recognition of client margin, client initial margin the supplemented leverage ratio provide special rules.

In terms of clear transaction framework and the capital rules are you should be familiar with all framework of CCBs and QCCBs and rate exposure and default fund calculation. And the final rule effectively takes the concept of SA-CCR and puts it in this construct of a trade exposure and default fund contribution.

Note that the final rule makes technical (unintelligible) with the capital rule with respect to clear transactions and there will be also some special provision later to set out the market with this collateralized market transaction.

So that completes the formal part of the presentation and now I will turn to (Angela) to collect any questions that we received. And as I mentioned we already got some questions beforehand so let me start to address them. So one of the questions I see is how SA-CCR will be applied to supplementary

leverage ratio. So let me spend a little bit of time on this question so we all have a clear understanding who going to be on the scope here and how implementation will look. The final rule update supplementary leverage ratio transact to permit the use of a SA-CCR the termination of exposure amount of derivatives included in banking organization's total leverage exposure. If you remember the formula it will be the denominator of the supplementary leverage ratio.

And as I mentioned before the use of SA-CCR allows a banking organization to recognize client collateral in the calculation of derivative exposures in the supplementary leverage ratio to the same extent that banking organization may recognize collateral for its base capital services.

I want to emphasize this. The final rule requires category one and category two banking organizations to use SA-CCR. And category three banking organizations are provided an option to use same (OSSCCI) the supplementary leverage ratio. But like risk-based case is the same is true here.

If a category three banking organization choses to use (SAM) to calculate the total risk-weighted assets it must use them to determine the exposure amount of all derivative contracts for example the supplementary leverage ratio and the same optionality is present in the context of when you use (SAM) or a CR for non-advance (unintelligible) banking organizations for these capability.

It's the same principle you – you use it for follow on financing and it's designed to eliminate cherry picking. I'm looking at the question here that we just received. "To apply netting under the – this methodology a master institution elect making their accounting policy or can an institution of apply the netting even if their accounting election is not made?"

I assume the question is dealing with this hedging and netting is applied to hedging requirements under US GAAP. So backtracking a little bit here, as we discussed before in SA-CCR the fee methodology there are kind of the first requirements that you need to ensure is your derivatives are subject to the same QMNA, Qualified Master Netting Agreement and following that you will have an asset class specific netting and offsetting provisions and they're going - the methodology going to defer you to a bid for different asset classes. So I think based on your question the answer will be you will rely on netting provisions as they are outlined in the final rule.

Okay another question that we got is to list all the changes that were made in the final rule compared to the proposed rule. Now you'll see an explanation in the preamble of the final rule that there a number of modifications that were made, you know, that address summaries by commenters. And so a rule greatly benefited from comments of a broad constituency of stakeholders.

There was a lot of comments from banking institutions, from commercial end users from nonprofit public (unintelligible) academics and many other. So there are generally I would say four broad changes in the rule.

The first is the final rule changes certain supervisory factors for commodity derivative contracts to coincide with supervisory factors in the part of committee standard. Originally the energy bucket was compressed in the simple one and the final rule broke it down again in the same manner that (unintelligible) had it.

Second, the final rule removes the alpha factor for exposures to commercial end users. We talked to about it. Third, the final rule allows a banking organization to treat (unintelligible) to market derivative contracts as subject

to a variation margin agreement allowing such contacts to net with collateralized to market derivatives contracts of the same netting set.

And I already mentioned that the final rule would allow a clearly a member of banking organizations to recognize client collateral on the supplementary leverage ratio to the same extent the banking organization may recognize collateral for risk-based capital purposes.

And let me just stop a little bit and set out the market versus collateralized the market derivatives. Several years ago our provincial regulators if you recall issued their guidance that explains the treatment of a set of the market derivatives on the capital framework.

The general gist of that guidance was that if a clear derivative at the time it's all cleared and there is a CME and LCH rulebook if the clear derivative associated rulebook introduces as a set of the market concept where their exchange of collateral is not really a collateral but a settlement of their outstanding position than those contracts can be treated as STM via a special maturity calculations. But they should satisfy accounting opinion requirements and regulatory requirements and you can find it in the guidance.

Award was explained in the common period for NPR is that because SA-CCR distinguishes between margin then and margin derivatives it created a bit of a confusion of whether STM and CTM will end up in a different categories and won't be able to use to offset each other. And in response to that provincial regulators allowed contracts to net with collateralized the market derivatives contract of the same netting set for (unintelligible) of the market derivatives but that would ultimately means that STM have to be treated as CTM for all other purposes.

And one more change that was made in the final rule compared to the NPR is the close out period required in the (unintelligible) failure. The final rule provides that (MPOR) for those exposures cannot be less than ten business days the transaction subject to variation margin agreements that are not client facing related transactions.

The rule also introduces a concept of client facing derivative transactions that lack of the transaction from creating member to the client and in the creating frameworks and going to be some model clarifications about how client facing derivatives contracts are treated.

Okay, so let's try to do just one more question, "Where is the concept of commercial end users is coming from?" As I mentioned it - well it's not a new concept. Commodity futures rating (unintelligible) FX have been using it for a long time. And there are banking regulators, provincial regulators margin rule relies on the definition of commercial end user. So this concept that is specifically defined and introduced in the SA-CCR rule generally is mimicking to what was already in the market for quite a while.

To operationalize the exposure amount formula for derivative conduct is going to (unintelligible) use the final rule provides a formal definition. And I will - hence the legal references here so I will run through them. So if people familiar with CFT CRX it will be a bit easier for you to do the comparison.

So under the final rule a commercial and user needs a company that is using derivatives to hedge or mitigate commercial maturities and is not a financial entity listed in Section 2 H7C on (unintelligible) IL through Section 7 of the Commodity Exchange Act or is not a financial entity listed in Sections 3C of the Securities and Exchange Act. And again as a reference while we are cross referencing both a commodity exchange track that the CFTC and Securities

Exchange Act that is SEC is because while swaps, futures, options will be subject to a CFTC jurisdiction, security-based swaps and our security based products, you know, will be subject to SEC jurisdiction and that all tries to capture both of those fronts.

So a definition also includes an entity that qualifies for the exemption from clearing under Section 2 which 7A, the Commodity Exchange Act. Generally speaking, if an entity is exempt from clearing requirements it's going to be a federal exempt from margin requirements. And now is like additional I guess benefit is that it also will have a special regime for SA-CCR.

1 point I want to make because this came up in the common period that those entities include so, so-called (unintelligible) or a (unintelligible) that hedge commerciality's on the hub of parent entities that is not a financial entity and it will qualify as commercial end user subject to those regs that I listed.

Okay I - we just received another question. "Is it truly only for banks and if it (unintelligible) was approaches or would it also for banks with assets are less than $10 billion?" This is a great question. So if the bank I should get even - backtrack even more. So you recall that recently the agency finalized so called (tailoring) rules. So the capital rules at the - looking at it the probability of a standpoint here will contain both Sam and SA-CRR and IMM.

The general breakdown is that for category one and to institutions for the risk-based capital you will be able to use is an IMM (unintelligible) approach starting from a mandatory compliance date in two years. As I mentioned their January 1, 2022 is when bank category one and category two institution must use SA-CCR for the purpose of the standardized use rates.

Our category three institutions have a choice. They have a choice both for risk-based capital as well as a leverage ratio calculations. For category one and two banks there is no choice. They would have to use SA-CCR just for the purpose of supplementary leverage ratio calculation. And then at least everybody else. And everybody else will have a choice of either using Sam or SA-CCR for their purpose of the risk-based capital.

There - I think when you are talking about 10 billion you are referring to things like (triple) amendments or margin exclusions or things like that. Generally speaking, you should not be impacted unless you're category one, two and three. And if your currently have derivatives you would capitalize them under the current same approach or if you want to do so on the SA-CCR approach.

I guess so finalize is my long-convoluted response to this is that if you're using (SAM) right now nothing in this rule requires you to change your (SAM) approach for derivatives going forward. But it gives you an additional option to choose SA-CCR if you decide so.

Okay we are almost out of time and I'm looking at (Angela) here that we have no more questions. That is good. So I – I guess the last point that I wanted to make in the context of SA-CCR implementation as we went through the PAC calculation it's – I will not say it's complicated process but it's somewhat a data intensive process.

So we would expect that a banking organization that the side to go with voluntarily implementation of SA-CCR will undertake probably substantial revisions to their aspirational system that the system to be able to generate necessary data for SA-CCR calculations. And since it's probably trade off that people need to be aware the (unintelligible) SA-CCR provides for greater

(unintelligible) that is probably good. But it also requires much detail data and much more robust operational systems. (SAM) is still much more simple compared to SA-CCR. So you may want to kind of do your cost benefit analysis when you decide which approach you want to use.

In terms of our expectations we generally do not expect that all lot of smaller banking institutions will elect to go with SA-CCR at least initially because of this operational data lift that needs to happen. But it doesn't mean that somebody will now decide to do the adoption. It's absolutely up to a banking organization to decide what works the best for it.

We – when we did our calculations January just based on the structure of the methodologies directional portfolios usually do not see that much benefit on a pure numerical level because there's not a lot of netting off-settings that can take place. It's usually the balance portfolios that will more benefit from (unintelligible).

Okay and now a $1 million question. "Are (unintelligible) deduction will that be shared with the public?" I don't know actually. And I look at (Angela) and I think she looks back at me and we both don't know. So let us figure out the process for this and if you want to email me my email is (unintelligible) I will respond to you.

But generally speaking, it's absolutely consistent with the rule itself. It's more concise version but again let me check on this and I will let you know whether we can share the deck or not. I think usually we do but I don't know.

Okay, (Angela) gives me scary hand gestures. I think it means that I need to shut up. So (Angela)? Operator?

Coordinator: Yes.

Irina Leonova: I guess we are ready to close the Webinar.

Coordinator: And that concludes today's conference. Everyone you may disconnect at this time.

END