Comment on *Review of the Credit Valuation Adjustment Risk Framework* issued by the Basel Committee on Banking Supervision

Japanese Bankers Association

We, the Japanese Bankers Association ("JBA"), would like to express our gratitude for this opportunity to comment on *Review of the Credit Valuation Adjustment Risk Framework* issued by the Basel Committee on Banking Supervision (the "BCBS").

We respectfully expect that the following comments will contribute to your further discussion.

. General Comments

(1) Consideration of characteristics of the business models of individual banks and markets Excessive emphasis on ensuring consistency with the fundamental review of trading book (FRTB) should be reconsidered, and the measurement models should be designed in a manner to appropriately capture actual risks, considering differences in the business model between commercial banks and investment banks

Review of the credit valuation adjustment (CVA) risk framework proposed in this consultative document assumes the investment bank business model and the existence of high-liquid credit default swap (CDS) markets, and place emphasis on consistency with the FRTB. However, introducing a one-size-fits-all framework that does not consider the fact that actual risks differ across banks would be contrary to the intended objective of the CVA risk regulation to maintain banks' soundness and reduce un-level playing field globally. Additionally, such framework may have a negative impact on real economy as banks may change their strategy on derivatives. Since derivatives transactions conducted under the commercial bank business model support hedging activities which are based on customers' actual demand, such derivatives are expected to be held to maturity. This significantly differs from the investment bank business model and how CVA is recognized for accounting purposes, the effective management method for CVA differs across banks. Consequently, it is not appropriate to introduce a CVA risk capital requirement in a uniform manner in accordance with the FRTB framework.

The regulation that overemphasises the consistency with the FRTB should be reconsidered in order to establish a framework that appropriately captures actual risks unique to individual banks, based on the characteristics of business models and market environment. It is also requested to consider excluding actual demand-based hedging transactions with non-financials from the scope of this proposed framework.

(2) Basic CVA (BA-CVA)

Measurement models that do not reflect actual risks and result in excessively conservative capital requirements should be revised, because such models would have a negative impact on real economy through an increase in hedging cost based on actual demands of small and medium-sized enterprises

The BA-CVA has a material issue of calculating excessive capital charge relative to actual risks since the parameter RWb is determined in a manner to ensure consistency with the FRTB.

The consultative document published by the BCBS in December 2009 indicates that, during the recent financial crisis, losses arising from counterparty defaults accounted for 1/3 of the entire losses arising from counterparty credit risks, whereas losses from CVA represented 2/3 of the entire losses. Based on this, the ratio of capital charge between default risk and CVA risk should be 1:2. However, according to the estimation made by some of our member banks, for example, the proposed BA-CVA would increase this ratio to about 1:7. (The estimation by respective banks is made based on actual portfolios that cover all counterparties, SA-CCR applied exposure at default (EAD) and CVA capital charge calculation in accordance with the consultative document.)

Such capital charge that significantly deviates from actual risks, if introduced, would lead to a considerable increase in hedging cost which is based on customers' actual demands, thereby having a negative impact on real economy. In particular, since many of the financial institutions using the BA-CVA are expected to be regional financial institutions, there is a concern that the BA-CVA would have significant impacts on small and medium-sized enterprises which are main customers of such regional financial institutions. Further, derivatives markets would scale down in the regions such as Asia where the advanced measurement approach is not widely used. This would undermine the financial stability due to increasing volatility in derivatives markets.

In view of this, a framework that results in excessive and conservative capital charge relative to actual risks should be avoided. We therefore strongly request the BCBS to review the level of capital charge.

In reviewing the level of capital charge, we propose to establish buckets used for determining RWb in a manner to sufficiently reflect credit quality of counterparties and review liquidity horizon. (*See "Specific Comments" section below.*)

(3) FRTB-CVA

The FRTB-CVA eligibility criteria should have certain flexibility, taking into account differences in the business model, market environment, accounting standards and other elements

The FRTB-CVA sets forth as eligibility criteria the regulatory CVA calculation using market implied PD and the establishment of a CVA desk responsible for risk management and hedging of CVA. The FRTB-CVA eligibility criteria, however, should have certain flexibility, taking into account differences in business models and market environments across jurisdictions and financial institutions. Banks with the commercial bank business model calculate accounting CVA using historical PD based on sufficient customer information obtained through transactions such as loans. In such a case, it is desirable to calculate regulatory CVA using historical PD. When historical PD is used for accounting CVA calculation purposes, a strategy to hedge only certain counterparties when necessary should be permitted. This is because, since the needs for hedging is limited due to a low volatility in CVA, CVA hedge does not need to be carried out in an agile manner for all counterparties.

In addition, these should be reviewed to allow more flexibility so as to appropriately reflect accounting standards in respective jurisdictions. The framework is reviewed assuming that IFRS is the international accounting standard, and does not take into account local accounting standards in respective jurisdictions. Therefore, if this framework is implemented even by jurisdictions where IFRS is not introduced, a gap between accounting and capital requirements would widen. For example, for banks which recognise CVA for accounting purposes using historical PD under the commercial bank business model, shifting to the FRTB-CVA would increase a discrepancy between regulation and accounting. Such consequence would contradict to the initial purpose of Basel III intended at the time of implementation, which is to appropriately reflect changes in profits and losses attributable to CVA in regulatory capital requirements.

(4) Considerations for finalising the framework

The framework should be finalised by revisiting the proposed framework through the second consultation and based on an additional quantitative impact study (QIS)

If the framework is introduced as proposed in this consultative document, the excessive level of BA-CVA capital charge and eligibility criteria for FRTB-CVA that are not in line with actual practice may give rise to a change in banks' preference toward the transaction type, thereby having a negative impact on the business activities of customers. Consequently, in finalising the framework, both the public and private sectors should fully discuss impacts arising from changing the framework in order to avoid any disruption to real economy. The proposed framework therefore should be revisited through the second consultation, taking into account as many opinions as possible including

our comments described herein.

Additionally, firms subject to the QIS conducted are limited to 50 specific large counterparties. The number of counterparties, however, is not considered sufficient to assess the impacts on the entire portfolio and individual transactions such as project finance. Therefore, we believe that it is crucial to perform an additional QIS based on dialogue between the public and private sectors and identify the comprehensive impact prior to finalisation of the framework.

Further, in addition to analysing this framework on a stand-alone basis, the interaction with other requirements currently being reviewed or discussed, as well as the overall effect of requirements, should be fully discussed. Hence, this framework should not be finalised prematurely.

(5) Timing of applying the framework

Sufficient lead time and appropriate transitional arrangements should be ensured

Since the measurement methodology will significantly change, a considerable amount of work is required to comply with the proposed framework, including system development and establishment of a risk management framework (such as establishing a CVA desk) and obtaining approval from the regulators for a new measurement method. (In particular, the implementation of the FRTB-CVA would require a considerable time.) Given that banks are required to address various changes in the regulations such as implementation of SA-CCR in January 2017 and the FRTB to be finalised, sufficient lead time should be ensured before applying the framework, so that banks can completely implement regulatory requirements.

Further, if the new CVA methodology is introduced ahead of OTC derivatives margin requirements, the risk amount measured might excessively increase. The CVA risk framework therefore should be implemented only after September 2020, in which the OTC derivatives margin requirements are fully implemented, at the earliest. It is also expected that the review of the CVA risk framework would significantly change the capital charge for existing credit exposures and profitability. Accordingly, appropriate transitional arrangements should be taken, for example, by allowing exclusion of existing credit exposures from the scope.

<<BA-CVA>>>

(1) Excessively conservative capital charge relative to actual risks

<u>Capital charge should not be increased to a level that significantly exceeds the ratio of CVA losses to</u> <u>defaults observed in times of recent financial crisis, i.e. 1:2.</u>

As indicated in the General Comments Section, the proposed level of BA-CVA capital charge is excessively conservative, and does not appropriately reflect actual risks as specified below. However, according to the estimation made by some of our member banks, the proposed BA-CVA would increase the ratio between credit risk-weighted assets and CVA risk-weighted assets from about 1:2 to about 1:7.

- For 10-year derivatives transactions executed with a financial firm, the ratio would increase from 6 times to 9 times as compared to the current ratios for investment grade firms (AAA-BBB grade) and 3 times to 6 times for non-investment grade firms (BB-B grade).
- Based on the proposed formula and RWb under the BA-CVA, it is assumed that the risk weights (RW) of 10- to 20-year long term derivatives transactions would range from 1,000% to 3,000%. This is overly conservative relative to the risk weights under the current framework. In particular, for derivatives transactions such as interest rate swaps, which are embedded in a long-term loan contract, such as project finance, it is difficult to execute a hedging transaction that uses CDS. There is also a concern that the level of capital charge may be significantly conservative since the EAD is expected to increase after the implementation of SA-CCR.

As discussed above, the BA-CVA requires capital charge at a level that could be regarded as punitive. Since the RW under the current standardised method is calibrated, including the stress calibration to reflect the financial crisis, it is not reasonable to considerably change the level of capital charge due to the current proposed review of the framework. In order to deliver an appropriate framework, the BCBS is requested to review the proposed framework by, for example, reducing RWb so that the capital charge under the revised framework would equal to the level measured under the current standardised method through QIS.

In particular, the following (2) to (5) should be considered to ensure an appropriate capital charge.

(2) Time horizon for determining RWb

Time horizon for determining RWb should not be uniformly set to one-year. The liquidity horizon should vary depending on the buckets.

RWb provided in the BA-CVA is based on RWb for the SA-CVA credit spread in order to ensure consistency with the FRTB, with scale-up to one-year horizon (250 days). The level of RWb therefore has significantly increased as compared to the level under the current standardised method. It is not realistic to assume that the shock observed during the period of Lehman Crisis would last for a year. Such assumption seems to be a key factor for the BA-CVA framework to require excessively conservative capital charge relative to actual risks.

Time horizon for determining RWb shall be changed from the proposed treatment to uniformly apply one-year horizon to determine liquidity horizon depending on the buckets. (In other words, the same risk weights as those under the SA-CVA defined in paragraph 58 on page 21 should be used.) According to the estimation made by some of our member banks, if the liquidity horizon for determining RWb varies depending on the buckets, the ratio between credit risk weighted assets and CVA risk weighted assets is expected to be about 1:4.

(3) RWb table by industry and investment grade that does not fully take into account counterparties' credit quality

The buckets for determining RWb should appropriately reflect credit quality of counterparties.

Since credit quality of counterparties is a crucial factor to appropriately capture variability in CVA, this should be appropriately captured in calculating capital charge.

The buckets for determining RWb under the BA-CVA, however, consider credit quality of counterparties based on the two levels - investment grade and non-investment grade – to ensure consistency with the FRTB. However, given that, under the current standardised method, there are six levels of risk weights which are defined based on the external rating of the counterparty, the proposed framework would be less sophisticated in terms of its capability to capture credit quality. The capital framework should be designed to be more risk sensitive to capture actual risks, rather than to ensure consistency with FRTB. Therefore, at least the current granularity (six levels) should be maintained.

In addition, if RWb of non-investment grade would be applied to those counterparties with no external grading, risks of counterparties with no external grading but high credit quality would be unduly measured as high, leading to an inappropriate treatment of such counterparties. Consequently, in assessing the investment grade status (investment grade or non-investment grade) of counterparties for determining RWb under the BA-CVA, consistent with the current framework, the internal rating of those counterparties with no external rating should be mapped to external rating, and counterparties with internal rating equivalent to external rating of BBB or above should be treated as investment grade.

In determining RWb by industry and investment grade, the proposed approach to match sectors and risks globally and directly lacks objectivity and reasonableness because credit quality of counterparties within the same sector may vary across jurisdictions and individual companies. Accordingly, there is a concern that such approach may not appropriately reflect actual credit quality of counterparties.

For example, under the RWb table proposed in the consultative document, RWb of financials with investment grade is higher than RWb of health care sector with non-investment grade. In general, however, RWb should be set to a lower level for those counterparties with investment grade. If the proposed level of RWb would be retained, it is requested to provide reasonable grounds supporting such treatment.

Given the above, we believe that RWb by industry sector and investment grade under the BA-CVA is inappropriate, and hence do not support the introduction of such RWb, unless reasonable grounds are provided.

(4) Effective maturity

The treatment of effective maturity should be reviewed (establishing a 5-year cap and removing a 1-year floor).

Under the formula for calculating CVA risk capital requirements under the BA-CVA (Current framework: standardised method; Framework proposed in the consultative document: BA-CVA), capital charge is proportionate to the uncapped maturities. A 5-year cap is applied in the current exposure method (CEM) in calculating add-on for transactions such as long-term interest rate swap. This cap, however, will not be applied in the SA-CCR which will be implemented from 2017. As a result, maturity would have a more impact on the EAD calculation. The proposed formula which applies uncapped maturities in calculating CVA risk capital charge would count duration risk at both EAD measurement and RW determination. Such formula therefore would result in an excessively conservative capital charge; in particular for derivatives transactions such as an interest rate swap embedded in a long-term loan contract including project finance. Further, capital charge could hardly be reduced by hedging effects because hedging using CDS is not generally available for these transactions.

As an illustrative example, assume a 20-year interest rate swap transaction for a derivative embedded in a loan agreement for a project finance; with an external rating of BBB and industry bucket 3. As a result of comparing the ratio of CVA risk weighted assets to notional amount, the resultant ratio under the CEM and the standardised method is both at the level of 5.5%, whereas this

ratio increases to 32.6% (5.9 times as compared to the current formulas) once the SA-CCR is implemented. This ratio further increases to 106.4% (19.3 times as compared to the current formulas.) (Please note that estimation are made assuming that MTM=0.)

A significant increase in risk-weighted assets from those calculated under the current formulas as shown in the above example would drive a sharp increase in capital cost in executing such transaction. Such situation would significantly disincentivise the use of derivatives transactions which support real economy. The current specification of the proposed formula that calculates capital charge in proportion to the uncapped maturities should be reviewed, and appropriate measures such as cap the maturity with 5 years should be taken. Table 1 presents an increase (by the times) from the current formulas and the impacts when mitigation measures are taken for the derivative transaction illustrated as an example.

[Table 1] Increase in the ratio of CVA risk-weighted assets to the notional amount (expressed by the times)

[Assume internal rating equivalent to external rating of BBB, Sector 3 (Basic materials, energy, etc.), Interest rate swaps, MTM=0]

				Proposed approach in		Proposed mitigation		
	Current	From Jan	From Jan. 2017		consultative document		measure	
EAD	CEM	SACCR		SACCR		SACCR		
CVA Risk	Standardised	Standardised method		BACVA		BACVA (5-year cap)		
calculation	method							
Duration	Ratio to notional	Ratio to notional	Comparison	Ratio to notional	Comparison	Ratio to notional	Comparison	
	amount	amount	with the	amount	with the	amount	with the	
			current level		current level		current level	
10	3.4%	12.6%	3.7times	41.2%	12.0times	20.6%	6.0times	
15	4.6%	22.7%	4.9times	74.1%	16.1times	24.7%	5.4times	
20	5.5%	32.6%	5.9times	106.4%	19.3times	26.6%	4.8times	
25	6.2%	41.5%	6.7times	135.5%	21.7times	27.1%	4.3times	
30	6.8%	49.2%	7.3times	160.7%	23.7times	26.8%	3.9times	

As a result of estimation made by some of our member banks for the entire portfolio, if a 5-year cap is applied to the maturity, the ratio between credit risk-weighted assets and CVA risk-weighted assets is about 1:5. Whereas, if the revision of liquidity horizon proposed in (2) above is reflected, the ratio would be about 1:2.5, which is closer to the ratio observed during the recent financial crisis.

In addition to above, the proposed treatment to retain a floor with a one-year maturity, while additionally requiring capital charge for variability in exposures, is an overly conservative treatment. The BCBS is requested to consider removal of such floor.

(5) Level of parameter β

The grounds for determining the level of parameter β should be clarified. The β should be reviewed to set to an appropriate level.

Under the proposed method for calculating K_{EE} , K_{EE} is calculating by scaling K_{spread} (unhedged), and hence does not reflect the variability in market risk factors.

Since parameter β is set to a high level (currently, 0.5), this parameter β , combined with other factors raised in (1) to (4) above, further widens the gap between actual risks and the BA-CVA risk capital charge. It is therefore requested to disclose the grounds for establishing the proposed parameter, and recalibrate this to an appropriate level.

<<FRTB-CVA>>

(6) Eligibility criteria for the FRTB-CVA (3.1 on page 6 and paragraphs 8 and 13 on page 12) Eligibility criteria for the FRTB-CVA should have certain flexibility taking into account differences in the business models, market environment, accounting standards and other elements.

Eligibility criteria of FRTB-CVA specify requirements including the use of market implied PD. However, given that the characteristics of business models and markets differ across jurisdictions and financial institutions, the effective CVA risk management method differs by financial institutions. Accordingly, FRTB eligibility criteria should have certain flexibility, taking into account accounting practice of individual banks.

For example, the use of historical PD should be permitted for the purpose of calculating regulatory CVA risk with respect to banks which recognise accounting CVA using historical PD according to internal rating determined based on sufficient information obtained through customer transactions under the commercial bank business model.

Additionally, the requirements related to risk management and hedge functions for the CVA desk should allow certain flexibility to reflect accounting practice. For example, when historical PD is used for accounting CVA calculation purposes, a strategy to hedge only certain counterparties when necessary should be permitted. This is because, since the needs for hedging is limited due to a low volatility in CVA, CVA hedge needs not be carried out quickly for all counterparties.

(7) Scope of calculating capital charge under the FRTB-CVA (materiality threshold) <u>A materiality threshold should be established to exclude portfolios with low materiality from the</u> <u>scope of simulation calculation.</u>

The benefit of requiring full simulation for all counterparties, instruments and currencies

including immaterial ones would not out outweigh its calculation burden, while such requirement would unnecessarily increase regulatory compliance cost including resources and hours. Therefore, a materiality threshold should be established in calculating risk-weighted assets under the FRTB-CVA. Portfolios whose materiality is deemed to be low in the light of risk of variability in CVA should be excluded from the scope of CVA risk simulation.

(8) Formula for calculating SA-CVA capital charge Kb (paragraph 45 and subsequent paragraphs on page 17)

A formula that does not fully reflect the netting effects of the risk amount should be modified.

The formula for calculating a capital charge Kb within each bucket b and the formula for calculating a capital charge K within each risk type are specified in paragraphs 45 and 46, respectively. These formulas, however, do not sufficiently reflect netting effects of the risk amount since Kb is always positive regardless of the direction of risks (long or short), and hence produce an excessively conservative capital charge.

The below two cases illustrate such issue using the capital charge calculation for FX delta (assuming that the hedge sensitivity is zero):

Case 1: Weighted sensitivity of EUR/JPY WSk(EUR)=100; Weighted sensitivity of GBP/JPY WSk(GBP)=100

Case 2: WSk(EUR)=100, WSk(GBP)=-100

The capital charge Kb within the bucket for 2 cases are:

Case 1: Capital charge of EUR/JPY Kb(EUR) =100; Capital charge of GBP/JPY Kb(GBP) = 100

Case 2: Kb(EUR)=100, Kb(GBP)=100

Generally, the capital charge for case 2 should be smaller than that for case 1. Since however the value of Kb is always positive, and does not consider the direction of risks (long/short), both two cases result in the same capital charge K for FX delta.

Consequently, we propose to change the formula above to the following by defining the capital charge Kb with a "sign", in order to appropriately capture actual risks of respective banks' portfolio.

$$K_{b} = \operatorname{sign}\left(\sum_{k \in b} WS_{k}\right) \sqrt{(1-R)\left[\sum_{k \in b} WS_{k}^{2} + \sum_{k \in b} \sum_{l \in b; l \neq k} \rho_{kl} WS_{k} WS_{l}\right] + R\sum_{k \in b} \left[(WS_{k}^{CVA})^{2} + \left(WS_{k}^{Hdg}\right)^{2}\right]}$$

The standardised approach under the FRTB of the third consultative document on the Review of the trading book (see Annex I, 2.8) takes into account risk directions similar to the

proposed approach in the above.

(9) Formula for the SA-CVA capital charge K (paragraph 45 on page 17)Diversification benefit between delta and vega risks should be allowed.

The SA-CVA should allow diversification benefit between delta and vega risks.

The consultative document specifies that the SA-CVA capital charge is calculated as the simple sum of the capital requirements. Such treatment however would result in an excessively conservative risk measurement.

(10) Setting multipliers (3.5 on page 9 and paragraph 33 on page 16) The level of multipliers should be reviewed and revised according to the accuracy of internal models.

The consultative document only states that the value of the multiplier can be increased from its default value by a bank's supervisory authority, although CVA risk could be measured more precisely if the granularity of risk factors is increased. To maintain an incentive for banks to enhance their internal models, it is requested to allow individual banks to determine a multiplier, and to apply a multiplier which is lower than 1.5 defined in this document.

(11) Calculation method of sensitivity (paragraph 37 and subsequent paragraphs on page 17) The calculation method of sensitivity should not be defined in the rules text. Rather, respective banks should have latitude in determining the method.

The consultative document implies to measure the CVA sensitivity using the difference calculus. If other methods, such as the automatic differential calculus, have certain reasonableness and could reduce measurement burden, such methods should also be permitted. In the case of the difference calculus, the size of a range of infinitesimal change in the variables causes approximate errors and rounding errors. On the other hand, since the automatic differential calculus calculates the value of partial derivatives, this method is not affected by these errors, and hence has a high accuracy. Further, since this enables an immediate calculation even there are many variables, the use of this method for risk management practice is increasing in recent years.

(12) Eligible hedges (paragraphs 28-31 on page 16 and paragraphs 91-93 on page 28) We request to expand the scope of eligible hedges taking into account actual conditions of individual market environments.

Instruments that are permitted as eligible hedges are limited under the consultative

document. The trading volume of these instruments however is small in the markets primarily in Asia where the liquidity of CDS market is low. Therefore, these instruments are difficult to use as hedge instruments in practice.

Consequently, it is requested to consider expanding the scope of eligible hedges taking into account market conditions of respective jurisdictions.

3. Our response to questions

Q2. Is Alternative 1 or Alternative 2 preferred with regard to the calculation of MPoR?

Alternative 1 is in line with the industry practice. Whereas, Alternative 2 that uses the supervisory floor defined in the Basel framework is too conservative for CVA calculation purposes.

Q3. Should IMM approval be included as an additional eligibility requirement for the FRTB-CVA framework under <u>Option</u> A (ie accounting-based CVA method for generating scenarios of discounted exposure?

Assumptions of the model are different for banks that use pricing measures for accounting purposes and real measures for risk management purpose. In addition, in most cases, separate system infrastructures are used for accounting and IMM. Therefore, IMM approval needs not be included as an additional eligibility requirement for the FRTB-CVA framework.

Q5. Is Option A (accounting-based CVA) or Option B (IMM-based CVA) preferred for exposure calculation?

The use of the accounting-based model for capital calculation in the CVA risk measurement enables to directly match capital charge with actual changes in profits and losses. Further, the basic principle of Basel regulations is to use accounting figures as underlying data. If IMM-based figures are used only for CVA risk measurement, this lacks transparency to investors. Accordingly, Option A which adopts an accounting-based model is considered to be a preferable option.

Q6. Is Option 1 or Option 2 preferred for simulation time horizons?

The proposed review of the framework requires the calculation of the CVA risk capital charge for market risk factors in addition to credit spread, which significantly increases calculation burden. Given such calculation burden in practice, Option 2 is considered to be a more appropriate option.