The rise of KVA

As more banks start pricing capital costs – or KVA – into their derivatives trades, questions are multiplying. In the first survey of its kind, global and regional banks give their answers. By Nazneen Sherif, with research by Max Chambers

Need to know

- During July, *Risk* asked banks how they are recognising the impact of rising capital requirements on their trading businesses.
- The survey is the first of its kind to test consensus on the evolving discipline of capital valuation adjustment (KVA).
- A majority of respondents now price KVA into at least some trades upfront, and agree KVA is the biggest of the various pricing adjustments to have emerged in the post-crisis period – the so-called XVAs.
- Survey respondents calculated a KVA of up to €400,000 for a generic interest rate swap with a notional value of €100 million, when facing a BB-rated counterparty, but their numbers were very different.
- There are also clear divisions on many other points: banks vary in the portion of the total KVA they pass along, in whether and how to anticipate future regulatory changes, and the modelling of customer behaviour.
- For the article and analysis that accompanies the survey results, *Risk* spoke to XVA specialists at 12 banks – not necessarily the ones that participated in the survey.

It is difficult or impossible to hedge, threatens losses for the industry in the multiple billions of dollars, and could force banks to rethink some of their businesses – these are some of the key findings from *Risk*'s survey on capital valuation adjustment (KVA), a new component of trade pricing that reflects growing capital costs.

The respondents are split on many of the 23 questions in the survey, but there is agreement that if banks were to recognise the full cost, and to revalue existing trades in the same way that has happened for funding valuation adjustment (FVA), the impact would be huge.

"The number can be very large. It has the potential to affect financial results in a very significant way. These are monumental charges," says one head of quantitative research at a US bank.

As an example, survey respondents calculated a KVA of up to €400,000 for a generic interest rate swap with a notional value of €100 million, when facing a BB-rated counterparty.

A total of 10 respondents from different institutions participated in the KVA survey – the first to consider the topic – including representatives from three major global banks, five regional banks, one development bank and one trader at a global bank offering an independent opinion. Participants were spread across Europe, the US and Australia. *Risk* discussed the findings with 12 different dealers for this article, but those quoted did not necessarily participate in the survey.

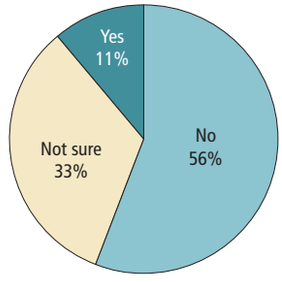
The idea behind KVA is fairly straightforward – capital costs are rising, and banks need to ensure they are being compensated.

"We started pricing it simply because we have to. Our return on allocated capital has suffered because of certain market moves," says Nicki Rasmussen, a chief analyst in the counterparty credit and funding trading desk at Danske Bank in Copenhagen.

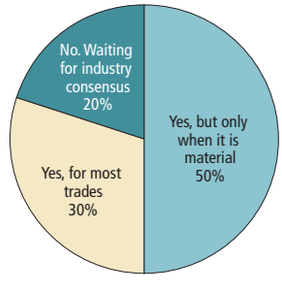
But that is about all the industry agrees on. KVA started out as a simple hurdle rate, and is now being priced into at least some trades by eight of the respondents. The methodology used, the attitude to accounting, and the amount of the cost passed on all vary – three respondents pass on as little as 30–50% of KVA, while two pass on 70–100%.

As with the arrival of any new derivatives pricing adjustment – now known collectively as the XVAs – banks that incorporate the costs ahead of the pack risk being priced out of trades. Nine survey respondents said their fixed-income desk is the most affected by the charge, as they typically enter into long-dated trades that

Q1 Do you think it is sensible to introduce an unobservable parameter like KVA into P&L (market cost of capital)?



Q2 Do you include KVA in trade pricing for clients?



generate significant risk-weighted asset (RWA) totals, against which capital is calculated.

"Long-dated derivatives could become significantly more expensive, as until recently the true costs weren't reflected," says Socratis Tapeinos, a director in XVA trading, RWA, balance sheet and leverage optimisation at Deutsche Bank in London.

The size of the KVA charges can be significant – six respondents said KVA is equal to or larger than credit valuation adjustment (CVA), which compensates banks for counterparty risk, and FVA, which was a big focus for many banks during 2013 and 2014. In total, those two years saw 24 banks revalue their derivatives to recognise FVA – the funding costs and benefits associated with uncollateralised trades – booking a collective $6.2 billion loss.

"KVA is the biggest of them all and often more than half the total XVA charge. If you knew CVA was 10 basis points and FVA was five basis points, you have got to guess the full KVA is going to be at least 15bp and possibly more," says Jon Gregory, a London-based independent XVA expert.

Given the size of the add-ons, some dealers say they can only pass on a portion of the total KVA cost, or they would never win a trade.

"I wouldn't expect someone to charge the full thing. For a new concept starting in the industry, charging circa 50% is a good way to test the waters without killing yourself," says one XVA trader at a large European bank.

Getting it right

While the concept of KVA is fairly straightforward, calculating it is not. Banks need to project the capital needs of a trade over its lifetime, which requires two big calls. First, the future changes to the capital regime; and second, the length of time for which the trade will be allowed to run.

In the survey, seven respondents said they factor in potential future regulatory changes to some degree. Some take a cost based on a blend of two regulations if they are in the process of shifting from one regime to the other.

Guessing how long a client will leave the trade in place is just as challenging. As the KVA on a 30-year swap would be aggregated over its life, the add-on could be enormous, but charging it all upfront would be overkill if the client only keeps the trade on for a few months.

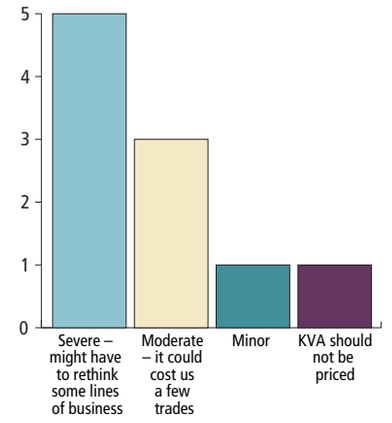
The same problem exists for CVA and FVA, and some banks factor client behaviour into these adjustments. The same approach is being used for KVA.

"We segment the portfolio by end-user type and assess behaviours. At the end of the day, management judgement has a greater impact on our pricing that is linked to capital," says one risk manager at a second large US bank.

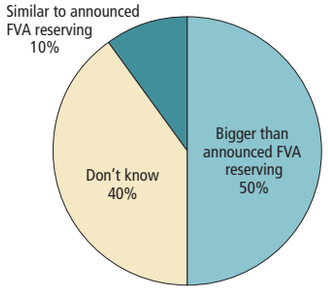
Deutsche Bank's Tapeinos suggests a more mathematical approach, in which banks run statistical analysis based on past behaviour and any indications from clients as to their strategy, in order to predict the expected average real life of the trade – rather than using the derivative's actual maturity.

Another major dealer does not make assumptions about counterparty behaviour at all. "Unless we are absolutely convinced they will exit, we usually assume they will hold until maturity. For strategic transactions, if you have a very clear view on the deal and the client, you can model that. For day-to-day business, you have to assume you have the transaction up to maturity," says the bank's head of credit trading.

Q5 What impact do you think pricing KVA has on your business?



Q9 If you do take an accounting reserve in the future, do you expect it to be…



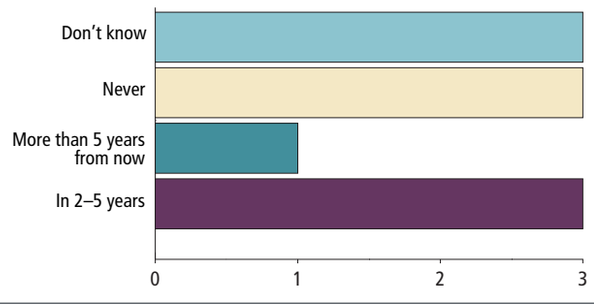
The new accounting debate

Another big question is whether the reported fair value of derivatives portfolios should be adjusted to include KVA, raising the prospect of another round of multi-billion-dollar write-offs. According to one source, the charge estimated by one second-tier dealer was in the region of €1 billion; in contrast, the largest FVA charge by far was the $1.5 billion at JP Morgan.

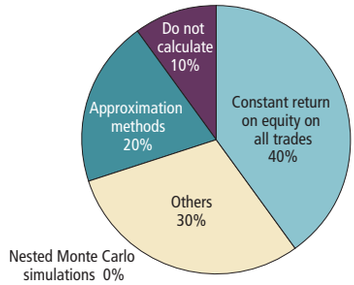
Accounting standards currently do not force banks to recognise FVA or KVA in derivatives fair values – they only state the fair value must reflect the price a company would pay to exit the position. KVA is very bank-specific, however – dealers can have different capital regimes or internal return-on-equity (ROE) targets, so the KVA one dealer would charge might be some distance from that of a counterparty it was novating the position to. It's also impossible to know ahead of time which dealer would be buying the position.

Khalid Yaqobi, head of the counterparty credit risk quantitative models and solutions team at Crédit Agricole Corporate and Investment Bank (CA CIB) in Paris says banks could benchmark their KVA costs by taking an industry average across the Street – a similar approach to that used by banks

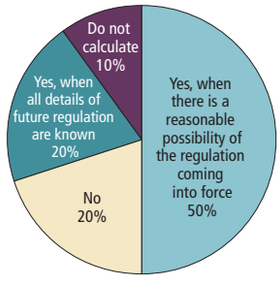
Q7 When do you think you will be required by accounting standards to take a reserve for KVA?



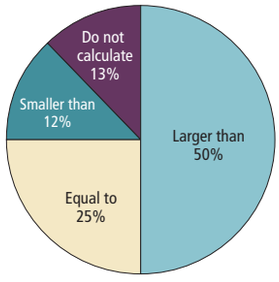
Q15 What method do you use to calculate KVA?



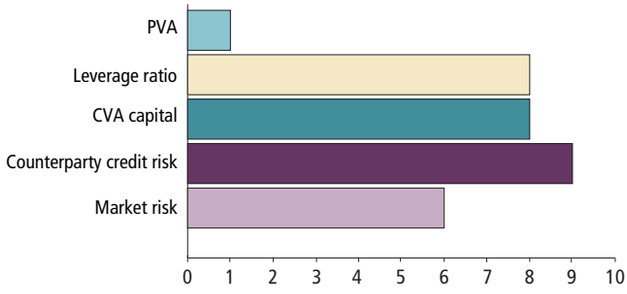
Q17 When considering capital requirements, are future regulations included?



Q20 KVA is ... our largest XVA (excluding KVA) in size



Q18 When considering future capital requirements what elements of regulatory capital are included?



when calculating the FVA component of an exit price.

In practice, a lack of data for KVA could make this tricky. "You know it is there somewhere in the price, but trying to strip it out is quite difficult. That is why this will take time to emerge," says Maurice McCormick, a partner in the financial services division at consulting firm EY in London.

The *Risk* survey asked whether banks will be required by accounting standard setters to take a KVA charge: three expect it within the next two to five years; one said it might take longer than five years; and three said it should never be a formal accounting requirement.

EY's McCormick believes some banks are preparing to voluntarily take the plunge: "I wouldn't be surprised to see some institutions taking it through this year. The final couple of hurdles will define whether they will get a precise number; that will decide whether they take it this year or next. This is something banks are looking at very seriously," he says.

Below, we have highlighted some individual answers to various questions in the survey.

Q3 and Q4. Do you include KVA in trade pricing for clients? On average, what percentage of KVA do you charge?

Eight out of 10 respondents, including four regional and four global banks, price KVA into their trades (see figure 2).

"I would say major banks would certainly look into it right now, but the smaller regional banks sometimes don't even charge CVA and certainly not FVA, so that surprises me a bit," says Jerome De Vasconcelos, European head of structured credit trading at Societe Generale Corporate & Investment Banking (SG CIB).

The triggers for regional players to price KVA can vary. Danske's Rasmussen says falling interest rates during the post-crisis years, coupled with the new capital regime, caused a rise in the capital costs of some outstanding trades. One head of valuation control at a regional European bank says the impetus to consider KVA initially came from the impact Basel 2.5 had on credit derivatives after the rule was finalised in 2009. Its use at the bank has expanded from there.

Although most banks include KVA when pricing, only two of the six who responded to the question pass more than 70% of the cost along. Four firms, including both regional and global banks, charge between 30% and 70%.

Retaining market share is a major factor. "You want to be competitive. You don't want to be so aggressive that people start stepping away from your trades. My guess is the respondents are trying to be cautious in the beginning, before understanding how their pricing model works," says the regional bank's head of valuation control.

Q5. What impact do you think pricing KVA has on your business?

Five out of 10 respondents said the impact would be severe and may force them to rethink some lines of business – all of the global banks that participated in the survey belong to this group. Three considered the impact to be moderate, potentially causing them to lose some trades (see figure 3).

The impact varies by regulation and by bank, influencing behaviour. For instance, some banks may have a very healthy leverage ratio, but face tighter RWA limits, so might seek to charge fully for RWA-heavy trades while competing more aggressively for trades with a bigger impact on leverage exposure.

"It does really lead you in a certain direction from a business model perspective – you might do certain types of business because they are more RWA-efficient, even if they are less leverage ratio-efficient. We assessed our cost associated with hedging and reducing RWA and we wanted to make sure we were charging that appropriately even if it meant we missed some business," says Ian Harris, head of CVA trading at Credit Suisse in London.

As a rule, long-term macro rate businesses are more RWA-constrained, whereas the leverage ratio is more relevant for prime services and prime brokerage.

Deutsche Bank's Tapeinos argues KVA's impact depends to a large extent on how disciplined banks are being at calculating it and incorporating it fully in prices. "In the fullness of time, the impact will be on the major side. The fact it is not major already is firstly due to

resistance to change and secondly, people haven't implemented it fully. But I think eventually some sort of self-selection will prevail and some segments of products may indeed become uneconomical for banks," he says.

The ongoing overhaul of market risk capital rules – the *Fundamental Review of the Trading Book* (FRTB) – is expected to add to the impact, with draft versions of the new regime generating big increases in capital (*www.risk.net/2410149*).

"It will be quite different before the FRTB and after. It will be much higher after," says a risk manager at a second large European bank.

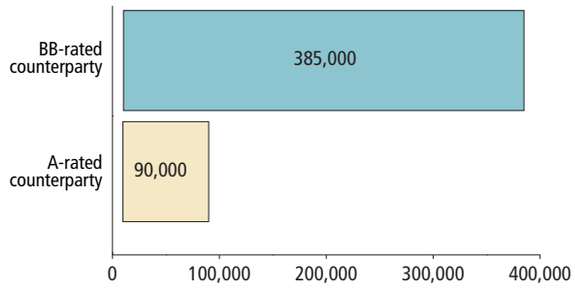
Q7. When do you think you will be required by accounting standards to take a reserve for KVA?

Respondents are split on this question, with three saying it will happen in the next two to five years, one saying it might take longer than five years and three saying it should never be an accounting charge (see figure 4).

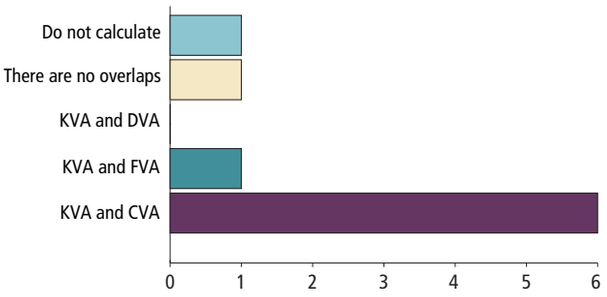
Banks could choose to account for it voluntarily, as happened widely with FVA, but there are strong views on how it should be done.

When banks restated earnings based on FVA, it was taken as a reserve to cover the funding costs of their trades over its lifetime. Some argue KVA should not be given the same treatment. Unlike FVA, KVA is seen as a profit – the return banks should make on trades to distribute to shareholders. Taking a reserve makes sense to cover costs, but not to record profits – which usually change hands on day one.

Q21 Price range of KVA for a plain vanilla, five-year, uncollateralised receiver swap of 100 million notional



Q23 What overlaps do you think exist between KVA and the other XVAs?



Credit Suisse's Harris worries the bank- and jurisdiction-specific nature of the capital requirements included in KVA calculations could lead to huge differences among reported numbers if banks were to account for them. "We do see people ignoring or just missing certain aspects of the regulation in their pricing – those where we are not so aggressive. It can't really be applied as an accounting adjustment unless it is the same for all participants – otherwise you would get arbitrages. And part of the reason you are going to get differences is because national regulators have some freedom to apply rules in different ways," argues Harris.

> "KVA is the biggest of them all and often more than half the total XVA charge. If you knew CVA was 10 basis points and FVA was five basis points, you have got to guess the full KVA is going to be at least 15bp and possibly more" Jon Gregory, XVA expert

"Return on capital is not a cash cost, it is a profit. If you took it to the accounting statement, there wouldn't be any profit. It is a completely below-the-line item and shouldn't manifest in any kind of reserve or holding back of profit and loss (P&L) associated with the transaction. What you would effectively be doing is turning a mark-to-market instrument into an accrual instrument, because then you wind up accruing P&L instead of taking it from day one," says the risk manager at the second US bank.

Quants do not see these as major issues. "It basically gets down to treating a derivative as a project and looking at all the inputs to that project and accounting for them. It is nothing exotic from an accounting point of view," says one XVA quant at a third European bank.

Ultimately, some say, as was the case with FVA, if markets price it in, banks will have to account for it. "You can grumble about it and say people are doing it wrong, but ultimately the markets cannot be ignored. The moment capital costs become clearly visible in prices, you must find a way to deal with it," says the quantitative research head at the first US bank.

Q9. If you do take an accounting reserve in the future, do you expect it to be bigger/similar to/smaller than announced FVA reserving?

Six out of 10 respondents estimate KVA will be equal to or larger than their announced FVA losses, implying losses that could easily reach the double-digit billions.

Large dealers have tended to announce roughly similar FVA losses – most recently, the $468 million and $474 million charges taken in the fourth quarter of 2014 by Morgan Stanley and Citi. At the other end of the spectrum, FVA charges include a €15 million loss at Allied Irish Banks and a C$30 million loss at Scotiabank (*Risk* April 2015,*www.risk.net/2402050*) (see figure 6).

"I am not surprised by the magnitude. This is directly proportional to the balance sheet of the

bank. In the same way that CVA and FVA are proportional to how much business you do and with what clients," says the XVA trader at the first European bank.

This relationship allows for a rule-of-thumb estimation of firm-wide KVA. For instance, the adjustment typically assumes a 10% return on equity, whereas FVA, reflecting the cost of borrowing, might be charged at closer to 1%. "When you look at the regulatory capital firms set aside, those are numbers in the billions. Take 10% of that, roll that forward for many years and add it all up. You end up with a very big number – running into many billions," says the quantitative research head at the first US bank.

Q15. What method do you use to calculate KVA?

There are two principal inputs to KVA. One is the trade's price, based on its future path; the other is the amount of capital it will consume over its life – both require simulations and a huge number of computations.

The precise way to do this would be to run one simulation within the other – a so-called nested Monte Carlo simulation, which is extremely complex and time-consuming. The easier option is to use approximation methods and run fewer simulations.

Among the respondents, none use nested Monte Carlo simulations and only two use approximation methods. Four banks charge a constant ROE on all trades – that is, they apply the same charge uniformly across all trades based on a wider ROE set as a target at the firm or business level by the management (see figure 7).

While cruder, this approach may help align the trades with the bank's strategic objectives. SG CIB, for example, models future KVA changes, but applies a constant ROE to all trades – not necessarily a bad thing in terms of encouraging consistency.

"The cost of capital is assumed to have a long-term target, which I think most institutions on the Street would have," says SG CIB's De Vasconcelos. The return is then adjusted for each type of product. "For some businesses that are plain vanilla and are a core part of the business, we have a lower charge, and for very sophisticated products where we could have operational risks, we would want a higher return on equity," adds De Vasconcelos.

While some warn this runs the risk of mispricing KVA, one head of modelling at a second regional European bank argues there is no right answer. "The recipe for KVA is mixing together many different ways of computing exposures – and we also see KVA overlapping with other charges." In other words, while trying to be rigorous, one might systematically and incorrectly misprice KVA, including incorrectly assessing the size of any double-counting.

Q17. When considering capital requirements, are future regulations included?

One of the biggest challenges in calculating KVA is the lack of a crystal ball. Any bank that wants to correctly calculate the lifetime capital costs of a 30-year swap, for example, needs to anticipate every change in the regulatory framework during that period. A lot can change in three decades, of course – 30 years ago, the first Basel capital accord was still a glint in its creators' eyes.

"Capital requirements will continue increasing; that means you have to take a very conservative view on transactions, in which case you will be completely left out of the market" Jerome De Vasconcelos, SG CIB

Given the gestation period for major new rules, the near-term agenda is fairly clear, but a lot can still change between a first draft and a final one. For trading businesses, the big incoming items are the FRTB, which is due to be finalised this year, the capital floors framework – which will limit the amount of capital relief available to modelling banks – the revised standardised approach to counterparty credit risk (SA-CCR), and the leverage ratio, which is already defined, but still has to be calibrated (*www.risk.net/2410521*, ***Risk*** July 2015, *www.risk.net/2414136*, ***Risk*** August 2015, *www.risk.net/2420128*).

This creates a lot of uncertainty. For instance, the leverage ratio is currently based on the current exposure method (CEM) first published as part of the first capital accord, but it could be replaced by the SA-CCR (*www.risk.net/2418486*). The minimum ratio, meanwhile, is expected to be set anywhere between 3% and 5% for European banks.

"This is where it becomes as much an art as a science. In contrast to other components of XVAs, it rests on getting the best quant team to calculate the theoretically correct current KVA value, as well as getting the best possible advice from your regulatory policy team of what is going to be coming along, what will be most impacted and projecting this into the blend of the values you need to bake into KVA," says Deutsche Bank's Tapeinos.

Many appear to share this thinking. Five out of 10 respondents said they factor in future regulation when there is a good chance it will come into force, two claimed they do it only if all details of the regulation are known, while two said they don't model future changes in regulation at all (see figure 8).

Choosing the latter course of action is convenient for two reasons. It makes the calculation simpler, but also – probably – lower, says SG CIB's De Vasconcelos: "Capital requirements will continue increasing; that means you have to take a very conservative view on transactions, in which case you will be completely left out of the market. Forecasting future requirements may be the right thing to do, but not many will do it – it is a strategic question for management."

Q18. When considering future capital requirements, what elements of regulatory capital are included?

Banks estimate KVA arising from a number of regulatory capital requirements. Among respondents to the survey, all banks that calculate KVA include counterparty credit risk capital, seven include CVA capital and the leverage ratio, but only six include market risk capital. One bank also includes the prudent valuation adjustment, which is a deduction from Tier 1 capital, and reflects the possibility that accounting standards may overstate the value of some positions, particularly in stressed markets (see figure 9).

The relatively low number for market risk may reflect the fact that the FRTB will soon replace the current regime (*www.risk.net/2410149*).

"I would be tempted to say this is due to the fact some respondents do not consider future

regulations. So far, for a well-managed bank, market risk has been much lower than other components. But in a few months everyone will compute it because of FRTB – they will feel forced to include it," says the head of modelling at the second regional European bank.

Danske Bank's Rasmussen, on the other hand, argues market risk capital is not that big a deal when compared to the leverage ratio. "Today, it is reasonably low compared to the rest of the risks. If you talk about leverage ratio, it could be four times bigger than market risk," he says.

Q19. Considering only the following XVAs: CVA (including DVA), FVA and KVA, how would you assess their typical relative magnitude?

Of the nine banks that responded, four picked KVA as the largest XVA, out of which three said CVA was their second biggest add-on. Two picked CVA as their largest XVA. None chose FVA as the largest adjustment (see figure 10).

The head of modelling at the second regional bank argues KVA is pushed up the leaderboard because it cannot be eliminated by collateralising trades, as is possible with CVA and FVA. It means collateralised trades, which are typically in the majority, have to be taken into consideration when calculating the capital add-on.

Q23. What overlaps do you think exist between KVA and the other XVAs?

CVA, DVA, FVA and KVA are relatively new measures – as a result, the boundaries between them are not fully understood or properly policed. Double counting could cause banks to overcharge their clients.

The overlap between KVA and CVA has been widely flagged, with six banks agreeing it exists. Only one bank sees an overlap between KVA and FVA, while another claims there are no overlaps at all, if the right methods are used to calculate the numbers (see figure 11).

"It is a question of how you calculate KVA as a function of how much you hedge your CVA. If the regulator does not recognise a capital relief due to your CVA hedge, you must take the full RWA on your balance sheet – the two are completely additive. Otherwise, there is an overlap," says De Vasconcelos. While the extent of the overlap has not yet been analysed rigorously, he estimates it to be around 30–40% based on what he observes in the market. **R**

Respondent details	
Major global bank	3
Major regional bank	5
Development bank	1
Independent trader	1
Total	10

Q1 Do you think it is sensible to introduce an unobservable parameter like KVA into P&L (market cost of capital)?	
No	5
Not sure	3
Yes	1
Number of respondents	9

Q2 Do you calculate KVA on a trade-by-trade basis as a hurdle rate?	
Yes, for most trades	2
Yes, for some trades	5
No	2
Number of respondents	9

Q3 Do you include KVA in trade pricing for clients?	
Yes, for most trades	3
Yes, but only when it is material	5
No, we are waiting for an industry consensus	2
Number of respondents	10

Q4 On average, what percentage of KVA do you charge clients?	
70–100%	2
50–70%	1
30–50%	3
Number of respondents	6

Q5 What impact do you think pricing KVA has on your business?	
Severe – we might have to rethink some lines of business	5
Moderate impact – it could cost us a few trades	3
Minor impact	1
KVA should not be priced	1
Number of respondents	10

Q6 Which desk would be the most affected if KVA is priced into trades?	
Fixed income	9
Don't know	1
Number of respondents	10

Q7 When do you think you will be required by accounting standards to take a reserve for KVA?	
In 2–5 years	3
More than 5 years from now	1
Never	3
Don't know	3
Number of respondents	10

Q8 Do you expect to start recognising KVA in the accounting statement regardless of whether it becomes an accounting requirement?	
We are waiting for an industry consensus	3
No plans	6
Number of respondents	9

Q9 If you do take an accounting reserve in the future, do you expect it to be…	
Bigger than announced FVA reserving	5
Similar to announced FVA reserving	1
Don't know	4
Number of respondents	10

Q10 Can KVA be hedged?	
Yes	2
Only partially	5
There is no way to hedge it	3
Number of respondents	10

Tables continue overleaf

Q11 Do you have a KVA pricing/ management function set up?

Yes, it is an integrated resource management function covering CVA, FVA and KVA	5
Yes, it is a separate KVA management function	1
Planning to set one up in 2016	2
No plans	1
Don't know	1
Number of respondents	10

Q12 How do you address the regional differences in capital treatment in pricing?

Respondent 1	We don't
Respondent 2	We don't
Respondent 3	Not applicable to us – we are regulated globally by a European regulator
Respondent 4	We operate under a single regulator but pricing is adjusted for some regional differences such as tax rates and interest rate differences

Q13 How do you address different modelling options in capital (standard rules vs IMM vs floors at national level, etc)?

Respondent 1	There is really no choice as you can only pick one with regulatory blessing. Once done, you can switch to others
Respondent 2	Approximation and simplification
Respondent 3	According to relevant approach
Respondent 4	We take all into account
Respondent 5	We use IMM when possible – standard approach is too expensive
Respondent 6	We are currently limited to standard rules

Q14 How is the capital priced?

Cost of capital to the business (e.g. trading floor)	5
Average cost of capital to the bank	4
Do not price	1
Not priced – controlled by desk capital allocation and desk budget	0
Risk assessment of trading desk	0
Number of respondents	10

Q15 What method do you use to calculate KVA?

Approximation methods	2
Constant return on equity on all trades	4
Nested Monte Carlo simulations	0
Others	3
Do not calculate	1
Number of respondents	10

Q16 What sort of computation is it based on?

Lifetime computation	8
We don't calculate KVA	2
Number of respondents	10

Q17 When considering capital requirements, are future regulations included?

Yes, when all the details of the future regulation are known	2
Yes, when there is a reasonable possibility that the regulation will come into force	5
No	2
Do not calculate	1
Number of respondents	10

Q18 When considering future capital requirements what elements of regulatory capital are included? Tick all that apply

	Market risk	Counterparty credit risk	CVA capital	Leverage ratio
Respondent 1	Do not calculate			
Respondent 2	✓	✓	✓	✓
Respondent 3	✓	✓	✓	
Respondent 4	✓	✓	✓	✓
Respondent 5		✓	✓	✓
Respondent 6		✓		✓
Respondent 7	✓	✓	✓	✓
Respondent 8		✓	✓	✓
Respondent 9	✓	✓	✓	✓
Respondent 10	✓	✓	✓	✓

Q19 Considering only the following XVAs: CVA (including DVA), FVA and KVA, how would you assess their typical relative magnitude?

KVA > FVA > CVA	1
KVA > CVA > FVA	3
CVA > FVA > KVA	1
CVA > KVA > FVA	1
Don't know	2
Do not calculate	1
Number of respondents	9

Q20 KVA is … our largest XVA (excluding KVA) in size

Larger than	4
Equal to	2
Smaller than	1
Do not calculate	1
Number of respondents	8

Q21 For a plain vanilla 5-year, uncollateralised receiver swap of 100 million notional, what percentage of the notional of the swap is your KVA for: a) an A-rated counterparty and b) a BB-rated counterparty?

	Range based on responses
A-rated counterparty	0.01–0.1%, 10,000–100,000
BB-rated counterparty	0.015–0.4%, 15,000–400,000
Number of respondents	4

Q22 Are future capital requirements conditioned on counterparty and/or bank survival?

Both counterparty and bank survival	3
Counterparty survival	5
Bank survival	0
Do not calculate	1
Number of respondents	9

Q23 What overlaps do you think exist between KVA and the other XVAs?

KVA and CVA	6
KVA and FVA	1
KVA and DVA	0
There are no overlaps	1
Do not calculate	1
Number of respondents	9