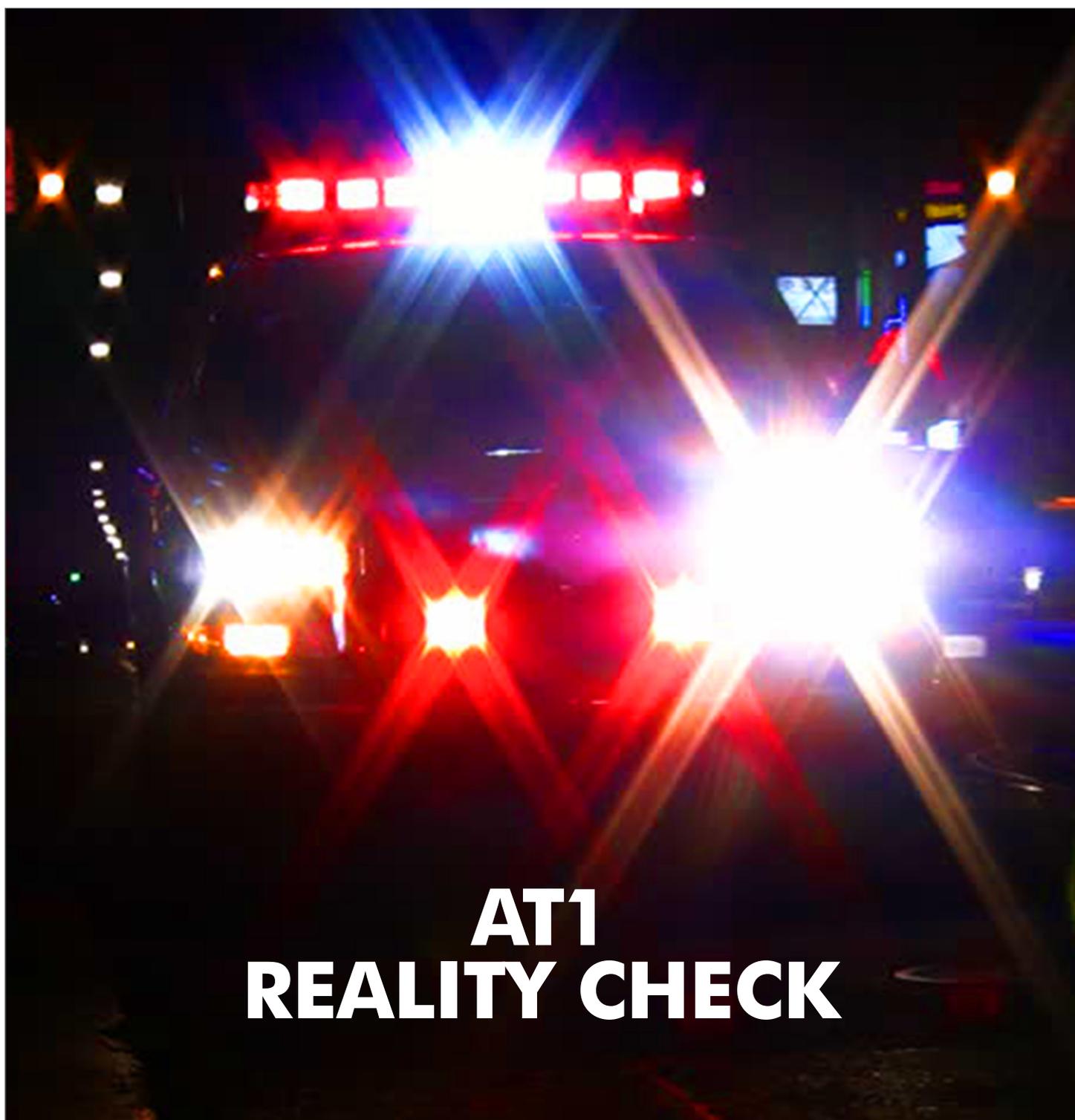


Bank+Insurance HybridCapital

With  **CRÉDIT AGRICOLE**
CORPORATE & INVESTMENT BANK



March 2020

AT1 Reality check

Financial markets' capitulation in the face of the coronavirus has proven a reality check for the Additional Tier 1 market, with prices collapsing after a booming start to the year. Here, issuers, investors and Crédit Agricole CIB's team look beyond the headlines to discuss how fundamentals, structural and regulatory changes could see the asset class develop after the pandemic has eased.

Originally conceived as a roundtable to be hosted by CACIB in London on Wednesday, 11 March, the gathering was like many events called off, but our participants kindly took time out from their market-related responsibilities to share their insights at this critical time with Bank+Insurance Hybrid Capital via one-on-one calls conducted from Wednesday to Friday of last week, and we present here their aggregated answers.

Neil Day, Bank+Insurance Hybrid Capital (BIHC): AT1 valuations compressed significantly to record levels before the equity meltdown driven by the coronavirus. What were the main drivers of this performance and were they reasonable? Was it based on fundamentals, or perhaps exuberance and vulnerable to a fall?

Ervin Beke, BlackRock: The market moves we've seen for the last two weeks or so kind of answer that, in the sense that the upward moves were quite hectic, almost euphoric, and now we are seeing a sell-off to the same extent or even larger. What happened in January-February was excessive risk-taking and people chasing the markets. There was an element of "fear of missing out" in the rally, which was quite evident in the huge order sizes for yieldy new issues. Look at the very low coupon AT1s that were done or even Greek Tier 2s: they all had huge order books, but there wasn't follow-on interest on the secondary market, which suggested people were in for a quick trade, trying to take advantage of the very strong sentiment, but once a new issue was down a point or underperformed on the break, people weren't actually comfortable holding on to or adding to that. This suggested the market was quite vulnerable and there were not many rational forces behind the rally. Now we have a furious sell-off where everybody is trying to get out of positions they should not have been in in the first place.

Sebastiano Pirro, Algebris: Valuations were actually reflecting a few things. But the main pillar was fundamentals. I used to have

20 slides on why European banks would not default in our presentations and now I have just one or two, because there's really not much to say — their capital position is very strong. We were looking for a 10 year rebuild and that has actually happened.

Then there is a structural reason why the current vintage of AT1s, the ones that were outstanding for the past few years, deserved to be tightening, which is that they have very limited extension risk. Due to a combination of regulatory reasons and the fact that coupons were very high, with low rates these AT1 are unlikely to extend. And hence if you have no coupon risk and you have no perpetuity risk, you can justify much tighter spreads, and in Europe those were still wide.

There is a distinction to be made in primary markets, where in some cases these arguments are not valid, but the bulk of the market reflected these factors and amid the good times some investors were not necessarily able to discriminate against the few that didn't.

Vincent Hoarau, Crédit Agricole CIB (CACIB): Accommodative central banks and QE started delivering in full in Q4 2019, while bank capital metrics and rating trajectories had been on the way up for quite some time. Early this year, the prospect of further central bank stimulus and rate cuts in Europe was gaining ground given the risks the Covid-19 outbreak were implying for global growth. Unfortunately, early February nobody was expecting the ultimate outcome for Europe and the cascading economic disruptions worldwide that were ahead of us — indeed, nobody wanted to extrapolate too early any potential market risks. Based



Participants:

Olivier Bélorgey, head of Crédit Agricole SA group funding and chief financial officer, Crédit Agricole CIB
 Ervin Beke, bank analyst, BlackRock
 Cécile Bidet, head of DCM solutions and advisory, Crédit Agricole CIB
 Vincent Hoarau, head of FI syndicate, Crédit Agricole CIB
 Matthieu Loriferne, bank credit analyst, Pimco

Grégoire Pesques, head of global credit, Amundi
 Sebastiano Pirro, portfolio manager, Algebris Investments
 Neel Shah, financial credit analyst, Crédit Agricole CIB
 Andreas Thiessen, head of strategic corporate finance, Commerzbank
 Neil Day, managing editor, Bank+Insurance Hybrid Capital

on the so-called “fear of missing out”, it was one-way only up to the market peak. But when the virus grabbed the headlines 24-7, the same happened to the downside — a brutal meltdown.

Now, bear in mind that the rich AT1 valuations we had a month ago should be put in the context of falling interest rates and an abundance of cash. Meanwhile, a major part of the fixed income landscape was and still is trading in negative territory. On a spread basis, we had seen tighter AT1 levels in early 2018, anyway.

Grégoire Pesques, Amundi: It was a bit of both, and indeed markets always tend to overshoot one way or the other.

There were a few factors behind the strong performance of AT1 and credit in general at the end of last year and through January. Basically, you had the classic hunt for yield — with rates staying low, this remained the game in town. We also had impetus from positive political news — the trade war was over and Italian political risk diminished, for example. And the latter drove not only the performance of Italian AT1s, but also BTPs performed massively.

Looking specifically at bank hybrid capital, it benefited from the belief that interest rates had really reached their lower bound. After a wave of cuts last summer in the face of economic fears, we had a perceived turnaround in the consensus among governments and central banks, particularly in Europe, that rates were close to where their negative impact would outweigh any benefits, notably in relation to banks. At the same time, many brokers amended their recommendations vis-à-vis the equity of financial

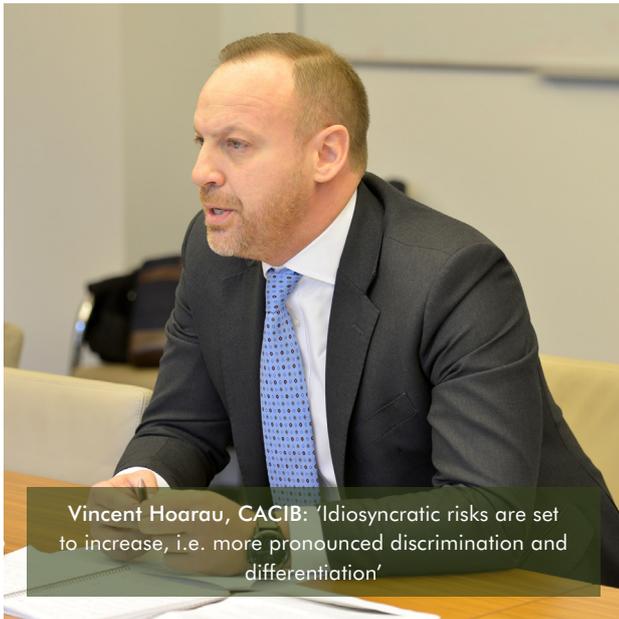
institutions, changing them to neutral, and we had a big rally on the equity side at the end of last year.

So there were a few reasons — and good reasons — that explain I would say 75% of the rally that occurred until the coronavirus hit.

Another reason why this asset class has been quite interesting is that subordination risk has been one of the better tools for investors to increase the yield of their portfolio against the recent backdrop, relative to alternatives. The classic way to increase yield is to go long duration, but given how flat the curve is and how low yields are, that’s not the most appropriate. Another is to go to high yield, but spreads have been at tight while the rating agencies are expecting increased default rates. Emerging markets are meanwhile full of specific issues. So in fact one of the main solutions to increase the yield of your portfolio has been subordination, where you have low duration versus other investment grade instruments and you don’t have much default risk. And as a result in their asset allocation investors have over the last six months increasingly looked at this asset class.

Andreas Thiessen, Commerzbank: Looking at the coupons we saw from various issuers before the crisis started, and how heavily oversubscribed some of the order books were, I would say that there was an element of mispricing. There was just too much liquidity — investors were sitting on a lot of cash and they couldn’t afford to not invest into those names that came to the market. It was just so easy to go out and print a deal.

But if you put it into the context of where government yields



Vincent Hoarau, CACIB: 'Idiosyncratic risks are set to increase, i.e. more pronounced discrimination and differentiation'

are, that's perhaps somehow the new normal, even for the highly structured credit product AT1.

Mathieu Loriferne, Pimco: While we may have been at record levels on a yield basis — reflecting the global collapse in government yields — if you look on a spread basis, we were not back to the tights of Q1 2018. We were a few dozen basis points away from some of the issuance we saw that time, such as the UBS 5%, for example. I'm not saying it was an attractive market; I'm just pointing out that we were not at the tights on a spread basis.

The problem was that the entire credit market was getting sucked in by the collapse in government yields. And in a world of tight spreads — i.e. relatively expensive valuations in credit generally-speaking — AT1 specifically still looked OK versus some of the alternatives in credit, particularly high yield.

Looking at most of the new issues that have come to the market this year, we felt that given how important resets are for this asset class, it was better to focus on the outstanding bonds: the tighter the new issues were coming, the better it was making the prior vintages of these bonds.

Neel Shah, CACIB: AT1 valuations continued to be stretched into January as investors searched for a yield pick-up over a lower-yielding risk free rate, in a continuation of the strong market momentum of 2019. Current AT1 valuations — with US dollar AT1 down some 12 points on average in the past five days — have moved from pricing to the first call date to now trading in between the first call date and perpetuity. From valuations that were signalling expensive at the beginning of the year, we have moved to cheap and now distressed, as the financial markets struggle to quantify the economic and social impact from the coronavirus.

Day, BIHC: How do you feel about how AT1 have performed since markets were hit by the outbreak?

Loriferne, Pimco: AT1 on a price basis are down between 15 and 20 points from the highs, and the bonds with longer spread duration have underperformed, which makes sense. But if I look at the asset class versus high yield then AT1 has outperformed, which validates my previous comments. If I look at the credit quality underpinning the AT1 market, given the secular re-regulation, deleveraging and balance sheet strengthening trend of banks versus the rest of the credit market, our view is that if we were to have a corporate-driven recession, banks should outperform, which is what we are seeing at the moment.

And if I may add, it goes back to a trend that we have seen over the past several years and is extremely important: who has been providing the credit risk generally speaking over the past 10 years? It's not the banks; it's the bond market. You can see that in a variety of statistics that show banks' balance sheets have not only provided muted credit growth but have in most countries shrunk, whereas the size of the bond market has increased significantly.

Pirro, Algebris: Spreads have widened materially, but mostly because rates have gone down and the majority of AT1 holders do not own a spread, they own a yield, because no one hedges that risk. And from a price perspective, there has not yet been an extreme move and we have not seen desperate conditions in the market. I would say that markets have been quite functional throughout the sell-off, and AT1 have outperformed what we have witnessed in the equity markets, for example.

Hoarau, CACIB: So, what about current valuations? It depends if you ask today or yesterday, so it is difficult to say. Look at the violent swings in the equity markets and the extraordinary market risk, plus the key element of time, which is unknown. How long are we going to have global business and everyone's lives disrupted? This will determine the cost to the global economy. Governments across the planet are now going to inject extraordinary amounts of liquidity into the system.

The question is also to what extent we are going to see asset prices decoupled from fundamentals again. If your holding horizon is long term, and you have solid reins to bear volatility, AT1 valuations are attractive. And this despite the outperformance versus corporate high yield products. Globally, investors should not be too concerned by loss absorption or coupon skips in the banking sector; it is likely to be a corporate-driven recession. Nonetheless, idiosyncratic risks are set to increase, i.e. more pronounced discrimination and differentiation. And some banks are clearly more exposed than others.

Day, BIHC: What do you think we need to see in order to have a sustainable stabilisation of markets?

Loriferne, Pimco: That's a tough question and I do not know the answer. One of the reasons the market moves are so violent is because no one really knows how to assess such a shock, and

No one really knows how to assess such a shock

so far the response from authorities, albeit significant, has trailed market expectations. The consensus anticipates a short term yet violent collapse in demand, but as the situation unfolds and given the moves in the market, it can easily turn into a self-fulfilling doom loop, where the rebound takes a lot longer to materialise, which will ultimately compound losses. We need some clear markers about the magnitude of the shock to the real economy and how the system will react to it.

Beke, BlackRock: The fiscal response is very important to the markets, and there are some countries — such as Italy and the UK — that are doing this better than others. It is quite important to be able to draw a line under the economic impact of defaults, and that can only be done with a targeted fiscal response, basically supporting those small companies or entrepreneurs in need, because not everybody can withstand one, two or three months without cashflows. That's manageable for large corporates, of course — it's a guidance cut, maybe a dividend cut — but for small shops, it's about their very existence. And indeed if you have small businesses shut for three months and they start defaulting, that affects the whole supply chain and can easily go up to some medium-sized or even bigger guys, and that can have a more meaningful impact on economies

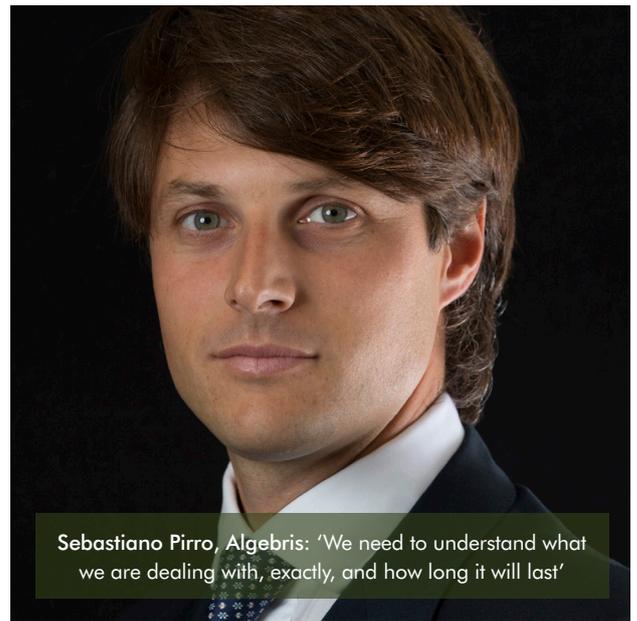
Central banks can't do too much. The US and the UK cut rates, and that improved sentiment somewhat. The ECB decided not to and to be honest I can understand their stance. Once you are at minus 40bp, how far can you go? It's already ineffective, so cutting it further will not impact anything. So it's more the fiscal side that matters. That's on the economic side.

In terms of sentiment, we would need to see the spread of the virus slowing down, because then you can start estimating how

it will end, how much closure we should assume for businesses, how much of a decline there will be, and how long it will take to normalise. In that regard, a good playbook could be watching how China develops, because they seem to have had it under control and its growth seems to be coming to an end and the economy recovering. And what should be watched closely is how European rates converge to the experience of China, whether we have the same curve in terms of increases of new cases, and if we have the same stabilisation that China has experienced, so we can know if the measures that have been put in place are effective.

Shah, CACIB: Financial markets are looking for co-ordinated global fiscal policies to alleviate as much as possible the economic shock caused by the coronavirus. We see monetary policy as an ineffective tool to improve confidence. Additionally, any stabilisation in new cases of coronavirus will be welcomed and help market confidence that we are reaching an inflection point to the crisis.

Pirro, Algebris: On the fundamental side, you can have questions about just how serious the threat of the virus is, but what is undeniable is the economic downturn occurring as a reaction to



Sebastiano Pirro, Algebris: 'We need to understand what we are dealing with, exactly, and how long it will last'

the situation. That is very real. We think mostly it's going to affect earnings, although there is a circumstance under which some of the capital buffers will be used, and I understand the way the market is moving. But the markets are functioning and there are no signs of liquidity problems, so nothing in that respect would help. Valuations are simply reflecting a worsening or a potential worsening of fundamentals that are unclear.

What do we need to stabilise things? We need to understand what we are dealing with, exactly, and how long it will last. Ideally we need to see signs of improvement, let's say maybe a sta-

bilisation of the growth in Italian cases, and then we can begin to kind of assess the likely damage from the slowdown. A three month

slowdown is perfectly manageable for all of the strong issuers — not welcome, but perfectly manageable — so then the market will stabilise.

Pesques, Amundi: The ECB package was not that bad as a first response to the situation and to be honest it was more the speech that disappointed people. But it's not really a question of whether the ECB package is good or whether it is weak. It's more a question of coordination. Each country announcing their own little bit of fiscal stimulus isn't sufficient; we need strong coordinated action among countries on fiscal measures. Coordination at the Eurozone level would send a strong message to investors and also reinforce the euro project, which still has its sceptics. That will then ease the job of the ECB and reinforce its Banking Union ambitions. Eurozone action could also be a first step towards coordination at the G7 level, which is probably even more difficult to achieve.

As well as the human and economic impact, it's a pity that these events arrived just at the time when we were finally getting the sense that the regulator was starting to be a bit more flexible and we were seeing some consolidation, with Intesa bidding

The ECB package was not that bad as a first response to the situation



Olivier Bélorgey, Crédit Agricole:
 ‘There is a high probability of there being more liquidity in the system tomorrow than today’

on UBI Banca — developments that contributed to the previous bullishness. There was some good momentum in this respect and it’s important the authorities show that this cannot be broken by a threat like the one we are experiencing. It’s during this period that we need to be even stronger and to commit even further. And so the Eurozone can win a double battle here, first against the current threat of the virus, and then the project of the Eurozone will be reinforced.

Hoarau, CACIB: We need a sustainable phase of equity recovery before the AT1 market can reopen. This can only happen when the underlying situation starts improving and the heavy flow of negative headlines stops. The mark to market volatility is extreme and it will take some time to heal the wounds. The fiscal response is likely to be extraordinary. A Marshall-plan style health response that implies a suspension of the Stability and Growth Pact in the EU is certainly what markets would like the most. This is one key to addressing the underlying problem, the virus, and subsequently stabilising markets. Lowering capital requirements, countercyclical buffer adjustments, improved TLTROs or term funding dedicated to SMEs are nice to have. But this health crisis is likely to kill more enterprises than people. Businesses need immediate assistance if you want the corporate recession to be contained. This is what investors want to see in order to fuel a stabilisation and a strong market recovery.

Day, BIHC: How do you see the market taking shape when it ultimately reopens? Will there be less exuberance? Or is it too early to even discuss that?

Olivier Bélorgey, Crédit Agricole: The very recent and notable widening we have seen simply follows a very long period of compression. And we have to look at it in relative terms: in the AT1

market we are back to the levels that we had early 2019. So it’s not a situation that should worry issuers. Of course, I don’t see issuers trying to tap this market — the volatility in equity and bond markets is so high that nobody knows where prices really are, so it would be difficult to make an issue of such a high beta instrument.

But ultimately the market will calm down when the new paradigm has been better assessed, with potentially an increase in the cost of risk. I don’t know what spread levels will be at this time, but let’s say they remain at the same level, or perhaps more probably that they again tighten somewhat. We will then be in a situation for issuers where either the yield or the reset spread, depending on the way you manage your AT1 outstanding, will in the vast majority of cases be lower than the yield or the reset spread of AT1s that bear a call, because AT1s that were issued in 2013, 2014, 2015 and that have a call date in the coming months generally speaking have higher yields or reset spreads than current market conditions.

As a result of this crisis, we can anyway expect the authorities to take some measures in order to restore the economic situation that will mean there is a high probability of there being more liquidity in the system tomorrow than today. So once the situation is a little steadier, we will be in a configuration where we have spreads and yields for AT1 lower than issuance that potentially has to be refinanced, and with a lot of liquidity in the system. So, at least for strong names, issuance won’t be a problem, and the fundamentals of this market remain very strong.

Beke, BlackRock: As I said earlier, new AT1 issues earlier this year were just too aggressive in terms of quality and pricing. In light of the recent market moves, once the market reopens, new AT1s should be healthier in structure, with the reset spread giving a more balanced upside/downside in terms of convexity, and that will be very welcome.

Pirro, Algebris: I have learned that irrespective of how volatile things get, in the end the reopening always unfolds the same way.

Wider new issue premiums will be tested and some investors will perhaps not participate. But we have lived through much worse mark to market situations, and

every time the market came back. I have no reason to believe that this time it is going to be any different. Maybe it will take some time, but rates are so low and spreads have widened so materially that we should see a good amount of demand, provided there is clarity on the fundamentals of the issuers — banks are obviously affected by an economic downturn, but they also have a lot of buffers, and there are better and worse banks. We will perhaps not initially see the ultra-tight valuations of the start of the year, which was 100% search for yield behaviour, and maybe people who are a bit more disciplined or more focused on the characteristics of AT1 that are very important will have a bit more pricing power.

Thiessen, Commerzbank: Quite honestly, it is a bit early to be discussing a reopening, because what we are seeing, especially

New AT1 issues earlier this year were just too aggressive

with the announcement of the ECB, is that markets are clearly in shock. The capital relief measures announced by the ECB, for example, have not enjoyed the reaction that was intended, but the exact opposite, because the market thinks the measures imply that the ECB expects banks to get into serious trouble. So currently there is little point in talking about the AT1 spreads at which could one issue right now, for example.

What needs to happen beforehand is a period of stabilisation. Then, before we reach the point at which issuers can come out with an AT1 again, we will firstly need to see well rated issuers coming to the market with senior preferred, with non-preferred senior, then maybe a Tier 2 and at some point in time an AT1. That's basically how I would expect this market could reopen.

Loriferne, Pimco: The pain has been so severe that it's going to take an awfully long time to get back to the conditions we had at the end of last year. In 2018, for example, the scenario was totally different, but just look at how long it took for the market to recover. If what used to be the base case even a few days ago — a short-lived problem followed by a rebound — does materialise without too much pain to the system then we can recover relatively swiftly.

Shah, CACIB: I am not expecting any AT1 issuance until we seen broader stability in the financial markets. Only once we have seen successful senior deals placed with well covered books, might we then be able to consider a strong bank issuing an AT1. Given the sharp price fall in AT1s, the market will need to reassess call risk, which was not priced correctly, as we saw in the non-call of the Deutsche Bank 6.25%. The market is currently in capitulation mode, struggling to assess the economic impact of the coronavirus on the European banking system and the broader economy.

Pesques, Amundi: The visibility we currently have is quite low, particularly as this is a new type of threat. But if we try to stay relatively calm and look at what the situation will be in nine months, a year from now, if growth is picking up slightly, what could be the end-game? It could be that yields are still extremely low — if anything both the oil shock and the virus will further encourage in investors' minds the view that yields will stay even lower for even longer, if it's even possible — unless the fiscal boost is strong enough. That would trigger the return of the hunt for yield — it's difficult to see that not happening, unless you have a recession scenario. So if you have a U-shaped scenario in mind, you have to stay calm and construct your portfolio with a lot of flexibility to make sure that when things normalise a bit you will be able to capture this opportunity.

Hoarau, CACIB: When things stabilise and markets reopen, the temptation to dive back into AT1 complacently in the search for yield will be extremely high. AT1 is and will remain the only asset class still offering anything semi-respectable — or even juicy when you look at the stock of debt with negative yields. The supply/demand dynamic will remain in favour of issuers. This has



Andreas Thiessen, Commerzbank:
'We will firstly need to see well rated issuers coming to the market with senior preferred'

not changed even if 104a is brought forward (*see below for more*). But liquidity can become a problem. It will reopen at much wider levels and will deliver a wide range of valuable yield opportunities to investors. The lower for longer rate mantra is also valid in the US now, and subsequently the entire AT1 complex, across currencies, will be supported by the zero rate environment.

I just hope we can have some discipline back in pricing and a stricter approach to back-end adjustments. Reset comparisons were often ignored before the collapse, as the market was essentially driven by liquidity and many investors were buying anything at any price. Moving coupons by almost a full point in some extreme cases showed evidence that "anything goes".

Day, BIHC: What is your view regarding the idea of green capital, green AT1? What might be the obstacles to such issuance?

Beke, BlackRock: That's an interesting one. To me, the overall ESG strategy of an issuer is more important than whether an

instrument is green or not. This is because to be able to issue a green bond, one only needs to have a green book. Even if you are the most polluting bank and

you manage to finance a windfarm, you can use that windfarm to issue a green bond — and it doesn't really help the rest of the book, which can still be polluting the environment. So I'd much prefer banks to have a good ESG policy or strategy, than just buying individual securities in the hope that it helps the overall environment.

One of the features of green bonds is that all the funding is to some extent dedicated to only green projects, and if green capital were to follow that idea, with AT1 only being used for green projects, the difficulty is how you account for that from a regulatory point of view. Is it now excluded from capital calculations because it can only be used for specific projects? What happens

I just hope we can have some discipline back in pricing

if a bank actually defaults, because the AT1 is *pari passu* to other AT1s, and must therefore absorb losses? So there are a few difficulties around the idea.

Pirro, Algebris: Would you just use the proceeds of the issuance, so the let's say €1bn issuance proceeds, to finance green initiatives, or would it actually reflect the portion of the loan book that you are using this capital for? If it's the latter, it is hard to envisage having clear traceability.

And will I be expected to pay more for a green AT1? All banks have a green side to their loan book and a black one, and it just looks like a way for banks to get cheaper deals. Frankly, they should comply 100% with the relevant requirements, not just a portion of their loan books. To me, it would be a branding exercise. I don't think it will change the world.

Thiessen, Commerzbank: I would say no to the idea of a green AT1. AT1 *per se* is a highly structured instrument and a credit instrument. In the past these hybrid instruments were at times linked to interest rate derivative structures — steeper structures, CMS, etc — so there was a situation where you had two components, the credit risk and on top of that the derivative interest rate feature. This mixing of different types of risk did not go well in the past and I see similarly problems with a green AT1. You would have the AT1 as a credit product and then the additional green component, which might affect the instrument itself — if you don't have enough green assets, for example. And if you go one step further, there are no green shares out there. So I personally think that if you want to invest green, look at the issuer; do not look so much at the instrument.

Loriferne, Pimco: Generally speaking, Pimco is extremely committed to ESG investing, to responsible investing, and has invested a lot of internal resources to support that commitment, and that's across the capital stack. At the moment obviously most of the issuance has taken place in senior and largely with European issuers, which is a reflection of the global trends with this asset class.

I'm not against green capital, but when it comes to capital, how do you bridge the gap with the fact that capital is supposed to be unallocated, fully fungible, and fully available to absorb any losses that could be hitting the balance sheet. So at this stage, I think it's more a regulatory question rather than an investor question.

Bélorgey, Crédit Agricole: To be honest, right now, I'm not really in favour of that kind of issuance. It doesn't mean we will never do that, but today the percentage of our green assets versus our total assets remains very limited — because the real economy is still very brown — and the proportion of green AT1 you have outstanding should reflect the proportion of green assets on your balance sheet.

When you issue a green preferred senior, you can of course

easily dedicate the funding to green assets. And when you issue a senior non-preferred, 80% of the price is a funding price — the relative part of the bail-in-able clause of this instrument is rather small — so you can still make the short-cut to dedicating the funding to green assets, following a certain use of proceeds orthodoxy. But when you go down to Tier 2 and even more to AT1, if you do a public benchmark issuance, the proportion of green AT1 in your AT1 outstanding will immediately be higher than the proportion of your green assets in your balance sheet — of course, it could work as a €10m or €20m private placement.

So while this is potentially tempting, right now I find the difference between the proportions would be too wide to justify. But the more our assets are green and the closer we can come to the proportions matching up, the higher the probability this would be feasible.

Pesques, Amundi: We have corporate hybrids that are green, so why not a green AT1? What could be problematic is identifying the use of proceeds across the amount of the balance sheet the AT1 supports. It will probably be more complicated than a similar audit for senior green bonds, but I'm sure people will find ways.

Hoarau, CACIB: The buy-side is clearly divided on this topic. Some investors indeed see a conceptual problem with green AT1, arguing that you raise capital to refinance a risk and not to fund your balance sheet. Meanwhile, the stock of green RWA on balance sheet is most of the time limited and as a consequence it seems difficult to envisage a green AT1 that is not associated with green-washing. You need to draw the line somewhere, and SNP is where many issuers put it.

Day, BIHC: The first wave of AT1s came up to their first call dates, with Santander under the spotlight with a non-call event and most recently Deutsche Bank skipping a call. How do you think the market will approach the AT1 instrument and issuers' call policies in light of developments?

Loriferne, Pimco: We are buying bonds with options embedded in their structure. A call option, particularly for European banks, is not a decision taken in isolation, in my view. Often, and particularly for the large frequent issuers, a call decision is also a reflection of their broader capital management. Let's not forget one thing: Why do banks issue those bonds? It's to meet regulatory demands. So if you are a large consumer of capital market funding, as a treasurer you very well know that there will be times when you can issue extremely easily and there will be times where it's a lot more difficult — like today. The key for such an issuer is to maximise its access to market, and certainly not lose that market access. So your call policy, it's a reflection of the capital management, it's also a difficult IR exercise, and clearly some banks have differentiated themselves in a very positive manner

It just looks like a way for banks to get cheaper deals



from those two perspectives, and clearly some have not. It plays a major role when we buy those instruments. As we look at these on an option-adjusted spread basis, we always take into account the extension risk, as most people do, but obviously the reason I was mentioning capital policy is one can clearly see banks who are a lot more active in managing their issuance, managing their overall capital stack, so that they don't find themselves in a position to have to take decisions that would be detrimental to their access to the market.

Then obviously there is always the economics associated with the reset. The call policy is often described as “economic” — but what does it actually mean? As there are a lot of inputs when you are assessing the economics of a call decision, it's interesting for the issuer to clarify their approach as much as they can so that there is no surprise in the market.

That said, there are obvious reasons where it does make sense to extend, and in those circumstances, I do not see much pushback from the market.

Pirro, Algebris: Deutsche is a special situation and it deserves to be looked at accordingly. In this specific circumstance, the bank is undergoing a very large restructuring. They have been able to do a good portion of it during very benign and conducive markets, and now they have the second half of it, and it's coming in unwelcome markets, and because it involves a significant amount of deleveraging and a big balance sheet reduction, I think it is appropriate for Deutsche Bank, regardless of levels, to keep more capital buffers, and because they do have a tightish MDA position and a shortfall in fully phased-in AT1, it is totally understandable that they prefer to retain it. There is also the question of justifying it from an economic perspective and it is true that in the long term the coupon is going to reset to 5% and they would never have access at that level.

I think this is a one-off. It shouldn't be followed by other

issuers, but in extraordinary circumstances these bonds are designed to do this, and this is how they should function, and every player involved should understand it. If you look at the secondary market for the new bonds they issued, the 6% in dollars, they were actually up on the day. Credit investors can understand that for Deutsche it is better to retain a bit more flexibility on the MDA — the coupon risk is your larger risk, and the extension of that bond kind of helps you from a credit perspective.

Thiessen, Commerzbank: From an issuer perspective, the approach that Deutsche took sounds very prudent.

We had similar discussions to this topic when some issuers started not calling Tier 2 instruments many years ago. Tier 2 had been issued at plus 20bp and then the cost of renewing that issue at its call date would have been, let's say, 100bp, and as an issuer you have to look at that from an economic perspective.

What does it mean for investors? Fixed income investors have certain expectations with respect to these instruments, notably that they be called, especially in an environment where we are seeing historically tight spreads. I could well imagine that investors are looking at the current vintage of these instruments and saying, well, if we are at historically low levels and issuers tend to look at it purely from an economic point of view, and we expect yields and spreads to rise in the future, then the likelihood that this instrument is going to be called might be low, or at least lower than in a higher spread environment. As an issuer, it's not necessarily only the spreads that we are looking at, but also the make-up of the capital stack, how RWAs have developed, whether the AT1 bucket needs to be filled, etc.

To be honest, the community is somehow getting used to issuers not calling these instruments. There's always a bit of hype and speculation as the first call dates approach, which is reflected in the price of the instruments, and we saw that in Deutsche Bank, too.

But when the non-call announcement came out, it lost some big figures, but just went down to where all the other issues were trading, so it was not really a shock.

Hoarau, CACIB: The risk of perpetuity is well known by investors and the market reaction to Santander's non-call last year demonstrated that the AT1 market was mature. Calls on “economic basis” only! Meanwhile, the instrument is by definition very attractive for investors, particularly when issued by well capitalised banks. Last year Santander deliberately took the decision not to call the 5.481% at the first call date, and to wait for better market and refinancing conditions. The bonds were ultimately called early this year and refinanced at cheaper levels by the issuer — a strong outcome to the benefit of everyone given the exceptional market circumstances. That was a demonstration that both issuer and investor have a mutual understanding of the rules of the game surrounding extension risk and the implication of the reset.

It's not necessarily only the spreads that we are looking at



Grégoire Pesques, Amundi: 'The approach taken by Santander is slightly costly for them, but this cost gives them flexibility, which is a good weapon from time to time'

Pesques, Amundi: When it comes to call policies, firstly, you have the regulatory framework that more or less embeds this notion of economics, and then each issuer has its own view and own way of exercising the optionality that is offered by such instruments. They do what they want and we, as responsible investors, price according to our assessment of the risk of each individual security and issuer. The approach taken by Santander, for example, is slightly costly for them, but this cost gives them flexibility, which is a good weapon from time to time.

What we clearly saw was that an issuer not calling a bond is not the end of the world. I remember that some time ago people were asked what would happen if a call were missed and they were saying there would be a contagion effect and prices would fall 20%, 30% or whatever. But it was a very good test for the market.

It's your job as an analyst to assess the credit quality, to anticipate and to know the firm and the each of the bonds, what is the optionality and how that is priced. And that's good — it makes active management more interesting.

Beke, BlackRock: It was very well telegraphed that calls will be evaluated on an economic basis, and this is how the law is written as well — that was the intention of CRD IV, basically to not have any incentives for issuers to call AT1s. For Tier 2, it is slightly different, because of the amortisation period. But for AT1s, it's been fairly clear that there is no incentive from the issuer to do anything different than to evaluate the reissue costs and the existing running costs. And it's easy to understand, it's easier to price in as well, so the market was reasonably effective in pricing instruments with their call probabilities.

And when last year Santander did not call its AT1, on the day there was a two point drop for the particular instrument without affecting the rest of the AT1 sector or the rest of Santander's liability structure. It showed investors understood that this was a

specific case for the instrument and it doesn't alter how the issuer looks at its bonds across different parts of the capital structure. It's very similar with Deutsche Bank. It's hard to really differentiate performance because of course everything is falling, with a big magnitude, but the particular instrument that was not called, DB 6.25%, underperformed to a greater extent than other DB bonds, again showing that it is something specific to that bond. But if you look at yield-to-perpetuity on DB instruments, the one that did not get called is just trading in line with other DB bonds, so it to me again highlights the rationality of investors, of not necessarily panic-selling that bond, but rather evaluating that OK, now it's a perpetual instrument, the same as some other DB bonds are, I will price it in a similar fashion, and that's reflected in yield-to-perp. In the past we had arguments that not calling an AT1 could have an effect on other parts of the liability structure, and hence the funding cost for the bank. I don't think that a good argument, because we've got different incentives and different investor bases as well in AT1s compared to preferred seniors.

Bélorgey, Crédit Agricole: This is a recurring topic, and to be honest, for me the answer is exactly the same as before — the latest developments don't change anything. The key is the different value issuers place on their medium and long term relationship with investors. Some names obviously put very little or even no value on this.

But whatever value you put on this relationship, you will still have to report to your board, or in some cases even gain their approval, and justify any trade where you might lose money by calling and reissuing a new instrument with a higher spread than the previous one by x basis points — and if x is a large number, it's just impossible. Deutsche Bank's announcement should not be a surprise to the market, because the difference is something in the area of 150bp, and you cannot justify that to your board.

An issuer not calling a bond is not the end of the world

Shah, CACIB: With the non-call of the DB 6.25%, the market clearly wasn't pricing the call risk correctly. With the reset of the DB

6.25% at 436bp versus the new DB 6.0% trading at around 825bp, the bond was trading around 400bp out of the money and with close to zero probability of being called. The bond nonetheless fell eight points on the day of the call announcement versus a fall of only two points for other DB AT1s.

I expect the market to scrutinise every call decision more closely given that 75% of AT1s now trade wider than their reset levels. The next immediate contentious call decision is from the ING 6.0% dollar AT1, which has its first call date on 16 April and with the call decision due by Tuesday (17 March). This bond has a reset of 445bp, which is roughly 150bp out of the money. We expect further non-call decisions to increase focus on the mispricing of AT1s calls.

Day, BIHC: Are there any other regulatory or structuring developments happening that you consider carry risks or opportunities?

Pesques, Amundi: This comes back to your previous question. Again, it's good to be able to give optionality to issuers in the way they want to structure their deals, for them to have this flexibility, and then it's up to us to price this and to be OK or not. And if investors are efficient, at some point each feature should be reasonably priced — which is not the case, in my opinion, when you look at the various issues.

But there has to be a balance to that. If you start to have too many different little features adding up, you don't as such have a market anymore. You need to have a minimum level of standardisation for the market to be liquid and transparent, otherwise at a certain point it becomes too costly for everybody, the issuers and investors. So while I am happy to give issuers the ability to express their active management, we need a limited number of these features, or else you will need a 500 page textbook, and that's too much. There are also features that as an investor I won't accept or will require an additional premium for. If there are too many, the issuer will realise that it's too costly. And when you want to be too clever, it's also not good for your reputation.

Hoarau, CACIB: Only really sophisticated investors look into technicalities such as coupon frequency, six month par calls, etc, when approaching new issues and pricing. The majority of investors focus on coupon headlines, reset spread, yield-to-call, relative value terms, and momentum. As a general rule, issuers should not be handed

too much flexibility for free. But issuers can have tailor-made instruments. For example, on call frequency, some investors will tell you anything shorter than five years is too aggressive. Others will say quarterly calls, OK, but only with coupons resetting on a quarterly basis as well. Many are clearly annoyed by quarterly calls with a five year reset. We can see almost everything. A year and a half ago we were even discussing FRN AT1s with investors.

In the end, as many have said, the simpler the better. To give you an example of how far it can go, we can even have discussions on the pricing impact of a six month par call although the issuer has quarterly calls on the back-end in the instrument. A bit of standardisation and simplification could be welcome.

Day, BIHC: What are your views on call frequency after the first call date?

Bélorgey, Crédit Agricole: I'm not really a fan of having frequent calls after the first call date. We manage our AT1 in terms of spread, so we hedge the interest rate risk. If I don't know if I will exercise the call tomorrow or in one, two or three months, or in one or two years, I have to keep the proceeds short term, and for a period that I don't manage I lose the benefit of the shape of the interest rate curve and it costs me some money.

Beyond that, we try to be an issuer that is predictable and straightforward in all such features. The AT1 instrument is complex enough in itself, so it's not really necessary to introduce all these very complex elements.

Beke, BlackRock: We would like to see more harmonisation in terms of the call frequency after the first call date. At the moment there are very wide variations, some banks having a five year call only after the first call date, some deciding to do annual calls, some going for semi-annual calls, and there are a few that actually have any day calls. So more standardisation would be welcome to allow us to price risk more effectively and not have to draw up different scenarios and have more deep dives on individual bonds to figure out what the fair value of that particular instrument actually is. And then once you achieve standardisation, it should open the market up to more participants. If someone is drawn to the AT1 asset class by the attractive yields, but then sees the 10, 15 different attributes and instruments, it's understandable if they get scared and shy away from the market. You already have different trigger levels, loss absorption methods, MDA levels, etc, and now we have the call frequencies that are different, as well, and reset spread, too — it's not an easy market to understand. Whenever we can achieve more harmonisation, it's always very welcome.

And this should be an easy one as well, because it shouldn't have a meaningful impact on cost, but would balance the risk-reward after the first call date. If I'm an issuer then of course my incentive is to have an any day call after the first call date, so if the

market rallies I can just call and reissue, but from an investor point of view, that caps my upside at par for the AT1s, so I don't really have an incentive

to keep that AT1 after the first call date, or it might trade differently approaching the first call date.

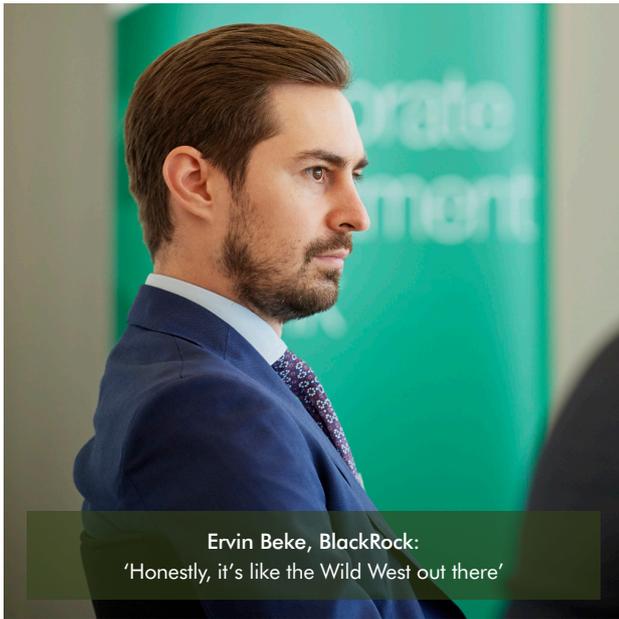
Cécile Bidet, CACIB: In spite of regulators' pressure, AT1 harmonisation hasn't fully materialised, and we are seeing a number of features sometimes with similarities within one country — Spanish banks tend to have shorter subsequent call dates than French or UK banks — but not always — German and Nordic are more disparate.

Day, BIHC: What are your views on the six month par call feature?

Thiessen, Commerzbank: The six month call period is a very valuable feature for issuers, and it's well understood in the market, and also acknowledged by the regulators. If an issuer has outstanding a €1bn AT1, for example, and knows it has to refinance it before calling, it previously had to refinance it and then only afterwards could call it, so effectively had to pay the coupon twice. This new feature offers more flexibility and is also in the interests of regulators, because at the end of the day it saves your P&L. So this is a highly welcome development.

Beke, BlackRock: I can understand the logic of this feature. Issuers want to be able to manage their coupons as efficiently as possible. But it's another way of complicating AT1 prospectuses. If we had some standardisation, with all the banks having the

Only really sophisticated investors look into technicalities



Ervin Beke, BlackRock:
‘Honestly, it’s like the Wild West out there’

same structure and adhering to that, we could accept that — it’s good for the banks and we can price it up. But honestly, it’s like the Wild West out there — some banks do anytime calls before the first call date, then different call dates after, and then we have to compare instruments that are not entirely homogenous. Investment banks are always trying to come up with innovations to make some extra fees.

Loriferne, Pimco: I find the six month call window to be an unnecessary gimmick. We are dealing with an industry that is already under tremendous pressure from a regulatory standpoint, from its lack of ability to generate appropriate returns, regulatory uncertainty, institutional uncertainty in the Eurozone. I don’t think we need to add more complexity to a product like the AT1.

The six month call window makes sense philosophically-speaking — it’s interesting. But it creates another flashpoint in your call calendar. I’m pretty sure that in five or

10 years’ time most people will have forgotten that those bonds were issued with the six month call window; the only thing they will see on their Bloomberg screen is the first call date, which is the beginning of that six month period. I can see why it makes some sense for some very infrequent issuers, and again it will depend on how they articulate their overall capital management across the stack. But for frequent issuers, it’s an unnecessary complication.

If you wanted to make calls easier, the regulators could become perhaps a little more flexible in the way banks can redeem capital instruments, to the extent it is not detrimental to financial stability. For example, it could have allowed a bank like Deutsche Bank to perhaps react to the dramatic change in the market environment and take advantage of it to accelerate their rehabilitation in the eyes of the fixed income market — taking into account the overall environment, of course. That makes a lot more sense than trying to put more and more optionality onto the structures.

For frequent issuers, it’s an unnecessary complication

Bélorgey, Crédit Agricole: The par call is an interesting feature, but it’s not a totally free lunch. Firstly, if you use that feature, you have to issue a little bit longer, so you have some basis points to pay for that — depending on the shape of the curve it could be more or less, but it is not totally free, even if the option in itself is valued at zero. Depending on the way you manage your AT1 in terms of interest rate risk, there could be a further cost. If you manage it in absolute yield and don’t hedge the position at all, it’s clearly a feature that is very interesting. If you manage your interest rate risk and hedge the issuance, then given the uncertainty in the maturity you cannot optimise your hedge, so that has a cost, too. This cost is certainly lower than any cost of potential double carry, so it is an interesting feature, but we have to bear in mind that it’s not a totally free lunch.

Bidet, CACIB: The six month par call that emerged as a feature in 2019 provides refinancing flexibility to issuers. This is particularly attractive for issuers in a world where the pre-financing period — implying a double cost of carry — could reach 12 months. It somehow also gives greater call certainty to investors as the issuer has a six month window rather than a set date. On the other hand, the possibility for issuers to do liability management on capital instruments in the first five years of an instrument’s life that was introduced with CRR2 will remain an exception as it is more cumbersome to use — requiring the regulator’s approval removes some of its attraction.

Day, BIHC: Do the issuers find the possibility of liability management within the first five years of an instrument’s life appealing?

Bélorgey, Crédit Agricole: Well, to be honest, we know the five years rule and we have to play by it. If you ask for liability management before five years, well, is it possible six months before, one year before, three months before? Where do you draw the line? Five years is a rule that is very simple — let’s stick

to it and manage our position within this constraint. I don’t really see the benefit of trying to gain three months, four months or so on. So for me it’s not a real question.

Thiessen, Commerzbank: I believe this is dependent upon a very specific situation for an issuer at a particular moment. Per se, I would say there’s a minimum requirement for the lifetime of these instruments, and therefore it’s not intuitive to talk about liability management in these cases, so I guess it’s probably rather something that is very institution-specific.

Day, BIHC: Will banks have to deal with legacy Tier 1 issues in the coming years as a result of CRR1 and CRR2?

Thiessen, Commerzbank: What stakeholders should be aware of is that if they say, you have this legacy instrument, you’ve got a call date here, or you could do a LM there, and basically force

you to redeem these instruments, that might look easy from an outside-in perspective. But just imagine two banks having undergone an M&A process where you take on a legacy instrument from the entity being acquired and you have things like PPAs (purchase price adjustments) — these are effects that you do not see from the outside-in view. This is something that could hit your P&L right at the moment you are forced to call an instrument, which is something regulators shouldn't want. So you simply need to be cautious about how hard any requirement to get rid of these instruments will be.

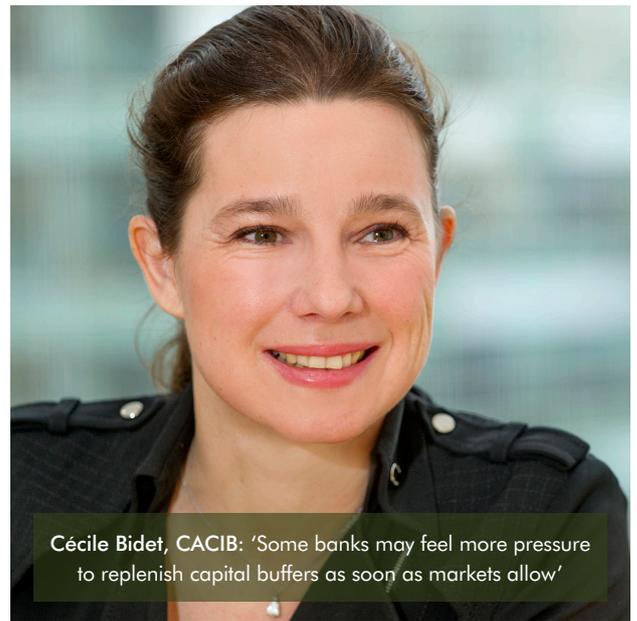
And then, if they do not count instruments as Tier 1 anymore, you might consider to check whether you can count them for MREL, or even just for liquidity purposes — I guess if spreads widen significantly, these instruments could again from an economic point of view be interesting simply as a liquidity provider.

Bélorgey, Crédit Agricole: There will be an issue, in that our legacy Tier 1 are grandfathered, but only until to a certain date. But we have already either called the main part of these instruments or done some liability management because it was economic to do so. So although we will have to manage this situation, the outstanding is decreasing year after year, and it's not such a big issue.

Day, BIHC: Article 104a offers the possibility of more flexibility in capital management for banks. How will issuers take advantage of this opportunity? Aggressively, with lower CET1 and more dividends? Or defensively, with lower CET1 to absorb RWA inflation? Will the market accept lower CET1? Will this lead to higher AT1 and Tier 2 issuances? When will the volumes materialise?

Bidet, CACIB: There is a general understanding that Article 104a's purpose is to help banks face risk weighted assets inflation — be that TRIM, but mainly that stemming from the finalisation of Basel III. The decision by the ECB on Thursday (12 March) to bring forward its implementation immediately confirms that this measure had always been a defensive one. In terms of issuance, with the current dislocated market we won't see high beta products until markets have stabilised. Our expectations were always that issuers would not rush into issuance; our estimates were around €40bn over the next three years, taking into account that not all banks would optimise their capital structure. That said, with pressure on RWA due to increased NPLs or IFRS9 provisions, some banks may feel more pressure to replenish capital buffers as soon as markets allow.

Thiessen, Commerzbank: Banks may anyway already run their Tier 2 layer above 2% to ensure that if they face, for example, an RWA shock they don't get into a Tier 2 deficit — in our case, we are currently somewhere north of 2%. With the change being brought forward, that effectively gives us relief on CET1 right away, as we can fulfil part of our P2R with that excess Tier



Cécile Bidet, CACIB: 'Some banks may feel more pressure to replenish capital buffers as soon as markets allow'

2 capital. Our P2R is set at 2%, that's public knowledge, and we know we can then bring in 50bp in Tier 2 to fulfil that 2%. And then Tier 2 is cheaper than AT1, so it's quite logical that banks would probably look at having enough Tier 2 to fulfil their 2% layer plus their proportion for P2R. In our case, with the US dollar issuance in AT1 last year we have only started building up our AT1 layer, so as we are currently not already fulfilling the 1.5% bucket, AT1 is not currently on my agenda when it comes to P2R. But with Tier 2, clearly that is something we are looking at. And I imagine a lot of other issuers are, too — put it this way: issuers who have excess capital in their AT1 and Tier 2 buckets will benefit from day one.

Loriferne, Pimco: This is a pragmatic response from European regulators to the problems banks have faced vis-à-vis regulatory uncertainty and an inability to make money. One of the major concerns we've had for years now is the extremely weak equity valuations of European bank stocks.

If you think about it, the decision to implement Article 104a is not a major releveraging of the industry — not at all. Yes, there will be a little bit more of AT1 supply, but the biggest impact is on the equity side, because given how low market caps are, even a small push from the regulators to allow for a small releveraging of the capital structure is equivalent to high single-digit of market cap.

For us creditors, investing in banks that have unquestionable access to equity and much expanded market caps is a good thing.

Beke, BlackRock: The impact of this is of course more AT1 and Tier 2 issuance. It's a supply risk for the sector, but it should be very well absorbed. We knew that it was coming; now it is coming sooner than expected. It's not something that I would be particularly worried about. If we look at the markets, we have bigger worries than some extra potential supply, when it comes to pricing.

Five years is a rule that is very simple — let's stick to it

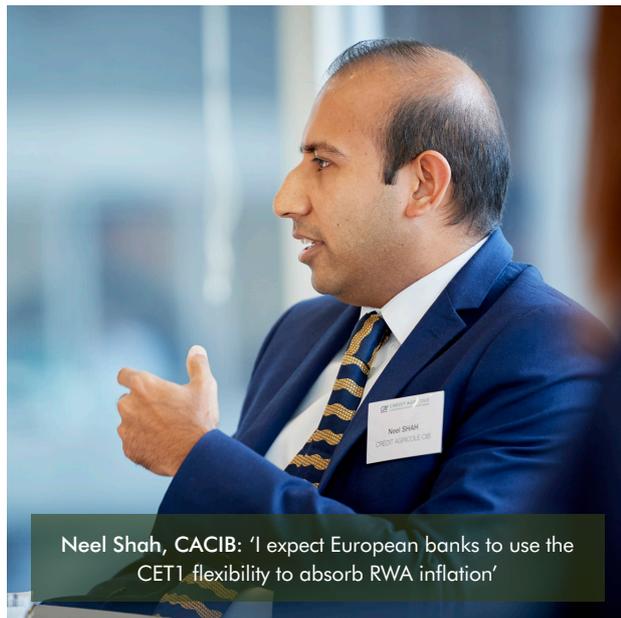
Bélorgey, Crédit Agricole: The 104a issue is a question we discussed extensively during our last roadshow in London. Crédit Agricole is in a sense in an atypical situation because at group level, which is the relevant level for credit investors, we have such capital buffers that this question is not really relevant. At CASA level, which is the issuing entity, the question is more relevant, and it can indeed be an opportunity, and this is something we will consider in due time — probably in conjunction with the way we envisage managing Basel IV requirements. This is for us today an open question, the way we will answer it is not yet defined, it has not yet been discussed at any level with our governance body, so I cannot take any position, but clearly this is an open question for tomorrow.

Shah, CACIB: At their full year 2019 results, European banks provided cautious guidance on how they will implement the improved flexibility from Article 104a. Banks are still battling to understand the full impact of multiple regulatory headwinds. Most European banks currently run with excess AT1 and Tier 2 capital above minimum requirements and will benefit from the increased flexibility (currently enjoyed by UK banks), so over the medium term, this flexibility will be incorporated into their capital planning. With the impact of the coronavirus impacting the economy and the banking system, I expect European banks to use the CET1 flexibility to absorb RWA inflation (regulatory and asset quality). The current funding environment is not economically attractive for subordinated issuance, but I would expect most banks to take advantage of the flexibility provided.

Day, BIHC: Will Basel IV also lead to a surge in capital instruments issuance? AT1, Tier 2 and even SNP? What do you expect as timing for any issuance increase due to Basel IV?

Bélorgey, Crédit Agricole: We will have to see how it is transposed in Europe, but Basel IV will increase RWAs and hence the need for Tier 2 and AT1 issuances. Whether it will present a challenge will potentially depend on whether or not you are a strong issuer. With the excess of liquidity in the market, demand will be much higher than the supply. In that sense, for stronger issuers, at least for Crédit Agricole, I don't see Basel IV as a problem or a challenge in terms of AT1, Tier 2 issuances. On the contrary, I consider it an opportunity for investors, because the probability that we will have higher needs is there, and we will potentially offer investors more paper with attractive yields.

Thiessen, Commerzbank: Whether we ultimately see RWA inflation, and if so how much we see, is hard to tell, because the discussion is not only ongoing within banks, but also on the regulatory side. It's not the case that everything is carved in stone and banks just have to apply it for us to know exactly what's going to happen; there's still a lot to be decided.



Neel Shah, CACIB: 'I expect European banks to use the CET1 flexibility to absorb RWA inflation'

Day, BIHC: Are there any other areas with respect to AT1 where you anticipate regulatory developments?

Pirro, Algebris: Bank capital is fast-evolving, so although I haven't heard anything definite on the regulatory front and nothing is necessary, the more you look at AT1, the more it looks kind of obsolete from a trigger perspective, and so we might see updates on that. Over time the capital is looking increasingly non-going concern, where coupons cannot be skipped. Perpetuity is probably the only intelligent feature that works given that, as Deutsche and Santander have shown, it can extend, and do so in times of stress and be under no pressure to refinance.

Thiessen, Commerzbank: Maybe one other point where I have a very strong view is the whole discussion — or maybe I should say non-discussion — about increasing trigger levels. When I speak to regulators I get absolutely no sign that they would be interested in raising triggers for AT1s. I'm hearing that from investment banks, of course, because issuers having to replace their instruments would mean bigger wallets. But quite frankly, there has been a lot of issuance since the instrument was introduced in 2014 and

It looks kind of obsolete from a trigger perspective

if we now start changing the trigger and requiring issuers to use different or higher triggers going forward, then we have again a situation where we have new legacy instruments that we have to deal with, with phase-in or phase-out rules. This is absolutely unnecessary and there is no value in this discussion. I don't like this idea of changing that structural feature now, requiring all the instruments in the capital stack to be changed once again, because it's all established, it's all there.

For that reason, I wouldn't even look at features like flexible triggers, for example, stating in the documentation that the trigger is 5.125% but could change due to regulatory or supervisory requirements. I won't do it because I don't want to open up this discussion or even show that I'm willing to adapt to that. ●

Disclaimer

This material has been prepared by Crédit Agricole Corporate and Investment Bank or one of its affiliates (collectively "Crédit Agricole CIB"). It does not constitute "investment research" as defined by the Financial Conduct Authority and is provided for information purposes only. It is not to be construed as a solicitation or an offer to buy or sell any financial instruments and has no regard to the specific investment objectives, financial situation or particular needs of any recipient. Crédit Agricole CIB does not act as an advisor to any recipient of this material, nor owe any recipient any fiduciary duty and nothing in this material should be construed as financial, legal, tax, accounting or other advice. Recipients should make their own independent appraisal of this material and obtain independent professional advice from legal, tax, accounting or other appropriate professional advisers before embarking on any course of action. The information in this material is based on publicly available information and although it has been compiled or obtained from sources believed to be reliable, such information has not been independently verified and no guarantee, representation or warranty, express or implied, is made as to its accuracy, completeness or correctness. This material may contain information from third parties. Crédit Agricole CIB has not independently verified the accuracy of such third-party information and shall not be responsible or liable, directly or indirectly, for any damage or loss caused or alleged to be caused by or in connection with the use of or reliance on this information. Information in this material is subject to change without notice. Crédit Agricole CIB is under no obligation to update information previously provided to recipients. Crédit Agricole CIB is also under no obligation to continue to provide recipients with the information contained in this material and may at any time in its sole discretion stop providing such information. Investments in financial instruments carry significant risk, including the possible loss of the principal amount invested. This material may contain assumptions or include projections, forecasts, yields or returns, scenario analyses and proposed or expected portfolio compositions. Actual events or conditions may not be consistent with, and may differ materially from, those assumed. Past performance is not a guarantee or indication of future results. The price, value of or income from any of the financial products or services mentioned herein can fall as well as rise and investors may make losses. Any prices provided herein (other than those that are identified as being historical) are indicative only and do not represent firm quotes as to either price or size. Financial instruments denominated in a foreign currency are subject to exchange rate fluctuations, which may have an adverse effect on the price or value of an investment in such products. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party without the prior express written permission of Crédit Agricole CIB. No liability is accepted by Crédit Agricole CIB for any damages, losses or costs (whether direct, indirect or consequential) that may arise from any use of, or reliance upon, this material. This material is not directed at, or intended for distribution to or use by, any person or entity domiciled or resident in any jurisdiction where such distribution, publication, availability or use would be contrary to applicable laws or regulations of such jurisdictions. Recipients of this material should inform themselves about and observe any applicable legal or regulatory requirements in relation to the distribution or possession of this document to or in that jurisdiction. In this respect, Crédit Agricole CIB does not accept any liability to any person in relation to the distribution or possession of this document to or in any jurisdiction.

United States of America: The delivery of this material to any person in the United States shall not be deemed a recommendation to effect any transactions in any security mentioned herein or an endorsement of any opinion expressed herein. Recipients of this material in the United States wishing to effect a transaction in any security mentioned herein should do so by contacting Crédit Agricole Securities (USA), Inc. United Kingdom: Crédit Agricole Corporate and Investment Bank is authorised by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and supervised by the ACPR and the Autorité des Marchés Financiers (AMF) in France and subject to limited regulation by the Financial Conduct Authority and the Prudential Regulation Authority. Details about the extent of our regulation by the Financial Conduct Authority and the Prudential Regulation Authority are available from us on request. Crédit Agricole Corporate and Investment Bank is incorporated in France and registered in England & Wales. Registered number: FC008194. Registered office: Broadwalk House, 5 Appold Street, London, EC2A 2DA.

© 2020, CRÉDIT AGRICOLE CORPORATE AND INVESTMENT BANK. All rights reserved.



actively promoting
responsible
growth



www.profil-design.com

Crédit Agricole Corporate and Investment Bank includes social and environmental criteria in its financing policies, proving its will to act in favor of responsible growth.

www.ca-cib.com