EBA/CP/2019/11
16 October 2019

Consultation Paper

Draft Guidelines on the treatment of structural FX under 352(2) of the CRR

Contents

1. Responding to this consultation

The EBA invites comments on all proposals put forward in this paper and in particular on the specific questions summarised in 5.2.

Comments are most helpful if they:

- respond to the question stated;
- indicate the specific point to which a comment relates;
- contain a clear rationale;
- provide evidence to support the views expressed/ rationale proposed; and
- describe any alternative regulatory choices the EBA should consider.

Submission of responses

To submit your comments, click on the 'send your comments' button on the consultation page by 17.01.2020. Please note that comments submitted after this deadline, or submitted via other means may not be processed.

Publication of responses

Please clearly indicate in the consultation form if you wish your comments to be disclosed or to be treated as confidential. A confidential response may be requested from us in accordance with the EBA's rules on public access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by the EBA's Board of Appeal and the European Ombudsman.

Data protection

The protection of individuals with regard to the processing of personal data by the EBA is based on Regulation (EC) N° 45/2001 of the European Parliament and of the Council of 18 December 2000 as implemented by the EBA in its implementing rules adopted by its Management Board. Further information on data protection can be found under the Legal notice section of the EBA website.

2. Executive Summary

The concept and specific application of the structural FX (S-FX) provision pursuant to Article 352(2) Regulation (EU) No 575/2013 (CRR) appear to be subject to several interpretations, across both supervisory authorities and institutions. This is particular relevant, as over the last few years banks appear to have become increasingly interested in the application of the structural FX exclusion. In addition, the implementation of this provision seems to be quite uneven across jurisdictions, and there is a lack of clarity around what constitutes a structural position for the purposes of Article 352(2). Finally, the treatment of the structural FX has been modified in the recently published Fundamental Review of the Trading Book (FRTB).

In order to ensure a harmonised EU interpretation and implementation, the EBA is publishing this consultation paper on draft guidelines on the treatment of structural FX positions to produce guidance on how to implement the structural FX provision contemplated in Article 352(2) of the CRR.

The EBA published a Discussion Paper (DP) on 22 June 2017[1] to gather feedback on current stakeholder practice and interpretation of the structural FX provision, and to provide the EBA's preliminary views on the topic. The DP aimed to elicit discussion and gather stakeholders' opinions at an early stage of the process. The DP outlined the EBA's preliminary views regarding the rationale and mechanics behind the structural FX provision, which allows Competent Authorities to authorise, on an ad hoc basis, the exclusion of FX positions of a 'structural nature', provided they have been taken on purpose to function as a hedge of the capital ratio(s). The DP outlined the rationale behind the structural FX treatment and, without pre-empting any conclusions, discussed several general elements that need to be considered by banks and Competent Authorities when assessing this provision, such as: (i) the limitation of types of FX positions, (ii) the maximum size of the position to be potentially excluded and (iii) the consideration of the minimum CRR levels for the capital ratio. Apart from these general elements, the DP provided a more detailed initial assessment of the specific cases where the exclusion of an FX position may be justified from an economic perspective.

As a result, this consultation paper has been developed considering the feedback on the DP and taking into account the standards agreed in the international fora.

The CP is deemed to set objective criteria that the competent authorities should consider for the purpose of assessing whether the conditions set out in article 352(2) for receiving the permission are met. In this context, in order to harmonize practices among EU jurisdictions, several technical details e.g. related to the computation of the sensitivity of the ratio to changes in the exchange rate have been included as part of these proposed guidelines.

[1] https://eba.europa.eu/documents/10180/1888124/Discussion+Paper+on+the+treatment+of+structural+FX+%28EBA-DP-2017-01%29.pdf

The consultation paper is structured as follows:

- The first section provides some clarifications around the structural FX provision. In particular, it is clarified that (i) institutions may apply for the waiver for any of the three ratios mentioned in article 92, (ii) both institutions computing the own funds requirements for foreign-exchange risk with the standardised approach and with the internal model approach may apply for the waiver, (iii) the waiver should be sought only for currencies that are material for the institution.

- The second section discusses the concepts of positions 'deliberately taken to hedge the capital ratio[2] and positions of 'a non-trading or structural nature'. Accordingly, some minimum requirements based on these two notions are set out. In particular, the EBA proposes that only banking book positions may be subject to the waiver (upon meeting other conditions), and that the position for which the exemption is sought should be long on a net basis.

- The third section sets the governance requirements and the requirements related to the risk-management strategy of the institution with respect to its structural-FX positions. Precisely, the EBA identified (i) 'types' of FX-positions for which there is the presumption of their structural nature (ii) quantitative and qualitative criteria aiming at assessing whether the institution is actually taking a position for the purpose of hedging the ratio;

- The fourth section deals with the treatment of items held at historical cost. In this context, the EBA clarified that such items should be considered as part of the FX-open position. In addition, given that the value of those items is not impacted by small changes in the exchange rate an ad-hoc treatment has been specified with respect to their exemption under the structural FX provision;

- The fifth section deals with the calculation of the maximum open position that can be excluded from the net open position. In line with the FRTB standards, the EBA proposes that the exemption should be limited in size by the open position for which the capital ratio is non-sensitive to the exchange rate.

- The sixth section clarifies some aspects with respect to the calculation of the own funds requirements for FX-risk where some positions have been excluded from the net open position following the permission of the competent authority, e.g. how institutions calculating the own funds requirement with the internal model approach are expected to exclude the FX positions for which they receive the exemption;

- The seventh section provides some clarifications around the approval process and how competent authorities should react to possible changes in the risk-management strategy of the structural-FX positions.

[2] In this document, the term "capital ratio" and "ratio" are used as a generic term to refer to the three ratios included in article 92 of the CRR (i.e. CET1 ratio, Tier 1 ratio, and total capital ratio).

- Finally, 2 annexes are included for further clarifying some technical details discussed in the first sections and for providing examples around the application of the structural FX provision.

Considering that these guidelines introduce for the first time a detailed regulatory framework around the structural FX provision, several questions have been included as part of the consultation process to gather feedback around the proposed provisions.

3. Background and rationale

1. The structural FX provision in Article 352(2) Regulation (EU) No 575/2013 (CRR) is subject to various interpretations that have led difference in its application both in EU member states and across banks. In order to ensure a harmonised approach, the EBA produced these own initiative draft guidelines on the practical implementation of 'structural FX' provision contemplated in Article 352(2) of the CRR.

2. The EBA published a Discussion Paper (DP) on 22 June 2017 to have further input from stakeholders. The EBA sought preliminary input on several aspects of the provision, in order to fully identify industry practises. The DP provided an overview of the interlinkages with other provisions, especially with the accounting framework, and identified elements that played a significant role in the determination of the capital requirement.

3. It is important to note that, even if these guidelines refer to the provision included article 352(2) which refer to the current market risk framework, these guidelines have been developed considering also changes to the market risk framework introduced in the CRR2, which builds on the new FRTB standards published by the Basel Committee on Banking Supervision (BCBS) in January 2019, and taking into account the structural FX treatment envisaged in the standards.

4. It should also be noted that the proposed guidelines has been designed in a way that institutions (and competent authority) will not be required to request (grant) a new permission that has been granted once they will be asked to switch from the current framework to the FRTB framework for computing the own funds requirements for market risk.

3.1 Overview of the provision and clarifications on the application of the Structural FX-treatment

5. This section provides an overview of the regulatory treatment of the structural FX provision in the CRR and clarifies some aspects around its applicability.

6. Article 352(2) of the CRR states that:

> *'Any positions which an institution has deliberately taken in order to hedge against the adverse effect of the exchange rate on its ratios in accordance with Article 92(1) may, subject to permission by the competent authorities, be excluded from the calculation of net open currency positions. Such positions shall be of a non-trading or structural nature and any variation of the terms of their exclusion, subject to separate permission by the competent authorities. The same treatment subject to the same conditions may be applied to positions which an institution has which relate to items that are already deducted in the calculation of own funds.'*

7. The provision allows Competent Authorities to authorise, on an ad hoc basis, the exclusion of FX-risk positions deliberately taken by firms to hedge against the adverse effect of exchange rates on capital ratios from the calculation of the net open currency positions where those positions are of a non-trading or structural nature. For convenience of the reader, '*structural positions'* refers to positions for which the institution seeks the permission referred to in article 352 that following the assessment of the competent authority are considered of a non-trading or structural nature.

8. It is worth mentioning that, in the context of these guidelines a position that has been taken to hedge the ratios against the adverse effect of changes in FX rate on its ratios is a position that reduces the volatility of the ratio with respect to changes in the relevant exchange rate. Accordingly, such position should limit the changes in the value of the ratio considering both appreciations and depreciations of the foreign currency with respect to the reporting currency. Accordingly, such positions should limit the changes in the value of the ratio compared to a closed position.

9. In line with these guidelines, the assessment of the competent authority should lead to the identifications of the positions that are *suitable for the exemption*, i.e. the structural positions that the competent authority assessed that they were taken for the purpose of hedging the ratio. Once the positions that are suitable for the exemption have been identified, all or part of these positions are excluded from the net open position in line with these guidelines.

10. It is worth clarifying that by FX position or FX-risk position is meant the FX-risk stemming from any item/asset/liability held by the institution. Accordingly, what is subject to the exemption is the FX risk-position stemming from an item/asset/liability, not the asset/item itself.

11. The fact that a position is structural does not necessarily mean that such position is suitable for the exemption. The institution should always prove that a structural position has been taken for the purpose of hedging the ratio. Accordingly, there can be structural positions that are not suitable for the exemption.

Maximum Open position that can be exempted under the Structural-FX provision

12. These guidelines clarify that the open position that can be exempted under the structural-FX provision is capped by the open position neutralizing the sensitivity the capital ratio with respect to changes in the exchange rate. Accordingly, in these guidelines, we refer to the maximum open position as the open position neutralizing the sensitivity of the capital ratio with respect to changes in the exchange rate (under certain assumptions discussed in section 3.5)[3].

13. The methodology institutions should use for calculating the open position neutralizing the sensitivity of the capital ratio to movements in the exchange rate is discussed in section 3.5.

[3] It should in particular be understood that since where calculating the maximum open position the size of the position that will be exempted is not known, some assumptions need to be made on the capital ratio to consider for the purpose of determining such maximum open position. All such assumptions are discussed in section 3.5.

14. There might be cases where the size of the open position generated by positions that are suitable for the exemption (and therefore potentially exemptible from the net open position) exceed the maximum position that can be exempted. Accordingly, these guidelines set a clear distinction between FX-positions that cannot be exempted because they are not suitable for the exemption (e.g. because they are not structural or because not taken for hedging the ratio), and FX-positions that are not exempted just due to the cap imposed by the maximum open position.

15. These guidelines refer to over-hedges where the position suitable for the exemption is greater in size than the maximum open position (i.e. the position perfectly hedging the ratio). Vice versa, where the position suitable for the exemption is lower in size than the maximum open position, then these guidelines refer to under-hedges.

Ratios to which the Structural-FX provision applies

16. Article 352(2) of the CRR refers to the ratios of the institutions as defined in Article 92(1). Article 92(1) defines (i) the CET1 ratio, (ii) the Tier 1 ratio and (iii) the total capital ratio and sets their minimum levels required. Therefore, it seems to be open to interpretation which of the ratios should be the target for the hedge.

17. Accordingly, these guidelines are developed considering that institutions may apply for the waiver when hedging any of the three ratios introduced in that article with structural FX-positions. Due to the fact that the CET1 ratio is the ratio which attracts the highest attention by external stakeholders, the expectation of the EBA would be that the CET1 ratio is the ratio institution should aim at hedging.

18. A position that is suitable for the exemption in the context of the structural-FX provision applied to one ratio of the institution is deemed suitable for the exemption also in the context of the structural-FX provision of another ratio of the institution.

19. Where the institution perfectly hedges the total capital ratio, then the T1 ratio and the CET1 ratio are over-hedged. Along the same lines, where the institution perfectly hedges the CET1 ratio, then the T1 ratio and the total capital ratio are in general under-hedged. It is clear that the FX-open position required to neutralise the sensitivity of the ratio to the FX-rate depends on the ratio that the institution hedges. Accordingly, the amount of FX-positions that could be exempted from the net open position (i.e. recognised as structural) would vary from ratio to ratio (as the maximum position that can be exempted varies).

20. As a result of the previous paragraph, if institutions were calculating the maximum open position for each of the ratios, then they would obtain also different own funds requirements for each of the ratio (since the positions that can be exempted would differ in size). To prevent such situation to occur, these guidelines specify that the institution should choose the ratio it intends to hedge, and accordingly, develop a strategy with the purpose of hedging such ratio.

21. Once the exemption has been granted by the competent authority in the context of one ratio, it will nevertheless have an impact on all three reported ratios, due to the reduction in risk-weights for FX risk.

22. The guidelines also clarify that the ratio to be considered in this context is the current ratio, i.e. the ratio that the institution currently has (or the one calculated with the latest available figures), and not any form of ratio the institution plans/foresees to have in the future. Accordingly, competent authorities should assess whether the FX-risk positions hedge the current capital ratio, and eventually grant the permission to exclude them from the net open position. In cases where banks have a plan to depart from a net open currency position of zero (hedge of CET1 amount) to an open currency position higher than zero (hedge of CET1 ratio), they must provide an estimation of how the ratio would be affected (see also section 3.3.2 *Risk-management strategy of the positions for which the institutions seek the exemption*).

23. As specifically mentioned in section 3.3, institutions are required to justify the choice of the ratio. In addition the EBA thinks that institutions should disclose such information to investors, clearly indicating that keeping open a position could possibly lead to losses (even where such position is kept open with the purpose hedging the ratio).

Structural FX – Provision for more than one currency

24. Article 352(2) refers to the adverse effect of the exchange rate as the exchange rate between the reporting currency and any other currency. Accordingly, an institution may request the permission for excluding from the relevant net open positions, FX-risk positions in more than one currency. However, these guidelines clarify that the permission should be sought (and potentially granted) for currencies that are relevant with respect to the business of the bank. In particular, positions in a currency that is not material for the bank should not be considered as deliberately taken for hedging the ratio from the corresponding exchange rate; indeed, movements in such exchange rate would negligibly affect the ratio.

25. These guidelines take as a premise that the top three currencies of the business of the institution are material. However, there might be other currencies that are actually material (or relevant) for the institution (e.g. where the institution performs its business in several countries with different currencies). Accordingly, the institution may ask for the permission referred to in Article 352(2) also for positions in those currencies that are not among the top 3; however, when doing so, the institution is required to justify the relevance of the currency for the institution (e.g. the justification may be based on the cross-border nature of the business performed by the institution).

26. For the purpose of the previous paragraph, the top three currencies are the three currencies corresponding to the largest net open positions calculated in accordance with Article 352(1) without considering any waiver.

27. As part of the consultation, institutions are requested to provide metrics that could provide a risk-sensitive measure (with respect to an absolute threshold given by number of currencies) to

assess whether a currency is relevant or not with respect to the business of the institution. In particular, the EBA consults on the two following measures:

Measure A: percentage of the open position in the foreign currency (without considering any waiver) with respect to the 'open position' in the reporting currency.

Measure B: percentage of the open position in the foreign currency (without considering any waiver) with respect to the total own funds of the institution.

and seeks feedback on the value taken for measures A and B for the most relevant currencies.

28. These guidelines also reflect the possibility for banks to apply for the structural-FX treatment for more than one currency. In particular, as detailed in the section for the calculation of the maximum open position, it is specified that:

(1) When calculating the max. open position for a specific currency for which it seeks the waiver, the institution should not consider any exemption that has already been granted for FX-positions in other currencies under the structural FX-provision.

(2) It should be noted that where the institution applies for a waiver in several currencies (i.e. for more than one currency) in the same application, the institution should calculate the maximum open position per currency without considering any waiver that could be granted for the other currencies in the same process.

(3) The capital ratio hedged (i.e. CET1/T1/total ratio) by the institutions should be the same in the context of different currencies.

The provision included in points (1) and (2) aim at limiting the possibility of regulatory arbitrage; in particular, without such provisions, institutions would get a different size of maximum open position depending on the sequence (of currencies) they use where calculating the size of the maximum open position in the context of one currency[4].

Example:

An institution reporting in EUR applied in the past for the structural FX treatment for its positions in GBP. The institution seeks now the waiver for its positions in USD and HUF.

[4] For example consider a bank that is reporting in EUR and applying the structural FX provision for positions in GBP and USD. If the institution calculates the maximum open position (i.e. the position offsetting the sensitivity of the ratio to the relevant exchange rate) for GBP positions and then for USD positions, then where calculating the maximum open position in GBP, the bank cannot consider the effect of any waiver for its position in USD (since the maximum open position in USD has not been calculated yet it is not possible to determine the size of the waiver). Afterwards, the institution calculates the maximum open position for USD positions, and it could do so by considering the effect of the waiver received for GBP positions. If the institution were calculating the two maximum open position in the opposite sequence (i.e. first for its positions in USD and then for its positions in GBP), it would get different results.

Accordingly, when calculating the maximum open position that can be exempted in USD, the institution should not consider the exemption that has already been granted for FX-positions in GBP. Moreover, it should not consider any exemption that might be granted for positions in HUF.

Consistently, when calculating the maximum open position that can be exempted in HUF, the institution should not consider the exemption that has already been granted for FX-positions in GBP. Moreover, it should not consider any exemption that might be granted for positions in USD.

Point (3) requires the bank to calculate the maximum open position that can be exempted in GBP, USD, HUF considering the same type capital ratio.

Level to which the Structural-FX provision applies

29. Article 6 of the CRR determines that institutions shall comply with their market risk requirements on an individual basis and Article 11 of the CRR establishes the obligation to comply with these requirements also on a consolidated basis. Accordingly, institutions have to generally comply with the CRR requirements for market risk, including FX risk requirements, both on a solo and on a consolidated basis. Consequently, the waiver in Article 352(2) could apply both on an individual and on a consolidated basis.

30. These guidelines clarify that the structural FX (S-FX) provision applies on both an individual and consolidated basis. A specific request should be sent to the competent authority for each level at which the institution seeks permission to apply the S-FX treatment. The need for a specific permission is due to the fact that positions which have been taken for hedging the capital ratio at consolidated level might not even have a hedging effect on the capital ratio at solo level (and vice versa). Accordingly, positions that might be exempted in one context, might not receive the same prudential treatment (i.e. the exemption) in another context.

Structural FX provision: standardised and internal model regulatory framework

31. An additional element of the current regulation related to FX positions which may be worth clarifying stems from the differences between the standardised and internal model regulatory frameworks. The treatment of structural FX is established in Article 352, which is located in Title IV, Chapter 3 of the CRR. The chapter deals with the FX treatment under the standardised rules. Importantly, the same article also specifies the requirements for the calculation of the 'net foreign exchange position'.

32. In this regard, it is worth noting that there are no rules in the internal model part of the CRR (Chapter 5) regarding the calculation of the net FX position or the possible exclusion of structural FX. However, any permission granted for the net open position in the currency under the standardised approach can easily be applicable in the context of the internal model approach.

33. The EBA is of the view that the exemption should be available regardless of the approach followed by the institution to capitalise market risks. The underlying risks are deemed the same under both the standardised and internal model regulatory approaches. Accordingly, these

guidelines reflect this view. In this context, it is worth mentioning that the new standards on the minimum capital requirements for market risk published in January 2019, clarified that the structural-FX treatment is available regardless of the approach implemented by institutions.

3.2 Positions 'deliberately taken to hedge the capital ratio' and positions of 'a non-trading or structural nature'

34. As previously mentioned, the structural FX provision, allows competent authorities to authorise, on an ad-hoc basis, the exclusion of FX 'positions' deliberately taken by firms to hedge against the adverse effect of the exchange rate on capital ratios from the calculation of the net open positions where those positions are of a non-trading or structural nature.

35. The EBA is of the view that the provision has a rather limited scope of application, as the hedging activity must be '*deliberately taken in order to hedge against the adverse effect of the exchange rate on its ratios in accordance with Article 92 (1)*'. Specifically, this is totally different from hedging specific exposures and would indicate that only positions taken to hedge the overall FX risk of the capital ratios, i.e. at the level of the overall balance sheet of the bank, can be taken into consideration. In addition, the CRR wording in Article 352(2) states that '*such positions shall be of a non-trading or structural nature*'.

36. As mentioned, the CRR requires the structural-FX positions to be deliberately taken in order to hedge the ratio. These guidelines reflect the interpretation that when considering whether or not a position is 'deliberately taken', this could be seen as analogous to 'deliberately not closed' or 'maintained'. Accordingly, the guidelines have been developed with the overarching concept that structural FX positions are positions that have been taken or maintained (i.e. not closed) with the purpose of hedging the ratios of the bank.

37. Competent authorities are expected to assess (i) whether a position is of a structural (or non-dealing) nature and (ii) whether it has been taken to hedge the ratio. Whether a position is suitable for the exemption is strictly related to the way such position is managed over time and accordingly it would be counterintuitive to e.g. define a specific set of conditions that structural positions should meet for being automatically identified as such without taking into account the risk-management strategy of such positions (which is typical of the institution).

38. Accordingly, the risk-management strategy of the structural FX positions, and the governance requirements set out in section 3.3 are expected to constitute the basis for the assessment of the condition in (i) and (ii) of the previous paragraph.

39. As mentioned, these guidelines do not include a list of requirements that if all met automatically identify a position as suitable for the exemption (given the rationale in paragraph 38); however, they identify minimum requirements that when not fulfilled, the position is not suitable for the exemption.

40. For the purpose of introducing such minimum requirements this section is subdivided into two subsections. In particular:

- The first subsection introduces minimum requirements in relation to the 'structural or non-dealing nature' of the positions for which the institution seeks the waiver.
- The second subsection introduces minimum requirements regarding the condition that the position that is exempted is kept for hedging the ratio.

41. The minimum requirements have been developed on the basis that where the institution applies for the structural FX provision, the institution is required to justify:

(i) The structural nature of the position for which the exemption is sought, and

(ii) The fact that such position has been deliberately taken (or maintained) for the purpose of hedging the ratio.

3.2.1 Minimum requirements for being a position of a 'structural' or 'non-dealing nature'

42. In light of the first condition in paragraph 42, this section defines a first set of minimum requirements that positions should fulfill for being recognised as structural. It is important to stress that the fulfillment of such requirement does not entail that a position is of a structural (or non-dealing) nature. Indeed, whether a position is of structural (or non-dealing) nature will be assessed by the competent authority in line with the reasoning in paragraph 38.

Limitation to banking book positions

43. These guidelines exclude the possibility for banks to include in the scope of positions suitable for the exemption, FX positions that stem from instruments in the trading book. In other words, only banking book positions qualify for possibly being recognised as structural.

44. In particular, it is deemed that, an FX-risk position is of a non-trading nature, only if the instrument from which it stems from is of a non-trading nature as well. In addition, article 102 of the CRR requires positions in the trading book to be free of restrictions (or able to be hedged). It is clear that if a position stemming from the trading book could be among the scope of those for which the institution seeks the permission, then the position would automatically become subject to restrictions with respect to its tradability (as the institution would be required e.g. to keep such position until the item bearing the position expires).

45. Accordingly, it is deemed that only FX-positions stemming from instruments for which the institution does not have trading intent (i.e. instruments held in the banking book) can possibly qualify for the exemption[5]. It should be noted that this does not automatically imply that banking

[5] It should be noted that the FRTB standards clarifies that the position should be of a "structural (i.e. non-dealing) nature", meaning that "structural" and "non-dealing" should be treated as synonymous.

book positions are structural; indeed, the structural nature of a position should always be assessed by the competent authority (in accordance with these guidelines).

3.2.2 Minimum requirements for an open position to be considered as taken for hedging the capital ratio

46. In light of the second condition in paragraph 42, this section sets minimum requirements that the open structural position should fulfill for being recognised as suitable for the exemption. It is important to stress that the fulfillment of such requirements does not entail that a position is actually eligible for being exempted. Indeed, whether the open structural position has been taken (or is maintained) for hedging the ratio will be assessed by the competent authority in line with the reasoning in paragraph 38.

Long nature of the open FX-position

47. If the purpose of structural FX positions is the hedging of the capital ratio, it is clear that only a net long FX position could potentially qualify for the exemption'. Indeed, if an institution maintains a net short position, the effect on the numerator of the ratio of the fluctuations in the exchange rate would actually go in the reverse direction to the effect of the FX movement in the denominator of the ratio, exacerbating the effect of FX movements in the ratio compared to a closed position, which is the opposite of what would justify the application of the rule (i.e. hedge the capital ratio).

Example:

Parent bank (or subsidiary) reporting in EUR

Assets (converted in EUR)		**Liabilities and Equity (converted in EUR)**	
Loans in EUR	680	Liabilities in EUR	605
Loans in USD	20	Liabilities in USD	30
		CET1	65
Total assets	700	Total liab&equity	700

Considering now a 10% appreciation in the foreign currency, the balance sheet of the bank would be:

Parent bank (or subsidiary) reporting in EUR – after a 10% appreciation of the foreign currency

Assets (converted in EUR)		Liabilities and Equity (converted in EUR)	
Loans in EUR	680	Liabilities in EUR	605
Loans in USD	22	Liabilities in USD	33
		CET1	64
Total assets	702	Total liab&equity	702

Accordingly, the CET1 (i.e. the numerator of the ratio) diminishes, while the RWA for credit risk augments (and the FX-OFR as well as the open position increased). As a result, the numerator and denominator of the ratio moves in opposite direction, obtaining the opposite effect of a hedge.

It is worth mentioning, that the numerator and denominator would move in the opposite direction also in the case the foreign currency depreciates.

48. It is worth highlighting that, for the purpose of the waiver, it is the net open position that shall be a long one. In turn, any net long position will normally be composed of gross long and gross short positions.

49. In accordance with the two paragraphs above, the guidelines set that the position for which the institution seeks the exclusion from the net open position should constitute a net long FX position.

Other minimum requirements depending on the level of application

Case A: Permission sought on an individual basis

50. Where the institution applies for the structural FX provision on an individual basis, then the exemption is meaningful where:

(i) The net open position in the currency without exemption is long;

(ii) The net open position generated by the exempted structural FX-positions is long.

51. The net open position generated by the exempted structural FX-positions should be long in light of the reasoning in paragraph 48. Accordingly, also the net open position in the currency before the exemption should be long; if such position was (net) short, then the exclusion of a long open

structural position stemming from that net short position would actually increase the magnitude of the net open short position the bank would have to capitalise.

52. However, considering that there is a natural incentive for institutions to fulfill the requirement in point (i) of paragraph 51[6], these guidelines do not include other minimum requirements reflecting this aspect. As a result, where the provision is applied on an individual basis, the only requirement set in this section is the one in point (ii) of paragraph 51 (i.e. the open structural position is long).

53. It should be noted that to ensure that the structural-FX provision is applied in a meaningful way (i.e. that the numerator and the denominator moves in the same direction), a provision requiring the numerator of the ratio to increase where the foreign currency appreciates has been also included in the legal text[7].

Case B: Permission sought on a consolidated basis with Article 325 granted for all entities

54. Where the permission is sought on a consolidated basis and the permission to offset the positions among all entities within the group has been granted, all rationales presented under Case A holds. Accordingly, also in this case, the only requirements set out in this section is the one in paragraphs 50 and 54 (i.e. the open structural position is long and the numerator increases where the foreign currency appreciates).

Case C: Permission sought on a consolidated basis without Article 325 granted for some entities

55. First, in this context, it is important to observe that the permission in Article 325 does not affect the calculation of CET1/T1/own funds of the institution at consolidated level as it deals only with the calculation of the own funds requirements (i.e. the denominator of the ratio). Accordingly, the CET1/T1/own funds of an institution are calculated regardless of the permission. As a result, the numerator of the capital ratio is sensitive to the exchange rate regardless of whether the permission in Article 325 has been granted or not.

56. Whether the permission in Article 325 has been granted or not, does change however the own funds requirement for market risk (and accordingly also the FX-charge) included in the denominator.

57. In particular, where the permission in Article 325 has not been granted for positions in all entities, then the level 1 text sets that the institution has to compute the own funds requirements for market risk on each of the resulting entities (with respect to the reporting currency of the consolidated institution) and sum them up for obtaining the total own funds requirements for market risk of the institution.

[6] If the institution excludes a long position from a short position, the institution would get an even shorter position to consider for capitalisation (i.e. the capital requirements would increase following the exclusion).

[7] It should be noted that where the institution hedges the CET1 ratio such provision is actually equivalent to require that the institution has a long position in the foreign currency before any exemption applies.

58. The reasoning outlined in paragraph 48 can be applied also in this context to each of the entities for which the institution performs the calculation of the own funds requirements following the application of Article 325, i.e. short open positions at the level of the portfolio on which the own funds requirement for market risk are computed lead to an opposite effect than the hedging.

59. As a result, these guidelines set that where at the level of the entities on which the own funds requirements for market risk are computed, the open position in a currency is short, then the positions in that portfolio are not suitable for the exemption.

Example:

An institution is composed by 3 entities: P, S1 and S2, where P is the parent bank and S1 and S2 are two subsidiaries. Suppose that after applying the permission in Article 325 the institution (i.e. P+S1+S2) is allowed to offset positions in P and S1, but not S2. Then the institution is required to compute the own funds requirements for market risk on the portfolio of P+S1 and on the portfolio of S2, and sum up the two results.

Suppose that the open position in the foreign currency is long in the portfolio of P+S1 and it is short in the portfolio of S2. As a result of the requirements set out in this section, positions in S2 are not suitable for the exemption.

3.3 Requirements on the governance and risk-management strategy of structural-FX positions

60. This section sets the governance requirements and the requirements related to the risk-management strategy of the institution of its structural-FX positions. As previously mentioned, the risk-management strategy of the structural FX positions and the governance requirements are expected to constitute the basis for the assessment performed by the competent authority.

61. Where seeking the application of the waiver, institutions should specify in the application sent to the competent authority:

(a) The level(s) of consolidation at which the exemption is sought;

(b) Which ratio among the 3 in Article 92 the institution intends to hedge and a justification for such choice;

(c) The currency/currencies of the positions for which the institution seeks the exemption;

62. In line with the level of consolidation and the currency of the positions for which the exemption is sought, the institution should specify in the application the FX-positions that according to the institution are suitable for the exemption (and for which accordingly it seeks the exemption). All other positions must be considered as non-structural by default.

63. In addition to the basic requirements mentioned in the previous paragraphs, the institution should fulfill the requirements outlined in the subsections below. In particular:

- The first subsection sets out requirements meant to support the competent authority in determining whether a position is of a structural nature.
- The second subsection deals with the requirements that the risk-management strategy should fulfill. Such requirements have been designed to support supervisors in determining whether an FX-position is of a structural nature, and mainly to assess whether the structural open position is maintained with the purpose of hedging the ratio.
- The third subsection introduces minimum requirements regarding the treatment of positions that have been recognised as suitable for the exemption (by the competent authority). Although this subsection deals with requirements that apply only once the exemption is granted, they are included in this part of the guidelines as they may play a significant role in the way the institution sets up the risk-management of its structural-FX positions.
- The fourth subsection introduces the requirements related to the reporting and the data used by the institution to assess the sensitivity of the ratio.

3.3.1 Categorisation of the positions for which the institutions seek the exemption

64. For the positions for which the exemption is sought, institution should indicate whether they are positions of type A or positions of type B in accordance with the specifications in this section. Positions of type A are positions for which there is the presumption that they are of a structural nature, while positions of type B are positions for which a deeper analysis to assess the structural nature is needed.

65. The categorisation into positions of type A or positions of type B is meant for supporting the competent authority in analysing the application of the institution; in particular, such categorization is meant to support supervisors in assessing whether the conditions that positions should meet for being suitable for the exemption are actually met, and represents a minimum level of granularity into which such positions need to be subdivided by the institution.

66. The categorisation into positions of type A or positions of type B is based both on the EBA view that positions that are of a structural nature are mainly positions related to the cross-border nature of the group, and is also based on the finalised FRTB standards (published in January 2019).

67. It is important to stress that the classification as a position of type A (respectively position of type B), does not automatically imply that a position is of a structural (respectively non-structural) nature. In addition, being of a structural nature is only one of the conditions set out in these guidelines for a position to be exempted (e.g. even a net short position can be of a structural nature, but as described in a previous section such position cannot be exempted).

68. Given that the classification does not entail any automaticity with respect to the structural nature of the position, among positions of type A, there might be positions that the competent authority may not deem structural and for which the exemption is not granted. Vice versa, there might be positions of type B that are actually structural and for which the competent authority may grant the permission.

69. It is worth mentioning that since the categorisation is performed only for positions for which the exemption is sought, the categorization itself is meaningful/relevant only for the positions for which the minimum requirements discussed in section 3.2 are met. All positions not meeting such minimum requirements are indeed considered as non-structural (as previously set out).

Case A: permission sought on an individual basis

70. Where the provision is applied on an individual basis, except for the investments in subsidiaries (i.e. investment in subsidiaries that are subject to prudential consolidation according to title II Chapter 2 CRR at consolidated level), these guidelines do not identify any other kind of position that is clearly correlated to the cross-border nature of the group.

71. Accordingly:

1) **Positions of type A**: Investment in a subsidiary

2) **Positions of type B**: The remaining FX-positions (i.e. FX-positions that are not of type A)

72. It is worth mentioning that investments in the subsidiary are in general held at historical cost, and accordingly they are subject to an ad-hoc treatment in relation to the maximum open position as presented in the following sections.

Case B: permission sought on a consolidated basis

73. Where the provision is applied at consolidated level:

1) **Positions of type A** are FX-positions satisfying both conditions (a) and (b) below:

   (a) The FX-position stems from an investment in the subsidiary.

   (b) The subsidiary holding the item from which the FX-position stems from has a reporting currency at solo level that coincides with the currency of the FX-position itself.

2) **Positions of type B:** The remaining FX-positions (i.e. FX-positions that are not of the type A)

74. For meeting the accounting requirements, where consolidating or combining the financial statements prepared in different currencies, an institution must have financial statements of its foreign subsidiaries translated in its reporting currency in order to produce single currency,

consolidated financial statements. The translation of assets and liabilities of the subsidiary may give rise, in the consolidated financial statements, to translation reserves. Movements of the exchange rate will affect the translation reserve through other comprehensive income (OCI), resulting in the volatility of the capital with no impact on the volatility of the P&L.

75. From a prudential perspective, all positions in the banking book and in the trading book (regardless of whether the corresponding gains or losses due to change in the exchange rate go through OCI or P&L in the financial statements) are subject to own funds requirements for FX-risk.

76. However, in the context of the structural FX provision, it should be noted that in general, although there are exceptions, positions for which the institution seeks the exemption contributing to the translation reserve are expected to be positions of type A as they in general fulfill the conditions included in paragraph 74. In line with paragraph 70, this is relevant only for positions that meet the minimum requirements set out in the previous sections; accordingly, without any exemption, i.e. even if contributing to the translation reserves, trading book positions should not be considered as structural.

77. FX- positions of type A are positions not bearing FX-risk when the own funds requirements are computed at the level of the subsidiary holding the items from which the FX-positions stem from.

Example 1:

The institution is made of the parent bank P reporting in EUR and the subsidiary S reporting in GBP at solo level.

The parent bank P (at solo level) has only positions in EUR, except for the long-term participation in the subsidiary that is held at historical cost.

The subsidiary S has only positions in GBP.

At solo level, none of the two banks is subject to FX-risk (except for the item held at historical by the parent bank), however at consolidated level the positions stemming from the subsidiary are subject to FX-risk.

At consolidated level, the FX-positions in GBP stemming from the subsidiary are positions of type A.

Example 2:

Bank C is a subsidiary of bank B, and bank B is a subsidiary of the parent bank A, and the reporting currencies of the three banks are different. At a consolidated level, the position in the foreign currency of C are due to positions stemming from investments of A in B that invested in C; accordingly at consolidated level the open position in the foreign currency of C is generated by positions of type A.

3.3.2 Risk-management strategy of the positions for which the institutions seek the exemption

78. As mentioned, this subsection deals with the requirements the risk-management strategy should fulfill. Such requirements have been designed to support supervisors in determining whether an FX-position is of a structural nature, and mainly to assess whether the structural open position is maintained with the purpose of hedging the ratio.

79. In particular, the notion *deliberately taken to hedge* specifies that the credit institution must have entered in (or maintains) a position with the purpose and objective of hedging its ratio against the effects of exchange rate movements. Any requirement which is based on the intention is, however challenging for the competent authorities to assess. For that purpose, a number of qualitative and quantitative elements have been put in place to assess whether a position is taken (or maintained) for the purpose of hedging the ratio.

80. For the purpose of assessing such requirements, institutions must provide supervisors with the business strategy used for structural FX-positions management. In particular, the waiver application should refer to those documents where the institution describes the intention and the strategy to hedge the capital ratio. This will be first and foremost the bank's risk-appetite framework (RAF), although other relevant documents approved by the board or senior management of the bank could also be considered. In particular, the institution should include in the waiver application only elements that are reflected in (or are consistent with) the bank's general risk-management strategy.

81. In general, the risk-management framework of the structural FX positions shall be approved by the management board. In the approval process the members of the management board must be explicitly made aware the open position that is taken/maintained for hedging the ratio will lead to losses (i.e. reduction in the own funds) when the foreign currency depreciates. In other words, the management board must be aware that a strategy, which fully hedges the ratio entails higher volatility of own funds/CET1 amounts due to changes in the exchange rate than a closed position. Additionally, a maximum limit on the loss, which is deemed acceptable should be part of the approval from the management board.

82. In particular, qualitative elements should include:

(i) The definition of the objective of the institution leading to the stabilisation of the sensitivity of the capital ratio against movements in the relevant exchange rate;

(ii) The strategy in order to achieve such stabilisation[8], which should be outlined in a detailed, credible and reliable way, and the time horizon of this strategy, which should be at least 6 months.

[8] For example the institution may decide to buy or sell FX-forwards that are held in the banking book as they are taken with the purpose of hedging the ratio. The FX-position stemming from the FX-forward would be part of the structural positions that is eligible to be exempted.

83. It is worth highlighting that for the purpose of receiving the structural-FX waiver, the institution is not requested to fully offset the sensitivity of the ratio to changes in the exchange rate. The EBA fully acknowledges that institutions may have strategies which are e.g. based on a trade-off between having the ratio fully hedged (i.e. sensitivity of the ratio to exchange rate changes equal to 0) and zero volatility in the CET1 due to the FX changes (i.e. according to the CRR this is equivalent to a net open position as per article 352(1) equal to 0). However, the institution is required to keep the level of the sensitivity stable over time, i.e. within a certain range.

84. In light of such reasoning, where defining objective as per point (i) in paragraph 83, the institution should include a specific target in terms of range within which the sensitivity of the ratio should be with respect to changes in the exchange rate.[9]

85. Institutions should calculate the sensitivity of the ratio to FX-movements as follows:

$$Sensitivity = \frac{S\_OP - MaxOP}{RWA_{NoFX\_FC}}$$

Where:

S_OP = is the size of net open position that is stemming from positions that are suitable for the exemption expressed in the foreign currency (excluding positions corresponding to items that have been deducted from the institution's own funds and items that are held at historical cost);

$MaxOP$ = is the maximum open position calculated in accordance with section 3.5 (and expressed in the foreign currency);

RWA_{NoFX_FC} = is the total risk exposure amount as defined in article 92 of the CRR, so it includes both risk - weighted exposure amounts and own funds requirements arising from various type of risks, excluding the $FX - OFR$ for the currency for which the institution is applying the structural FX provision.

86. The derivation of the formula to compute $Sensitivity$ is provided in Annex I along with the derivation of the formula institutions should use for calculating the maximum open position that can be exempted.

87. As outlined in Annex I, the sensitivity has been derived excluding the effect of the own funds requirements (OFR) for FX-risk for the currency of the structural position. This is consistent with the formula institutions should use to calculate the maximum open position that can be exempted in accordance with Section 3.5. The exclusion should also help institutions in meeting their objective to keep the sensitivity stable over time. If the ratio was indeed including also the own funds requirements for FX-risk, then changes in the sensitivity of the ratio could mainly be driven by FX-

[9] On top of the objective of stabilizing the sensitivity of the ratio, the institution may have other objectives. These guidelines do not prevent the institution to define a risk-management framework that in addition to the objective of stabilizing the sensitivity, aims at meeting any other objective the institution deems opportune.

OFR for positions that are not even suitable for the exemption (e.g. positions stemming from the trading book).

88. In addition, excluding the OFR for FX-risk for the structural currency means excluding the effect of the FX-charge for positions that are suitable for the exemption which will be excluded anyhow from the capital ratio if the institution receives the permission referred to in article 352(2) to exclude them from the net open position.

89. The sensitivity in the formula in paragraph 85 has been obtained removing from the open position at the numerator the effect of those positions that are not suitable for the exemption. Not removing such positions would possibly lead institutions with e.g. relevant FX trading book business to fail the requirement to keep the sensitivity stable over time due to the instability of positions that anyhow will be capitalised (since they are not suitable for the exemption). Not removing such position would imply that the overall open position should be stable over time; however, institutions should not be required e.g. to keep stable the open position stemming from the trading book, as such positions are not in the scope of those that can be waived. However, including such positions in the computation of the sensitivity would have a more 'direct' meaning from an economic point of view.

90. Institutions using the standardised approach for computing the own funds requirement for foreign-exchange risk should calculate the size of S_OP in accordance with article 352(1), meaning that they should consider the items generating the structural position, and calculate the resulting net position stemming from such items (which has to be long).

91. Institutions using the internal model approach for computing the own funds requirement for foreign-exchange for some of its positions can either:

(1) Calculate S_OP in accordance with 352(1) as for institutions using the standardised approach; or

(2) Calculate S_OP as the delta foreign exchange sensitivity corresponding to the portfolio of items from which the net position stem from:

$$S\_OP = \frac{V(1.01 * FX_{FC}) - V(FX_{FC})}{0.01 * FX_{FC}}$$

where:

- V is the value of that portfolio in the reporting currency;

- S_OP is expressed in the foreign currency;

- FC is the foreign currency of the structural position;

- FX_{FC} is the exchange rate between the reporting currency and the foreign currency FC (i.e. one unit of foreign currency corresponds to FX_{FC} units of the reporting currency).

92. The range within which the sensitivity should be kept over time should be calculated as follows:

$$Sensitivity \in [\,Target - \frac{0.05 * S\_OP_{inception}}{RWA_{NoFX_{FC}inception}}\ ;\ Target + \frac{0.05 * S\_OP_{inception}}{RWA_{NoFX_{FC}inception}}\,]$$

Where:

- $S\_OP_{inception}$ = is the value of S_OP at the date at which the permission was requested.
- $RWA_{NoFX_{FC}inception}$ = is the value of $RWA_{NoFX_{FC}}$ at the date at which the permission was requested.

93. The risk-management strategy should outline the definition of the boundaries between positions that the institution categorize as structural and taken with the purpose of hedging the ratio and those that are not. Those are also the boundaries that should be followed by the institution when categorizing FX-positions when entering into a new transaction bearing FX-risk.

94. In addition, for the purpose of assessing whether the open structural position has been taken to hedge the ratio or not, the risk-management strategy should outline how the institution plans to maintain the level of the sensitivity of the ratio (stated in the objective) stable over time. In particular, it should cover at least the following aspects:

(a) It should clearly state which are the position the institution intends to open/close as soon as the sensitivity of the ratio with respect to movements in the exchange rates changes, e.g. at consolidated level the institution is expected to at least indicate at which level (i.e. at parent bank level, or at level of which subsidiary) it intends to open/close the position.

(b) It should provide evidence that there are not impediments (of any nature) in opening/closing the positions identified in point (a). In particular:

(i) The intention to close/open the positions identified in point (a) should not lead to any inconsistency with the overall risk-management of the institution. In addition, it should not lead to any inconsistency with risk-management that the legal entities within the group may have in place e.g. at solo level.

(ii) The intention to close/open the positions identified in point (a) should be consistent with the risk-management strategies of the structural FX-positions that legal entities (i.e. the parent bank/subsidiary) within the same group may have where applying the structural FX-provision at a different level (i.e. on a solo/consolidated basis). In other words, closing/opening such positions e.g. for the purpose of hedging the ratio at consolidated level, must be compatible with the risk-management strategy the institution has for hedging the solo ratio.

The institution should also document and have available for supervisory review the type of positions (e.g. positions stemming from a specific subsidiary) and amounts (i.e. the net open position that is actually excluded) that are excluded from the FX-charge in the market risk capital requirements.

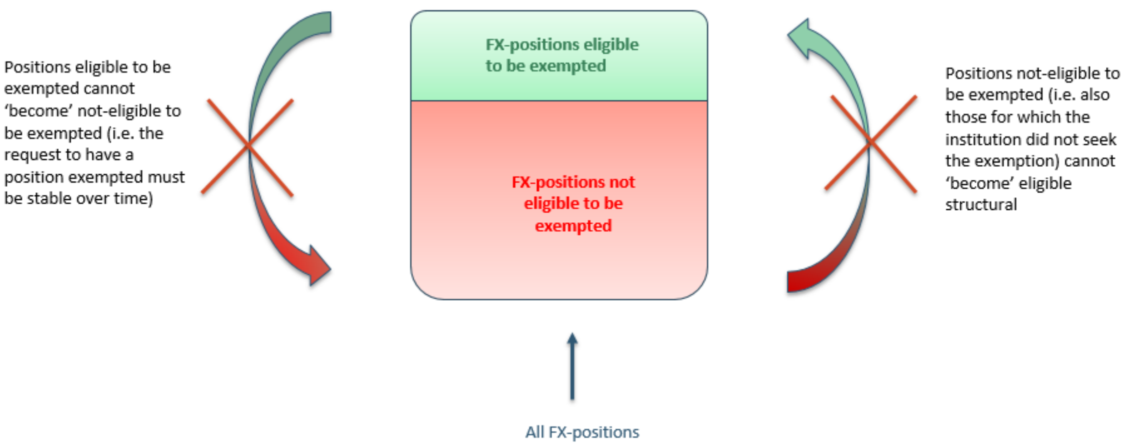
3.3.3 Minimum requirements on the exclusionary treatment of the hedge

95. The assessment made by the competent authority should lead to the identification of the positions that are suitable for the exemption. It is important to stress that this does not necessarily imply that such positions are actually exempted (i.e. excluded from the net open position), indeed a portion of the open position generated by them might not be exempted due the cap given by the maximum open position that institutions can exempt; such situation happens when the institution is actually over-hedging the ratio.

96. Once the exemption has been granted, institutions cannot change the boundaries identifying the positions that are suitable for the exemption from the positions that are not. In particular, if the institution did not seek for exemption for some positions, then, as previously mentioned, they must be treated (at all effects) as positions not-suitable for the exemption. Accordingly, institutions cannot change the scope of the positions for which they seek the exemption.

97. This specification is deemed essential to avoid any regulatory arbitrage, in particular considering the broad interpretation taken by these guidelines on the meaning of 'deliberately taken'. Figure 2 below provides a graphical representation about this aspect. The guidelines include such specification by requiring the institution to outline the above mentioned boundaries, and by saying that they must be used where entering into a new FX-position.

Figure 2



3.3.4 Reporting and data requirements

98. Institutions should inform the competent authority on the data and processes that are used for the purpose of calculating the sensitivity of the ratio with respect to changes in the exchange rate and for computing the maximum open position.

99. In addition, institutions are required to regularly provide an overview of the structural FX provision which shall contain a template for the structural FX provision. This reporting shall ensure that the essential information necessary to monitor the development of structural FX provisions is available in one template, which is one source of information for the competent authority. The template shall at least include the following information separately for each currency – the respective figures shall be calculated by the end of the month:

i. Net open FX position in the currency previous to any exemption;

ii. The amount of positions that are not structural;

iii. The amount of positions that are suitable for the exemption and the amount of those that are not;

iv. The maximum open position calculated in accordance with section 3.6;

v. The open position that is excluded from the net open FX position following the permission of the competent authority;

vi. The sensitivity of the ratio calculated in accordance with the previous section;

vii. The economic gain/loss due to movements in FX rates of the open position[10] in point iii

100. The template in paragraph 100 shall be submitted to competent authorities on a monthly basis. Due to the fact that this template is not included in the XBRL taxonomy, the technical submission shall be agreed with the competent authority.

101. It should be noted that the EBA proposes to not include the above mentioned reporting requirements in the current COREP templates considering that banks will switch in few years to the new FRTB requirements also for capital purposes, and accordingly they will be required to fill a new set of templates. However, the EBA intends to include such requirements in COREP in the future so that to have a more structured tool for reporting relevant information on structural FX.

102. Finally, the EBA thinks that essential information on structural FX provisions should be regularly reported to senior management and management body within the institution.

[10] In the guidelines it is specified that economic loss should be calculated as the variation in the value of the structural position in the last month due to changes in the exchange rate.

3.4 Treatment for items held at historical cost

103. The scope of the positions to be considered for the overall net foreign exchange position pursuant to Article 352(1) of the CRR comprises inter alia all asset and liability items (i.e. both in the trading and non-trading book) in the respective currency (foreign or reporting currency) in question.

104. In accordance with Article 92(4)(a) of the CRR, an institution shall calculate the own funds requirements for market risk of all trading book positions and non-trading book positions subject to foreign exchange risk or commodity risk irrespective of their accounting treatment. Therefore, all trading book positions and non-trading book positions subject to foreign exchange risk of an institution – with the possible exemption of structural positions in accordance with Article 352 - have to be included in the calculation of own funds requirements for market risk. This statement would hold also for so-called non-monetary items, which are defined in the following.

105. In accordance with the accounting standard IAS 21, monetary items refer to assets/liabilities with a right to receive or an obligation to deliver a fixed or determinable amount of money. For all these items, regardless of whether they are reflected at historical cost or at fair value, the FX rate applied shall be that of the reporting date.[11] Non-monetary items (i.e. items with the absence of a right to receive or an obligation to deliver a fixed or determinable amount of money) should be translated using the exchange rate at the date of the transaction, unless they are designated FV, either applying the FV option or if they are held with trading intent. For a typical institution, participations in subsidiaries in the individual balance sheet as well as real estate items would be such non-monetary items.

106. In general, non-monetary items that are booked at historical cost therefore do not change their balance sheet value with the movements in the exchange rates. However, in case of an indication of an impairment (due to a sharp move of the FX rate and/or due to other circumstances) the carrying amount of an asset is the lower of its carrying amount before considering possible impairment losses (with the FX rate of the date of the transaction) and its recoverable amount (with the FX rate of the reporting date). Thus, in certain instances a movement of the FX rate may also lead to FX-related losses with respect to non-monetary items that are booked at historical cost.

107. It is beyond the scope of these guidelines to clarify several aspects related to non-monetary items held at historical costs in the context of the FX-risk, although the harmonization of practices among jurisdictions on these aspects would be beneficial.

108. As previously mentioned, non-monetary items held at historical costs are in the scope of positions to include in the calculation of the open position. However, in the context of the structural FX treatment, they are not taken into consideration when comparing the value of the net open position stemming from positions that are eligible to be structural against the threshold set by the

[11] Here and in what follows, it is assumed that the functional currency (in accordance with IAS 21, i.e. the currency of the primary economic environment in which the entity operates) is identical to the (regulatory) reporting currency.

open position neutralizing the sensitivity of the capital ratio with respect to changes in the exchange rate.

109. Accordingly, in first place, institutions should treat non-monetary items like all other items in this context. However, as mentioned above, they can be exempted from the calculation regardless of the threshold set by the maximum position. In other words, for FX-positions stemming from non-monetary items held at historical cost, the eligibility to be exempted coincides with fact of being structural[12]. In other words, items at historical costs do not have either an hedging effect on the ratio nor an opposite effect to the hedging; indeed, for small FX-changes they 'behave' as those items that are in the reporting currency. Accordingly, assessing the hedging effect in this context would not be meaningful. Example 7 in annex II has been built to show the need of this specific treatment.

110. This ad-hoc treatment is of particular relevance in the context of the structural-FX provision applied at solo level. Indeed, there is the presumption that non-monetary items at historical cost generating FX-risk would mainly be investments in subsidiaries denominated in foreign currency (i.e. in general, the reporting currency of the subsidiary). Such investments are not part of the consolidated balance sheet, as the investments in the subsidiary (that are assets in the bank owning the subsidiary) nets with the capital (i.e. liabilities side) of the subsidiary itself during the consolidation process. As a result, the above-mentioned treatment for non-monetary items at historical cost is deemed to have a limited impact in the context of the structural FX provision at consolidated level.

111. It should be noted that the EBA expects that banks assess those items in their ICAAP, and that they will be part of the SREP if deemed necessary.

3.5 Calculation of the max open position

112. One of the key features of these guidelines on structural FX is the definition of the maximum open position that can be recognized as taken for hedging the ratio to an institution by the Competent Authority.

113. The definition of the maximum position is not trivial giving the complex nature of the structural FX provision. In particular, the maximum open position that can be exempted is defined as the amount of FX-risk position that neutralises the sensitivity of the capital ratio to movements in the exchange rate. Over such maximum position indeed, the institution loses the hedging effect where increasing the open position, accordingly, the position exceeding such maximum position cannot be considered as kept for hedging the ratio.

[12] This does not mean that an FX-position stemming from non-monetary item at historical costs is automatically structural; instead, it implies that once the competent authority assessed its structural nature, then such position should be considered automatically as eligible to be exempted.

114. This section aims at defining the methodology that the institution should apply for calculating the maximum risk position that can be recognised as suitable for the exemption.

115. As mentioned, Paragraph 2 of Article 352 of the CRR specifies that any positions which an institution has taken in order to hedge its capital ratio against the adverse effect of the exchange rate, may be excluded from the calculation of the net open position defined in paragraph 1 of the same article. As previously mentioned, in the context of these guidelines, hedging the capital ratio to FX changes is interpreted as reducing the capital ratio sensitivity to a change in the FX rate.

116. As the intention of hedging the ratio from FX changes by entering in any FX-risk position precede the fact of actually having such position, the ratio that the institution wants to hedge is the one that the institution have without considering the Own Funds Requirements (OFR) for such FX-risk position. A similar reasoning can be done for an open position that is maintained open for the purpose of hedging the ratio. Indeed, it could be argued that the institution keeps the position open for hedging the ratio, aware that such position would be exempted from the open position.

117. Accordingly, when the sensitivity of the capital ratio to the FX rate is assessed for the purpose of calculating the maximum open position that can be recognised as structural, the capital ratio should be the one without considering any own funds requirements for FX risk ($FX - OFR$).

118. The decision to exclude the $FX - OFR$ from the ratio for the purpose of calculating the maximum position that can be recognised as structural:

- Applies only to the currency for which the institution is calculating the maximum open position; i.e. the $FX - OFR$ for all other currencies should be included in the ratio used for the calculation of the maximum position.

- Avoids the circular effect of calculating the open position neutralizing the ratio including also the $FX - OFR$ of positions that will be excluded as part of the waiver.

119. Excluding the $FX - OFR$ (just for the currency for which the exemption is sought) should not be burdensome for banks. In particular:

- For banks using the standardised approach for the FX-risk, this would simply require the bank to remove the FX-charge stemming from net open position in the currency from the $FX - OFR$ that are already supposed to be calculated.

- For banks using the internal model approach for FX-risk, this would require banks to run the Value-at-Risk model without considering changes in the relevant exchange rate.

120. In line with the reasoning above, these guidelines set that the maximum open position ($MaxOP$) that the institution may exclude (upon permission of the competent authority) when hedging the CET1 ratio is the one calculated in accordance with the following formula:

$$MaxOP = CET1 * \frac{\frac{RWA_{NoFX_{FC}}\left(1.01 * FX_{FC_0}\right) - RWA_{NoFX_{FC}}(FX_{FC_0})}{0.01 * FX_{FC_0}}}{RWA_{NoFX_{FC}}(FX_{FC_0})} \quad (*)$$

Where $MaxOP$ is expressed in the foreign currency FC, and:

(i) FX_{FC}: is the spot exchange rate between the reporting currency and the foreign currency for which the institution is calculating the maximum open position that can be exempted (i.e. one unit of foreign currency corresponds to FX_{FC} units of the reporting currency);

(ii) FX_{FC_0}: is the value of FX_{FC} at the moment of the calculation of the calculation of $MaxOP$;

(iii) $RWA_{NoFX_{FC}}$: is the total risk exposure amount as defined in article 92 of the CRR, so it includes both risk - weighted exposure amounts and own funds requirements arising from various type of risks, excluding the $FX - OFR$ for the currency for which the institution is calculating the maximum open position that can be exempted;

(iv) $CET1$: is the Common equity Tier 1 of the institution.

121. For the purpose of calculating the maximum open position where the institution is hedging the T1 ratio (resp. the total capital ratio), the institution should:

(i) Calculate the amount in formula $(*)$ substituting the Common equity tier 1 in formula $(*)$ with the Tier 1 capital (resp. the Total capital).

(ii) Deduct from the amount obtained in (i), the amount of additional Tier 1 instruments (resp. the sum of AT1 and T2 instruments) issued in the structural currency.

122. Considering that:

(i) The sensitivity to the exchange rate in the value of a non-monetary item denominated in the foreign currency held at historical cost is zero;

(ii) Items in the foreign currency that have been already deducted from the CET1 (and accordingly from the T1 capital and the total capital) do not affect the sensitivity of the numerator of the ratio to FX-rate[13].

[13] It should be noted that in the FRTB standards it is clarified that positions stemming from items that have been deducted from the capital base must not be subject to own funds requirements for foreign-exchange risk. However, article 352(2) allows banks to exclude (subject to the permission of the competent authorities) positions that have been deducted from the capital based, meaning that there might be cases where such positions are actually included in the net open position.

Then, the $MaxOP$ should represent an upper bound for risk-positions that are suitable for the exemption, arising from items which are not in the scope of non-monetary items held at historical cost or in the scope of items deducted from the capital base.

123. The institution should perform the calculation of the maximum open position at least monthly. The competent authority may (at any time) request the institution to compute the maximum open position (e.g. in the case the exchange rate changes significantly) and to adjust the waived position accordingly.

124. Annex I presents the derivation of formula($*$).

3.6 Calculation of the FX-OFR following the permission for the exemption

125. For the purpose of determining the own funds requirement associated to the FX-risk once the permission has been granted, two different cases are distinguished:

(i) Where the size of the open position suitable for the exemption (i.e. the open position generated by the FX-positions suitable for the exemption) is lower than the maximum open position.

(ii) Where the size of the open position suitable for the exemption (i.e. the open position generated by the FX-positions eligible to be structural) is greater than the maximum open position.

126. Where the size of the open position suitable for the exemption is lower than the maximum open position (i.e. under-hedges), then the open position suitable for the exemption is exempted.

127. Where the size of the open position eligible to be structural is greater than the maximum open position (i.e. over-hedges), then only the amount given by the maximum open position is exempted.

128. Institutions should inform the competent authority of the positions that are actually excluded from the net open position. In particular, in the case of over-hedges, since only a part of the positions can be actually waived, the institution should provide the competent authority with the criteria the institution uses for selecting the positions that are actually excluded.

129. In addition, institutions using the internal models for FX-risk should specify the methodology that is used to exclude the waived FX-positions from the computation of the own funds requirements, and more in general to transfer the concept of net open position in the context of the internal model approach. Examples of methodologies that the institution may use are presented below.

Example:

Institution should be aware of the net present value of the portfolio of the positions in the BB included in the internal model that are suitable for the exemption following the assessment of the competent authority. Suppose such net present value to be 100. For banking book items, the net present value is a good approximation of the open position (associated to such items) calculated in accordance with article 352(1). Accordingly, it could be assumed that 100 is also the open position calculated for the items that are suitable for the exemption in accordance with 352(1). Suppose the maximum open position calculated to be 80.

The institution could include in its internal model a short position in cash in the foreign currency. The amount of such short position should be equal to the maximum open position in case of over-hedges, while for under-hedges it should be equal to the value of the net open position itself, which for positions stemming from items in the banking book can be approximated with the present value of the items themselves. Accordingly, in the specific case presented above, the institution would include a short position of 80 in its internal model[14]*.*

Alternatively, the institution may, for example, rescale its portfolio so that only 20 is capitalised. In this specific case, the institution should rescale its portfolio of 1/5 (i.e. 20/100), and consider such rescaled portfolio in its internal model. It should be noted that the 'rescaling' of the portfolio should not lead to a reduction of the commodity risk or non-delta risk (since only the delta risk component is possibly structural) that may stem from items included in such rescaled portfolio.

130. Without prejudice on other requirements, in particular related to the use of internal models, although not part of the legal text of these guidelines, as these specifications would go beyond the scope of the guidelines which deal with structural FX only, it should be noted that:

(i) The EBA believes that institutions should not be requested to update the value of their banking book positions, e.g. on a daily basis, for the purpose of computing the own funds requirements for FX-risk. Instead, for example, institution should be required to consider the last available accounting value, and perform only a daily revaluation of the FX-component. This specification is relevant for over-hedges where institutions are required to capitalise some positions that were suitable for the exemption (and as such they are certainly banking book position)[15].

(ii) During the SREP, CAs keep the ability to impose, if deemed necessary, pillar 2 add-ons in case pillar 1 requirements would be assessed as not sufficiently adequate to reflect the actual risk; however, where the Competent Authority adopts Pillar 2 add-ons aimed at

[14] On the contrary, if the institution had a net open position of 70, then the institution was under-hedging the ratio (indeed, the maximum open position, i.e. 80 is greater than the net structural open position). As a result, the short position in cash in the foreign currency to include in the internal would be equal to 70.

[15] It should be noted that the EBA has a specific mandate to specify how institution should calculate the own funds requirements for foreign-exchange positions for the FRTB standardized and internal model approach. Although such specifications will be legally applicable only in the context of the FRTB, the EBA intends as part of that mandate to clarify some aspects that may be relevant also for the current market risk framework.

covering the structural FX risk the EBA expects that the Competent Authority takes into consideration the Pillar 1 capital requirement and the frequency of the update of the value of the translation reserve when taking a decision on the amount of the Pillar 2 add-ons.

3.7 Approval of the competent authorities and changes in the risk-management strategy of the structural-FX positions

131. As usual, the approval of the competent authorities encompass all specifications that the institution does for meeting the requirements included in the previous sections (including those related to data that are used for computing the maximum open positions). Accordingly, the approval of the competent authority holds only under the condition that such specifications remain unchanged.

132. As soon as the institution plans to undertake any change to the specifications, which are at the basis of an approval, it should inform the competent authority of such change. Accordingly, the competent authority should assess the change and proportionally to the relevance/importance of the change, it should/may take any supervisory measure it deems appropriate (e.g. withdrawal of the previously granted permission). For this purpose, on top of the reporting requirements set out in section 2.3.4, the institution is required also to report whether it is planning to undertake any change.

133. It is important to stress that even where the institution does not perform any change to the specifications at the basis of the approval, the competent authority has the power to take any supervisory measure it deems appropriate; for example, if the competent authority assesses that the institution is not actually implementing the strategy that was at the basis of the approval, the competent authority may decide to withdraw the permission that was previously granted, as the institution is not following the specifications that were made for receiving the waiver.

134. As mentioned, institutions are required to keep the sensitivity stable over time, i.e. the sensitivity should be kept within the range calculated in accordance with section 3.3. Where the institution does not meet such objective (i.e. the sensitivity hits one of the boundaries of the range specified in section 2.3.2), the competent authority should be timely informed and should be provided with the reason justifying the breach[16]. The competent authority should investigate in order to understand the reason behind the breach. For example the breach may be due to:

(i) The inability of the institution to actually put in practice the strategy described in the application waiver to maintain the sensitivity stable over time.

(ii) The instability of some positions that were recognised as suitable for the exemption.

[16] For this purpose a specific reporting requirement has been included along with those specified in section 2.3.4.

(iii) Relevant changes in the business model of the bank leading to e.g. a relevant change in the value of the maximum open position calculated in accordance with section 3.5.

Based on the reason behind the breach, the competent authority should take any supervisory measure that is deemed appropriate. For example:

- The competent authority could withdraw the permission that was previously granted if the institution is not able to put in practice the strategy described in the application waiver (i.e. the strategy that was at the basis of the permission). Alternatively, the institution may propose a change in the strategy included in the application waiver, which is actually able to implement. Such change should be treated as outlined in paragraph 133.

- The competent authority may require the institution to review the boundaries defining the positions that are structural from those that are not, in order to reduce the amount of net open position suitable for the exemption. This could be the case for example where the competent authority assesses that the breach is due to the instability of some positions that were included in the scope of those that were suitable for the exemption, and accordingly, they shouldn't be considered as structural.

As set out in the previous section, the time horizon of the institution's strategy should be at least 6 months, meaning that the institution should not change e.g. the objective within a 6-months period from which the permission was granted.

If after such period the institution wants to change the objective included in the strategy, for example due to a change in the business model, then it should be treated as a change to which the provisions in 133 apply.

135. After having received the permission in line with these guidelines, the more frequent the institution requires to apply changes to the terms at the basis of the permission, the more e.g. it could be argued that some positions for which the institution seeks the exemption are actually not stable (and accordingly, of a structural nature). Accordingly, competent authorities are expected to consider also the terms at the basis of permissions that were granted in the past, where assessing the terms of a change or a new permission.

Transitional arrangement

These guidelines specify that competent authorities should, as far as possible under national laws, review, update or revoke permissions already granted at the date of application of these guidelines, regardless of the duration of the permission that may have been granted. The review of past waivers should be done through close cooperation with the supervised entities, in close supervisory dialogue.

4. Guidelines

In between the text of the draft Guidelines that follows, further explanations on specific aspects of the proposed text are occasionally provided, which either offer examples or provide the rationale behind a provision, or set out specific questions for the consultation process. Where this is the case, this explanatory text appears in a framed text box.

EBA/GL/2020/XX

DD Month YYYY

Draft Guidelines

On the treatment of structural foreign exchange positions under Article 352(2) of Regulation (EU) No 575/2013 (CRR)

1. Compliance and reporting obligations

Status of these guidelines

1. This document contains guidelines issued pursuant to Article 16 of Regulation (EU) No 1093/2010[17]. In accordance with Article 16(3) of Regulation (EU) No 1093/2010, competent authorities and financial institutions must make every effort to comply with the guidelines.

2. Guidelines set the EBA view of appropriate supervisory practices within the European System of Financial Supervision or of how Union law should be applied in a particular area. Competent authorities as defined in Article 4(2) of Regulation (EU) No 1093/2010 to whom guidelines apply should comply by incorporating them into their practices as appropriate (e.g. by amending their legal framework or their supervisory processes), including where guidelines are directed primarily at institutions.

Reporting requirements

3. According to Article 16(3) of Regulation (EU) No 1093/2010, competent authorities must notify the EBA as to whether they comply or intend to comply with these guidelines, or otherwise with reasons for non-compliance, by ([dd.mm.yyyy]). In the absence of any notification by this deadline, competent authorities will be considered by the EBA to be non-compliant. Notifications should be sent by submitting the form available on the EBA website to compliance@eba.europa.eu with the reference 'EBA/GL/2020/xx'. Notifications should be submitted by persons with appropriate authority to report compliance on behalf of their competent authorities. Any change in the status of compliance must also be reported to EBA.

4. Notifications will be published on the EBA website, in line with Article 16(3).

[17] Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC, (OJ L 331, 15.12.2010, p.12).

2. Subject matter, scope and definitions

Subject matter

5. These guidelines provide guidance to competent authorities across the EU on the treatment of structural foreign exchange positions referred to in Article 352(2) of Regulation (EU) No 575/2013.

Scope of application

6. These guidelines apply with regard to requests for permission by institutions applying the requirements of Regulation (EU) No 575/2013 on an individual basis as well as to requests for permission by institutions applying the requirements of Regulation (EU) No 575/2013 on a consolidated basis. Where institutions request a permission at both these levels these guidelines apply separately at each level, even if the request for that permission is made at the same time.

7. These guidelines apply to all institutions, irrespective of whether they calculate the own funds requirements for foreign exchange risk in accordance with Title IV, Chapter 3 of Regulation (EU) No 575/2013 for all of their positions, or based on the internal model approach in accordance with Title IV, Chapter 5 of that Regulation for all of their positions, or based on one of these approaches for some of their positions and the other approach for the remaining positions.

Addressees

8. These guidelines are addressed to competent authorities as defined in point i of Article 4(2) of Regulation (EU) No 1093/2010 and to financial institutions as defined in Article 4(1) of Regulation No 1093/2010.

Definitions

9. Unless otherwise specified, terms used and defined in Regulation (EU) No 575/2013 have the same meaning in the guidelines.

3. Implementation

Date of application

10. These guidelines apply from 01.01.2021.

11. Competent authorities should, as far as possible under national laws, review, update or revoke permissions already granted at the date of application of these guidelines.

4. Overview of requirements

12. For the purpose of granting the permission referred to in Article 352(2) of Regulation (EU) No 575/2013, the following process should be applied:

    (a) requests should meet the procedural admissibility requirements referred to in Section 5 and the substantive admissibility requirements referred to in section 6;

    (b) any requests that are admissible in accordance with point (a), should then be assessed with the view to examining their compliance with the conditions of Regulation (EU) No 575/2013 in accordance with Section 7;

    (c) with regard to any requests that have been found compliant with the requirements of that Regulation in accordance with point (b), the size of the position to be excluded should be determined in accordance with Section 8.

13. Following the granting of the permission referred to in Article 352(2) of Regulation (EU) No 575/2013, the ongoing monitoring of the permission should be carried out in accordance with Section 9.

5. Procedural admissibility of a request under Article 352(2) of Regulation (EU) No 575/2013

14. Competent authorities should deem as acceptable the submission of more than one requests for permission by an institution at the same time, including where such requests relate to different levels of application of the own funds requirements of Regulation (EU) No 575/2013 or to more than one foreign currency.

15. In their request to competent authorities, institutions should justify how the positions in the currency for which they seek the exemption meet the specifications set out in these guidelines. They should also specify the methodology that they intend to use in order to exclude the position from the computation of the own funds requirements for foreign exchange risk where those are calculated using the internal model approach in accordance with Title IV, Chapter 5 of Regulation (EU) No 575/2013.

6. Substantive admissibility of a request under Article 352(2) of Regulation (EU) No 575/2013

Hedging of a ratio

16. An open position in a foreign currency should be considered to be hedging the ratio where it reduces the adverse effect on that ratio caused by changes in the exchange rate, irrespective of whether that adverse effect derives from an appreciation or a depreciation of that foreign currency with respect to the reporting currency and irrespective of whether the position is maintained for hedging the ratio or taken for hedging the ratio.

17. The request for the permission referred to in Article 352(2) of Regulation (EU) No 575/2013 should specify which of the three ratios referred to in Article 92 of Regulation (EU) No 575/2013 the institution aim to hedge and the rationale for the selection of that ratio.

Questions for consultation

Where responding to the questions for consultation, respondents are invited to clarify, where relevant, whether they are referring to the structural-FX provision applied at the solo or/and consolidated basis.

Q1. Would you consider beneficial to limit the S-FX provision to hedge the CET1 ratio aiming at creating a level playing field in the EU? Please provide a rationale.

Q2. Which of the three ratios is your institution hedging?

Currencies to which the hedging relates

18. The request by an institution to exempt positions should be made with regard to currencies that are relevant to the business of the institution.

19. For the purpose of paragraph 18, currencies that should be considered relevant to the business of the institution should be the three currencies for which the net open positions of the institution calculated in accordance with Article 352(1) of Regulation (EU) No 575/2013 are the largest.

20. Other currencies, not meeting the condition referred to in paragraph 19 may be considered relevant where there is adequate justification supporting the relevance of the currency in the business of the institution.

21. Where an institution seeks the permission referred to in Article 352(2) of Regulation (EU) No 575/2013 with regards to positions in more than one relevant currency, both of the following should apply:

    (a) the same ratio as that referred to in paragraph 17 should be selected in the context of each of such currencies;

    (b) where calculating the maximum open position referred to in paragraph 31 in the context of one currency, the institution should not consider any waivers granted or that are in the process of being granted in accordance with article 352(2) of Regulation (EU) No 575/2013 for positions in other currencies.

Explanatory text for consultation purposes

The proposed draft guidelines include a provision identifying the relevance of a currency in the context of the structural FX provision with an absolute threshold (i.e. the top 3 currencies identified as set out in paragraph 19 are considered to be relevant). The EBA acknowledges that such absolute threshold may not capture the actual relevance of a currency in the business of the institution; in particular, there might be institutions for which even the top 3 currencies are not relevant, and some others where more than 3 currencies are actually relevant.

Accordingly, as part of the consultation, the EBA seeks feedback from the institutions responding to the consultation paper, on alternative measures that could be included in the guidelines for identifying the relevance of a currency instead of an absolute threshold.

Finally, the text specifies that where computing the maximum open position in the context of one currency, the institution should not consider the waiver that may have been granted in the context of another currency, meaning that the own funds requirements for foreign-exchange risk for the other currency should be fully considered for the purpose of computing the maximum open position. In this way, institutions will get the same result in terms of maximum open position in the context of different currencies regardless of whether the institution requests the permission referred to in Article 352(2) for e.g. two currencies at the same time, or one currency before another one.

Questions for consultation

Where responding to the questions for consultation, respondents are invited to clarify, where relevant, whether they are referring to the structural-FX provision applied at the solo or/and consolidated basis.

Q3. For how many and for which currencies do you currently have the permission to exclude some positions from the corresponding net open position? For how many and for which currencies do you plan to request the permission following the adoption of these guidelines?

Q4. Could you please provide the list of the 10 most material currencies if the materiality of a currency were assessed in accordance with measure A and measure B? Please provide also the value taken by measure A and measure B for those currencies.

Measure A: percentage of the open position in the foreign currency (without considering any waiver) with respect to the open position in the reporting currency.

Measure B: percentage of the open position in the foreign currency (without considering any waiver) with respect to the total own funds of the institution.

Positions eligible to be exempted

Non-trading book nature

22. A position in the foreign currency stemming from an item that is held in the trading book should not be considered as eligible to be exempted.

Long nature of the hedging position

23. The numerator of the ratio hedged by the position for which the exemption is sought should increase where the relevant foreign currency appreciates with respect to the reporting currency.

24. Where an institution computes the own funds requirements of Regulation (EU) No 575/2013 for market risk on an individual basis, the position for which the exemption is sought should be long on a net basis.

25. Where an institution computes the own funds requirements of Regulation (EU) No 575/2013 for market risk on a consolidated basis, the position for which the exemption is sought should be long on a net basis in accordance with the following:

    (a) where it does not have the permission referred to in Article 325 of Regulation (EU) No 575/2013, at the level of each institution within the group;

    (b) where it has the permission referred to in Article 325 of Regulation (EU) No 575/20913, at both of the following levels:

        (i) at the level of each subset of institutions of the group within which the positions are offset as specified in that permission;

        (ii) at the level of each of the rest of the institutions within the group, which are not included in that permission.

Explanatory text for consultation purposes

One of the conditions set out in these guidelines for receiving the structural-FX permission is that the position for which the exemption is sought should be long at each level at which the institution calculates the net open position(s) in the relevant currency.

At solo level, the institution calculates the net open position by including all positions that it has on a solo basis; in other words, the calculation of the net open position is performed only once.

At consolidated level, the levels at which the net open position(s) is (are) calculated depends on the scope of application of the permission referred to in Article 325 that an institution may have. In particular, consider the following example:

An institution is composed by 3 entities: P, S1 and S2, where P is the parent bank and S1 and S2 are two subsidiaries. Suppose that after applying for the permission in Article 325 the institution (i.e. P+S1+S2) is allowed to offset positions in P and S1, but not S2. Then the institution is required to compute the own funds requirements for market risk on the portfolio of P+S1 and on the portfolio of S2, and sum up the two results. Accordingly, the institution will compute two net open positions, one for computing the own funds requirements for P+S1, and the other for computing the own funds requirements of S2.

The provision included in the guidelines requires that the positions that are included in net open positions that result to be short at the level at which they are computed cannot be part of the exemption. Accordingly, in the example given above, if the net open position of P+S1 is short, then the FX positions generating such net open position cannot be excluded.

Questions for consultation

Where responding to the questions for consultation, respondents are invited to clarify, where relevant, whether they are referring to the structural-FX provision applied at the solo or/and consolidated basis.

Q5: Do you agree with the policy included in paragraph 25? Please elaborate.

7. Examination of the merits – assessment of the structural nature of the positions and of the intention to hedge the ratio

Assessment of the structural nature of a position

26. The following positions should be considered as positions of a structural nature, unless the competent authority's assessment results in the opposite conclusion:

    (a) where the institution requesting the permission referred to in Article 352(2) of Regulation (EU) No 575/2013 applies the requirements of that Regulation on an individual basis, a position in the relevant currency which corresponds to investments in subsidiaries that are included in the same scope of consolidation as the institution requesting the permission;

(b) where the institution requesting the permission referred to in Article 352(2) of Regulation (EU) No 575/2013 applies the requirements of that Regulation on a consolidated basis, a position for which both of the following conditions are met:

(i) it stems from an investment in a subsidiary that has been included in the consolidation;

(ii) the currency of the position coincides with the reporting currency used by the subsidiary holding the item to which such position corresponds where calculating the own funds requirements for foreign-exchange risk in accordance with Regulation (EU) No 575/2013 on an individual basis.

Explanatory text for consultation purposes

In the background section of this consultation paper the EBA identified some positions for which there is the presumption that they are of a structural nature (i.e. ‘positions of type A’). The remaining ones, i.e. banking book positions that are not of type A, have been indicated with the term ‘positions of type B’. As part of the consultation, the EBA included some questions in order to understand whether the institutions foresee to ask the permission for excluding positions of type A or positions of type B from the net open position.

Questions for consultation

Where responding to the questions for consultation, respondents are invited to clarify, where relevant, whether they are referring to the structural-FX provision applied at the solo or/and consolidated basis.

Q6: Are the structural positions for which you plan to ask the permission mainly positions of type A (i.e. meeting the condition in the paragraph above), or positions of type B? Could you please provide a rough estimation of the percentage of positions of type A on the total foreign-exchange position that you will potentially include in the request to the competent authority? For example, if the institution plans to request to exclude a net position = 100, and 80 of such net open position is due to positions of type A, then the percentage of positions of type A on the total foreign-exchange position that the institution will potentially include in the request to the competent authority is 80%.

Q7. Could you please provide the percentage of the net open position that you plan to request to exclude with respect to the net open position that your institution has without any waiver?

Please reply to Q6 and Q7 for each of the currencies for which you plan to request the permission.

Assessment of the intention to hedge the ratio- governance and risk-management strategy of the structural positions

27. In order for the competent authorities to be able to establish that the position in the relevant currency has been taken or is maintained for the purpose of hedging the relevant ratio, all of the following conditions should be met:

(a) the institution operates and documents the risk-management framework for managing such positions;

(b) the risk management framework referred to in point (a) sets out the objective to stabilize the level of sensitivity of the ratio over time;

(c) the institution calculates the sensitivity referred to in point (b) as follows:

$$sensitivity = \frac{S\_OP - MaxOP}{RWA_{NoFX_{FC}}}$$

Where:

- S_OP = the size of the structural net open position in the foreign currency that the institution has taken for hedging the ratio excluding positions corresponding to items that have been deducted from the institution's own funds and non-monetary items that are held at historical cost;

- $MaxOP$ = the maximum open position calculated in accordance with paragraph 31;

- $RWA_{NoFX_{FC}}$ = the total risk exposure amount calculated in accordance with article 92(3) of Regulation (EU), excluding the own funds requirements for foreign-exchange risk for all positions that are in the foreign currency FC of the structural position;

(d) the objective referred to in point (b) is defined by the institution by identifying a targeted sensitivity and a range within which the sensitivity calculated in accordance with point (c) should remain over time in accordance with the following formula:

$$range = [\,Target - \frac{0.05 \cdot S\_OP_{inception}}{RWA_{NoFX_{FC_{inception}}}}\ ;\ Target + \frac{0.05 \cdot S\_OP_{inception}}{RWA_{NoFX_{FC_{inception}}}}\,]$$

Where:

- $Target$ = the sensitivity targeted by the institution;

- $S\_OP_{inception}$ = the size of S_OP as referred to in point (c) at the date of the request of the permission to the competent authority;

- $RWA_{NoFX_{FC_{inception}}}$ = the $RWA_{NoFX_{FC}}$ as defined in point (c) at the date of the request of the permission to the competent authority;

(e) the risk management framework referred to in point (a) includes a limit of the maximum loss that is deemed acceptable for the institution to incur due to the choice of maintaining the positions for which the permission referred to in Article 352(2) of Regulation (EU) No 575/2013 is sought;

(f) the risk management framework referred to in point (a) is linked to the risk-appetite framework of the institution and the overall risk management of the institution and any relevant documents that have been approved by the senior management or the board of the institution;

(g) in the risk management framework referred to in point (a) there is an explicit warning that the open position that is maintained for hedging the ratio will lead to losses as soon as the relevant currency depreciates, and that hedging the ratio leads to an increase in the volatility of the own funds due to changes in the relevant exchange rate;

(h) the risk management framework referred to in point (a) and the documentation describing it, is approved by the management board of the institution;

(i) the risk management framework referred to in point (a) specifies a strategy for achieving the objective referred to in point (b) which includes at least the following:

   (i) it outlines the definition of the boundaries between positions that the institution categorises as structural and taken with the purpose of hedging the ratio and those that are not, and requires that such boundaries are used by the institution where taking a new position in the relevant currency;

   (ii) it states the positions the institution intends to open or close as the sensitivity of the ratio to movements in the exchange rates changes;

   (iii) it requires the documentation of evidence for both of the following:

   - that opening or closing those positions does not lead to any inconsistency with the overall risk-management of the institution or with the risk-management that any entity within the scope of the consolidation may apply on an individual basis;

   - that opening or closing those positions is consistent with the risk-management frameworks that any entity within the scope of consolidation may have where applying the provision in Article 352(2) of Regulation (EU) No 575/2013 for the purpose of hedging ratios at another level of consolidation;

(j) the strategy referred to in point (i) has a time horizon of at least six months;

(k) the documentation describing the risk management framework referred to in point (a) outlines the data that are used for computing the sensitivity referred to in point (c), the range referred to in point (d) and the maximum open position referred to in paragraph 31.

28. Institutions using the standardised approach for computing the own funds requirements for foreign exchange risk should calculate the value of S_OP in accordance with article 352(1) of Regulation (EU) No 575/2013.

29. Institutions using the internal model approach for computing the own funds requirements for foreign-exchange risk for some of their positions should calculate the value of S_OP in either of the following ways consistently over time:

(a) in accordance with article 352(1) of Regulation (EU) No 575/2013;

(b) in accordance with the following formula:

$$S\_OP = \frac{V(1.01 \cdot FX_{FC}) - V(FX_{FC})}{0.01 \cdot FX_{FC}}$$

where:

- V = the value of the portfolio including the items from which the structural position stems from expressed in the reporting currency;

- FX_{FC} = the spot exchange-rate between the reporting currency and the foreign currency FC of the structural position.

Explanatory text for consultation purposes

In order to assess whether a position has been taken with the purpose of hedging the ratio the EBA deems necessary to introduce a quantitative metric, namely the sensitivity calculated in accordance with paragraph 27(c). Such sensitivity has been obtained removing the effect of positions that are anyhow not are suitable for the exemption from the first term appearing at the numerator (see derivation in the annex I). In this way, institutions would not be required to keep stable over time also the component of the net open position corresponding to positions that are not suitable for the exemption (e.g. positions stemming from the trading book).

As part of the consultation, the EBA seeks feedback with respect to the proposed metric. In addition, the EBA seeks feedback on the risk-management practices that institutions may have in place for managing structural positions.

Questions for consultation

Where responding to the questions for consultation, respondents are invited to clarify, where relevant, whether they are referring to the structural-FX provision applied at the solo or/and consolidated basis.

Q8. Do you agree with the exclusion of positions that are not eligible to be structural from the sensitivity that is used for assessing the intention of the institution to hedge the ratio, or would you prefer to have those positions included although they cannot be exempted? Please elaborate.

Q9. Are there currently FX-risk positions that you kept open in the trading book for the purpose of hedging the ratio? Why did you not include such positions as part of the banking book since the main purpose of those positions is to hedge the ratio?

Q10. Do you think that by excluding positions that are non-eligible to be exempted, it will be easier for institutions to meet the requirement of keeping the sensitivity stable over time? Please elaborate.

Q11. Is your institution currently required to keep the sensitivity of the ratio stable over time where requesting the permission referred to in Article 352(2)? If not, how do you justify the intention of hedging the ratio? Please elaborate.

Q12. Do you agree with the definition of the range in paragraph 27(d)? Do you think that 0.05 is an appropriate value?

Q13. Could you provide a description of the risk-management framework within which your institution operates for managing structural positions that have been taken for hedging the ratio (e.g. how your institution currently computes the sensitivity of the ratio to changes in the exchange rate, the level of granularity at which the boundaries referred to in paragraph 27(i)(i) are defined, exc.)? Do you think that these guidelines are in line with the current risk-management within which institution operates for managing SFX positions? If not, which are the differences?

8. Size of the position to be excluded

30. The size of a position to be excluded in accordance with Article 352(2) of Regulation (EU) No 575/2013 should be determined in accordance with the following process:

    (a) by first calculating the maximum net open position in the relevant currency, in accordance with paragraph 31;

(b) by then comparing the size of the structural position that the institution has taken for hedging the ratio and, depending on the size of that position, applying either paragraph 32 or paragraph 33 .

31. The institution should calculate the maximum open position in accordance with the following formulas:

(a) where the institution aims at hedging the CET1 ratio, in accordance with the following formula:

$$MaxOP = CET1 \cdot \frac{\frac{RWA_{NoFX_{FC}}(1.01 \cdot FX_{FC}) - RWA_{NoFX_{FC}}(FX_{FC})}{0.01 \cdot FX_{FC}}}{RWA_{NoFX_{FC}}(FX_{FC})}$$

Where:

$CET1$ = the Common Equity Tier 1 of the institution;

$RWA_{NoFX_{FC}}(.)$ = the total risk exposure amount calculated in accordance with article 92(3) of Regulation (EU), excluding the own funds requirements for foreign-exchange risk for all positions that are in the foreign currency FC of the structural position;

FX_{FC} = the spot exchange-rate between the reporting currency and the foreign currency FC of the structural position;

(b) where the institution aims at hedging the T1 ratio, in accordance with the following formula:

$$MaxOP = T1 * \frac{\frac{RWA_{NoFX_{FC}}(1.01 \cdot FX_{FC}) - RWA_{NoFX_{FC}}(FX_{FC})}{0.01 \cdot FX}}{RWA_{NoFX_{FC}}(FX_{FC})} - AT1_{FC}$$

Where:

$T1$ = the Tier 1 Capital of the institution;

$RWA_{NoFX_{FC}}(.)$ = the total risk exposure amount calculated in accordance with article 92(3) of Regulation (EU), excluding the own funds requirements for foreign-exchange risk for all positions that are in the foreign currency FC of the structural position;

FX_{FC} = the spot exchange-rate between the reporting currency and the foreign currency FC of the structural position;

(c) where the institution aims at hedging the total capital ratio, in accordance with the following formula:

$$MaxOP = OF * \frac{\frac{RWA_{NoFX_{FC}}(1.01 \cdot FX_{FC}) - RWA_{NoFX_{FC}}(FX_{FC})}{0.01 \cdot FX_{FC}}}{RWA_{NoFX_{FC}}(FX_{FC})} - AT1_{FC} - T2_{FC}$$

Where:

OF = the own funds of the institution;

$RWA_{NoFX_{FC}}(.)$ = the total risk exposure amount calculated in accordance with article 92(3) of Regulation (EU), excluding the own funds requirements for foreign-exchange risk for all positions that are in the foreign currency FC of the structural position;

FX_{FC} = the spot exchange-rate between the reporting currency and the foreign currency FC of the structural position;

$AT1_{FC}$ = the absolute value of the size of the position in the foreign currency FC for which the exemption is sought stemming from additional tier 1 instruments;

$T2_{FC}$ = the absolute value of the size of the position in the foreign currency FC for which the exemption is sought stemming from tier 2 instruments.

32. Where the size of the structural position that the institution has taken for hedging the ratio is lower than the maximum open position, the whole structural position should be excluded from the calculation of the net open position.

33. Where the size of the structural position that the institution has taken for hedging the ratio exceeds the maximum open position, only the portion of that structural position which corresponds in size to the maximum open position should be excluded from the calculation of the net open positions.

34. Positions corresponding to non-monetary items that are held at historical costs and items that have been deducted from the institution's own funds that are part of the position for which the institution seeks the permission referred to in Article 352(2) Regulation (EU) No 575/2013 should not be considered for the purpose of paragraph 32 and paragraph 33.

35. The whole structural position for which the institution seeks the permission corresponding to non-monetary items at historical cost and to items that have been deducted from the institution's own funds should be excluded from the calculation of the net open position.

Explanatory text for consultation purposes

As part of these guidelines the EBA included formulas for computing the maximum open position that institution should be allowed to exclude from their net open position. The introduction of a common formula is meant also to avoid arbitrage that may arise if institutions were allowed to use their own individual approach. Accordingly, the EBA seeks feedback on the formula included in the guidelines for computing the maximum open position.

In addition, the EBA seeks feedback on the size that non-monetary items that are at historical costs have on the institution's balance sheet, the methodology that institutions may use for excluding the relevant position from the net open position where internal models are used in the computation of the own funds requirements for foreign-exchange risk.

Questions for consultation

Where responding to the questions for consultation, respondents are invited to clarify, where relevant, whether they are referring to the structural provision applied in the solo or/and consolidated basis.

Q14. Is it easy for institutions to 'transfer' the concept of net open position in the context of the internal model? What are the methodologies that institutions may use for excluding positions for which they may receive the permission referred to in Article 352(2) from their internal models?

Q15. What is the size of non-monetary items that are held at historical costs with respect to the size of institution's balance sheet?

Q16. Do you think that the formulas presented above provide a good estimate of the position that is offsetting the sensitivity of the ratio with respect to changes in the exchange rate? If no, why? Are there any adjustments that you would recommend? Please elaborate.

Q17. Do you think that is operationally feasible to compute the maximum open position and the sensitivity on a monthly basis?

Q18. Do you currently include Additional Tier 1 instruments, and Tier 2 instruments that are issued in the foreign currency in the net open position referred to in 352(2)? Please elaborate.

Q19. What is in percentage the amount of Additional Tier 1 instruments, and Tier 2 instruments that your institution issued in foreign currency with respect to the total amount of own funds of your institution?

Q20. What is the percentage of the amount of Additional Tier 1 instruments, and Tier 2 instruments that your institution issued in a foreign currency with respect to the net open position that your institution has in that foreign currency?

9. On-going monitoring of the permission

36. Institutions should perform the calculation of the maximum open position and the sensitivity at least monthly. Competent authorities may request institutions to compute the maximum open position and the sensitivity at any time.

37. For each of the currencies for which institutions have the permission from the competent authority to exclude some positions from the corresponding net open position, institutions should report the following information to the competent authority on a monthly basis:

    (a) the net open position in the currency previous to any permission;

    (b) the net open position stemming from positions in the currency that are not structural;

    (c) the amount of the structural net open positions that have been taken for hedging the ratio (S_OP);

    (d) the maximum open position ($MaxOP$) calculated in accordance with paragraph 31;

    (e) the sensitivity of the ratio calculated in accordance with paragraph 27(c);

    (f) whether the sensitivity referred to in point (e) falls out of the range identified in paragraph 27(d) and, where this is the case, a justification of such a breach;

    (g) the variation of the value of the structural position in the last month due to changes in the exchange rate in accordance with paragraph 38;

    (h) the spot exchange rate between the reporting currency and the foreign currency FC at the date at which the institution reports to the competent authority in accordance with this paragraph;

    (i) any planned changes relating to the request to the competent authority.

38. Institutions should calculate the variation in the value of the structural position in the last month due to changes in the exchange rate referred to in paragraph 37(g)in accordance with the following formula:

$$\textit{Variation} = S\_OP_{m-1} \cdot (FX_m - FX_{m-1})$$

Where:

FX_{m-1} = the spot exchange-rate between the reporting currency and the foreign currency FC at the previous date at which the institution reports to the competent authority in accordance with paragraph 37;

FX_m = the spot exchange-rate between the reporting currency and the foreign currency FC at the date at which the institution reports to the competent authority in accordance with paragraph 37;

S_OP_{m-1} = the amount of the structural net open positions that have been taken for hedging the ratio as reported in the previous reporting date as per paragraph 37(c) and expressed in the foreign currency.

Questions for consultation

Q21. Is there anything in the approach outlined in these guidelines that could create issues of compatibility with the treatment foreseen in any non-EU jurisdictions in which EU institutions operate? If so, please elaborate.

5. Accompanying documents

5.1 Draft cost-benefit analysis / impact assessment

The EBA has developed these own initiative draft guidelines on the practical implementation of 'structural FX' provision contemplated in Article 352(2) of the CRR.

As per Article 16(2) of Regulation (EU) No 1093/2010 (EBA Regulation), any guidelines and recommendations developed by the EBA shall be accompanied by an Impact Assessment (IA), which analyses 'the potential related costs and benefits'.

This section presents the impact assessment of adopting the Guidelines as described in this Consultation Paper. The analysis provides an overview of problem identified, the options considered to address this problem and the costs and benefits of these options. Given the nature and scope of the guidelines, the impact assessment is qualitative in nature.

A. Problem identification

Article 352(2) of the CRR allows competent authorities to permit, on an ad hoc basis, the exclusion of FX-risk positions from the calculation of net open currency positions, where an institution has deliberately taken these positions to hedge against adverse effect of the exchange rates on its capital ratios. Such positions should be of a non-trading or structural nature.

Over the last few years banks have become increasingly interested in the application of the structural FX provision. However, this provision has been subject to several interpretations by both supervisory authorities and banks leading to difference in its application across the EU. In addition, there has been a lack of clarity around what constitutes a structural position for the purposes of Article 352(2).

B. Policy objectives

The objective of these guidelines is to provide for a harmonised approach on the practical implementation of 'structural FX' provision contemplated in Article 352(2) of the CRR. In this way, the GLs aim to ensure a level playing field and promote convergence of supervisory practises across the EU regarding the exclusion of structural FX positions from capital requirements.

C. Baseline scenario

The baseline scenario in terms of regulatory environment assumes the full implementation of the CRR and CRR2. It is important to note that, even if these guidelines consider the provisions under the current CRR, the same provisions has been kept under the CRR2. Accordingly, these guidelines have been developed considering changes to the market risk framework introduced in the CRR2, which builds on the new FRTB standards published by the Basel Committee on Banking Supervision (BCBS) in January 2019, and taking into account the structural FX treatment envisaged in the standards.

D. Options considered, Cost-Benefit Analysis and Preferred Options

Materiality (or relevance) of a currency in the context of the structural FX provision

Article 352(2) refers to the adverse effect of the exchange rate as the exchange rate between the reporting currency and any other currency. Accordingly, an institution may request the permission for excluding from the relevant net open positions, FX-risk positions in more than one currency. The guidelines clarify that the permission should be sought (and potentially granted) for currencies that are material with respect to the business of the bank. In particular, positions in a currency that is not material for the bank should not be considered as deliberately taken for hedging the ratio from the correspondent exchange rate; indeed, movements in such exchange rate would negligibly affect the ratio. The following options have been considered to determine whether a currency is material or not with respect to the business of the institution.

Option 1a: Determine materiality (or relevance) based on an absolute threshold

Option 1b: Determine materiality (or relevance) based on a relative threshold

Under option 1a, a fixed number of currencies will determine the most material currencies. The Guidelines presumes that the top three currencies are material. This option provides for a simple rule to identify material currencies, which is expected to cover all relevant currencies in most cases. However, there might be cases for which even the top 3 currencies are not relevant or cases where positions in currencies that are not among the top 3 are actually material (or relevant) for the institution (e.g. where the institution performs its business in several countries with different currencies).

Under option 1b, a relative threshold is considered based the following measures:

> **Measure A:** percentage of the open position in the foreign currency (without considering any waiver) with respect to the 'open position' in the reporting currency.
>
> **Measure B:** percentage of the open position in the foreign currency (without considering any waiver) with respect to the total own funds of the institution.

This threshold allows for a more risk-sensitive assessment of the materiality of a currency as it takes into account the actual business of the institution. While this can provide for a more accurate measure of materiality, it may introduce an additional burden for institutions as they will need to calculate the above measures.

Option 1a is preferred for its simplicity. To account for cases where a bank has more than three material currencies, the GLs allows the institution to ask for the permission referred to in Article 352(2) also for positions in those currencies that are not among the top 3; however, when doing so, the institution is required to justify the relevance of the currency for the institution (e.g. based on the cross-border nature of the business performed by the institution).

However, the EBA acknowledges that such absolute threshold may not capture the actual relevance of a currency. Accordingly, as part of the consultation, the EBA seeks feedback from the institutions responding to the consultation paper, on alternative measures that could be included in the guidelines for identifying the relevance of a currency instead of an absolute threshold.

Sensitivity of the capital ratio to FX-movements

Article 352 specifies that when the institution applies for the structural FX provision, the institution is required to justify that the position for which the exemption is sought has been deliberately taken (or maintained) to hedge the ratio against the effects of exchange rate movements. The GLs put in place a number of qualitative and quantitative elements to assess if this requirement is fulfilled. More specifically, institutions shall keep the level of the sensitivity of the capital ratio against movements in the relevant exchange rate stable over time, i.e. within a certain range. For this purpose, the EBA has considered the following options on how to calculate the sensitivity of the capital ratio against movements in the relevant exchange rate:

Option 2a:

$$Sensitivity = \frac{OP - MaxOP}{RWA_{NoFX\_FC}} = \frac{S\_OP + NS\_OP - MaxOP}{RWA_{NoFX\_FC}}$$

Option 2b:

$$Sensitivity = \frac{S\_OP - MaxOP}{RWA_{NoFX\_FC}}$$

OP = is the size of the open position in foreign currency (excluding positions corresponding to items that have been deducted from the institution’s own funds and items that are held at historical cost);

S_OP = is the size of net open position that is stemming from positions that are suitable for the exemption expressed in the foreign currency (excluding positions corresponding to items that have been deducted from the institution’s own funds and items that are held at historical cost);

NS_OP = is the size of net open position that is stemming from positions that are not suitable for the exemption expressed in the foreign currency (excluding positions corresponding to items that have been deducted from the institution’s own funds and items that are held at historical cost);

$MaxOP$ = is the maximum open position calculated in accordance with section 3.5 (and expressed in the foreign currency);

RWA_{NoFX_FC} = is the total risk exposure amount as defined in article 92 of the CRR, so it includes both risk - weighted exposure amounts and own funds requirements arising from various type of risks, excluding the $FX - OFR$ for the currency for which the institution is applying the structural FX provision.

Option 2a considers the sensitivity of the overall net open position in a foreign currency, i.e. both positions that are suitable for the exemption and positions that are not. This option provides the overall sensitivity to changes in exchange rate which has a clear interpretation from an economic point of view. However, keeping positions that are not eligible for exemption in the sensitivity calculation could possibly lead institutions with e.g. relevant FX trading book business to fail the requirement to keep the sensitivity stable over time due to the instability of positions that anyhow will be capitalised (since they are not eligible to be exempted). Not removing such position would imply that the overall open position should be stable over time; however, institutions should not be required e.g. to keep stable the open position stemming from the trading book, as such positions are not in the scope of those that can be waived.

Option 2b considers the sensitivity in 2a, but it removes from the open position the effect of those positions that are not eligible to be exempted. Not removing such positions would possibly lead institutions with e.g. relevant FX trading book business to fail the requirement to keep the sensitivity stable over time due to the instability of positions that anyhow will be capitalised (since they are not eligible to be exempted). Not removing such position would imply that the overall open position should be stable over time; however, institutions should not be required e.g. to keep stable the open position stemming from the trading book, as such positions are not in the scope of those that can be waived.

Option 2b is preferred.

Range for the level of sensitivity of the capital ratio to changes in the exchange rate

As previously discussed, institutions shall keep the level of the sensitivity of the capital ratio against movements in the relevant exchange rate stable over time, i.e. within a certain range. The institution shall identify a targeted sensitivity and a range within which the sensitivity should remain over time. The following formulas for calculating the range have been considered:

Option 3a:

$$range = [Target - \frac{0.05 \cdot MaxOP_{inception}}{RWA_{NoFX_{FC_{inception}}}} \; ; \; Target + \frac{0.05 \cdot MaxOP_{inception}}{RWA_{NoFX_{FC_{inception}}}}]$$

Option 3b:

$$range = [\, Target - \frac{0.05 \cdot S\_OP_{inception}}{RWA_{NoFX_{FC_{inception}}}} \; ; \; Target + \frac{0.05 \cdot S\_OP_{inception}}{RWA_{NoFX_{FC_{inception}}}}\,]$$

$Target$ = the sensitivity targeted by the institution;

$S\_OP_{inception}$ = is the size of S_OP as referred to in Option 2 at the date of the request of the permission to the competent authority;

$MaxOP_{inception}$ = is the size of $MaxOP$ as referred to in Option 2 at the date of the request of the permission to the competent authority;

$RWA_{NoFX_{FC_{inception}}}$ = is $RWA_{NoFX_{FC}}$ as defined in Option 2 at the date of the request of the permission to the competent authority.

The size of the range in accordance with option 3a is determined by the value taken by the maximum open position. Accordingly, the size does not change on the basis of the target of the institution, i.e. regardless of whether the institution is over-hedging or under-hedging the ratio, the size of the range is the same.

The size of range in accordance with option 3b is determined by the value taken by the net open structural position that the institution took for the purpose of hedging the ratio. Accordingly, the size of the range depends on which strategy the institution performs; in other words, the size of the range is relatively small for under-hedges, and gets larger moving from under-hedges to over-hedges.

It should be noted that where the strategy of the institution is to offset the sensitivity calculated in accordance with these guidelines, then the range calculated in accordance with option 3a and 3b coincides.

Option 3b is preferred.

5.2 Annex I: Derivation of the maximum open position

Derivation of the formulas for an institution hedging the CET1 ratio

The reasoning below are presented in the context of an institution applying for the structural-FX treatment to recognize the hedging effect of FX-positions on the CET1 ratio.

For the purpose of calculating the maximum open position ($MaxOP$), as described in the background section institutions should exclude the own funds requirements for FX-risk ($FX - OFR$) for the currency of the positions for which they seek the waiver from the total risk exposure amount as defined in Article 92 of the CRR. Accordingly, the ratio to consider for calculating the maximum open position is defined as:

$$CR_{MaxOP} \equiv \frac{CET1}{RWA_{NoFX_{FC}}} \qquad (1)$$

Where:

$CET1$: is the Common Equity Tier 1 as defined under Part Two –Title I of the Capital Requirement regulation (CRR);

$RWA_{NoFX_{FC}}$: is the total risk exposure amount as defined in article 92 of the CRR excluding the $FX - OFR$ for the currency of the positions for which it seeks the waiver.

Making explicit the dependence of the CET1 on the exchange rate FX_{FC} and assuming CET1 to be regular around FX_{FC_0}:

$$\mathrm{CET1}\,(FX_{FC}) = \sum_{j=0}^{\infty} C_j \cdot \left(FX_{FC} - FX_{FC_0}\right)^j = C_0 + C_1 \cdot \left(FX_{FC} - FX_{FC_0}\right) + \sum_{j=2}^{\infty} C_j \cdot \left(FX_{FC} - FX_{FC_0}\right)^j \qquad (2)$$

Where:

(i) FX_{FC}: is the exchange rate between the reporting currency and the foreign currency for which the institution is calculating the maximum open position that can be exempted (i.e. one unit of foreign currency corresponds to FX_{FC} units of the reporting currency);

(ii) FX_{FC_0}: is the value of FX_{FC} at the moment of the calculation of the calculation of $MaxOP$;

(iii) Coefficients C_j are not depending on FX_{FC}.

Accordingly, around FX_{FC_0}, $CET1$ can be approximated as:

$$\text{CET1}(FX_{FC}) \sim C_0 + C_1 \cdot (FX_{FC} - FX_{FC_0}) \quad (3)$$

The first derivative of CR_{MaxOP} defined in (1) is:

$$\frac{\partial CR_{MaxOp}}{\partial FX_{FC}} = \frac{\left(\frac{\partial CET1}{\partial FX_{FC}} \cdot (RWA_{NoFX_{FC}}) - \frac{\partial RWA_{NoFX_{FC}}}{\partial FX_{FC}} \cdot CET1\right)}{RWA^2_{NoFX_{FC}}} \quad (4)$$

Considering the approximation in (3) it holds that $\frac{\partial CET1}{\partial FX_{FC}} = C_1$, and accordingly the sensitivity in (4) is:

$$\frac{\partial CR_{MaxOp}}{\partial FX_{FC}} = \frac{C_1 \cdot RWA_{NoFX_{FC}} - \frac{\partial RWA_{FX_{FC}}}{\partial FX_{FC}} \cdot CET1}{RWA^2_{NoFX_{FC}}} \quad (5)$$

Setting the derivative to zero, a condition neutralizing the sensitivity of CR_{MaxOp} with respect to FX_{FC} is obtained:

$$C_1^{Optimal} = \frac{CET1 \cdot \frac{\partial RWA_{NoFX_{FC}}}{\partial FX}}{RWA_{NoFX_{FC}}} \quad (6)$$

Where $C_1^{Optimal}$ is the value of C_1 neutralising the sensitivity of CR_{MaxOp} with respect to FX_{FC}.

The net open position (NOP) calculated in accordance with 352(2) can be written as the sum of long and short FX-positions stemming from items that have not been deducted from the $CET1$ and the sum of long and short FX-positions stemming from items that have been deducted from the $CET1$ (which have been in any case included in the calculation of the net open position). Accordingly:

$$NOP = OP_{CET1} + OP_{ExCET1} \quad (7)$$

Where:

- OP_{CET1} is the resulting net open position stemming from items that have not been deducted from the $CET1$.
- OP_{ExCET1} is the resulting net open position stemming from items that have been deducted from the $CET1$.

It should be noted now that OP_{CET1} is a good approximation of C_1. Indeed, the open position stemming from items that have not been deducted from the $CET1$ represents a good approximation of the coefficient measuring the impact on the $CET1$ of small changes in the exchange rate. In other words, the open position OP_{CET1} is the delta sensitivity to the foreign-exchange rate, and C_1 represents such delta, as it is the coefficient that multiplied by a change in the exchange rate provides (at the first order) the gain/loss that institution's portfolio faces following such change. For example, if e.g. OP_{CET1} increases of USD 10 Million to a shock of 1 bp in the exchange rate EUR/USD, then $CET1$ increases of USD 10 Million as well.

Combining that:

a. $C_1^{Optimal}$ is the value of C_1 for which the sensitivity to the ratio has a sensitivity equal to 0 with respect to changes in the relevant exchange rate;

b. $C_1 \cong OP_{CET1}$ following the reasoning in the previous paragraph;

It follows that if the institution has an open position stemming from items that have not been deducted from the $CET1$ that is equal to $C_1^{Optimal}$ then CR_{MaxOP} is non-sensitive (to the first order) to changes in the exchange rate. In formulas:

$$if\ OP_{CET1} = C_1^{Optimal}\ then\ \frac{\partial CR_{MaxOp}(FX_{FC})}{\partial FX_{FC}} = 0\ in\ FX_{FC} = FX_{FC_0}$$

Accordingly, $C_1^{Optimal}$ is the size of open position capping the size of the long structural open position that can be excluded from the net open position as it represents the amount neutralising the sensitivity of the CR_{MaxOp} to changes in the exchange rate.

As a result, these guidelines require the institutions to calculate the maximum open position ($MaxOP$) that can be recognised as structural as defined by the following formula:

$$MaxOP = CET1 * \frac{\frac{RWA_{NoFX\_FC}\left(1.01 \cdot FX_{FC_O}\right) - RWA_{NoFX\_FC}(FX_{FC_O})}{0.01 * FX_{FC_O}}}{RWA_{NoFX_{FC}}(FX_{FC_O})} \qquad (*)$$

Where $MaxOP$ is expressed in the foreign currency FC.

In addition, considering that FX-positions stemming from items that have been deducted from the $CET1$, which have been in any case included in the calculation of the net open position (i.e. those included in the calculation of OP_{ExCET1}) do not affect the way the $CET1$ moves with respect to FX-changes (as they have been deducted from the $CET1$), they can be excluded from the net open position regardless of the cap imposed in $(*)$.

It should be noted that the FRTB clarifies that: '*No FX risk capital requirement need to apply to positions related to items that are deducted from a bank's capital when calculating its capital base.'* Since there cannot be positions deducted from $CET1$ but included in the NOP, under the FRTB it holds that: $OP_{ExCET1} = 0$. The CRR/CRR2 does not include such specification and it appears from article 352(2) that there might be some positions stemming from items deducted from the $CET1$ but included in the NOP. As a result, the provision included in the previous paragraph have been included in the guidelines.

Combining (5) with the definition of $C_1^{Optimal}$ in (6), it follows that:

$$\frac{\partial CR_{MaxOp}}{\partial FX_{FC}} = \frac{C_1 \cdot RWA_{NoFX} - C_1^{Optimal} \cdot RWA_{NoFX}}{RWA_{NoFX\_FC}^2} \quad (8)$$

And since $C_1 \cong OP_{CET1}$ and $C_1^{Optimal} \cong MaxOP$ it holds that:

$$\frac{\partial CR_{MaxOp}}{\partial FX_{FC}} = \frac{OP_{CET1} - MaxOP}{RWA_{NoFX\_FC}} \quad (9)$$

Requiring the sensitivity in (9) to be stable over time would risk to lead banks with e.g. relevant FX trading book business to not meet such requirement. This could be considered an appropriate criteria if e.g. positions in the trading book were eligible to be structural; accordingly, the institution could adjust its over-all net open position in order to maintain the sensitivity stable over time. However, since the FX-positions that are not suitable for the exemption (which effectively lead to the volatility in the ratio) are anyhow capitalised, banks are only required to keep stable over time the portion of the sensitivity that is associated to positions that are eligible to be exempted.

The sensitivity in (9) can be written as:

$$\frac{\partial CR_{MaxOp}}{\partial FX_{FC}} = \frac{S\_OP_{CET1} + NS\_OP_{CET1} - MaxOP}{RWA_{NoFX\_FC}} \quad (10)$$

Where:

a) S_OP_{CET1} is the resulting open position stemming from items that have not been deducted from the $CET1$ and corresponding to positions that are eligible to be exempted.

b) NS_OP_{CET1} is the resulting open position stemming from items that have not been deducted from the $CET1$ and corresponding to positions that are not eligible to be exempted.

As explained in the background institutions are required to remove the effect of positions that cannot be exempted from the open position at the numerator of the sensitivity. In formulas institution are required to keep the following stable over time:

$$sensitivity = \frac{S\_OP_{CET1} - MaxOP}{RWA_{NoFX\_FC}} \quad (**)$$

Derivation of the formulas for an institution hedging the T1 ratio

The reasoning below are presented in the context of an institution applying for the structural-FX treatment to recognize the hedging effect of FX-positions on the T1 ratio[18].

For the purpose of calculating the maximum open position ($MaxOP$), as described in the background section institutions should exclude the own funds requirements for FX-risk ($FX - OFR$) for the currency of the positions for which they seek the waiver from the total risk exposure amount as defined in Article 92 of the CRR. Accordingly, the ratio to consider for calculating the maximum open position (CR_{MaxOP}) is defined as:

$$CR_{MaxOP} \equiv \frac{Tier\ 1}{RWA_{NoFX_{FC}}} \qquad (1a)$$

Where:

$Tier\ 1$: is the Tier 1 as defined under Part Two –Title I of the Capital Requirement regulation (CRR);

$RWA_{NoFX_{FC}}$: is the total risk exposure amount as defined in article 92 of the CRR excluding the $FX - OFR$ for the currency of the positions for which it seeks the waiver.

Making explicit the dependence of the T1 on the exchange rate FX_{FC} and assuming T1 to be regular around FX_{FC_0}:

$$\text{Tier 1}\ (FX_{FC}) = \sum_{j=0}^{\infty} T_j \cdot \left(FX_{FC} - FX_{FC_0}\right)^j = T_0 + T_1 \cdot \left(FX_{FC} - FX_{FC_0}\right) + \sum_{j=2}^{\infty} T_j \cdot \left(FX_{FC} - FX_{FC_0}\right)^j \qquad (2a)$$

Where:

(i) FX_{FC}: is the exchange rate between the reporting currency and the foreign currency for which the institution is calculating the maximum open position that can be exempted (i.e. one unit of foreign currency corresponds to FX_{FC} units of the reporting currency);

(ii) ${FX_{FC}}_0$: is the value of FX_{FC} at the moment of the calculation of the calculation of $MaxOP$;

(iii) Coefficients T_j are not depending on FX_{FC}.

The Tier 1 is the sum of CET1 and additional tier 1. Accordingly, the series in (2a) can be written as:

[18] It should be noted that the same reasoning can be applied in the context of the total capital ratio

$$Tier\ 1\ (FX_{FC}) = CET1\ (FX_{FC})\ + AT1(FX_{FC}) = \ \sum_{j=0}^{\infty}(C_j + AT_j)\cdot\left(FX_{FC} - FX_{FC_0}\right)^j = (C_0 + AT_0) + (\mathrm{C}_1 + AT_1)\cdot\left(FX_{FC} - FX_{FC_0}\right) + \ \sum_{j=2}^{\infty}(C_j + AT_j)\cdot\left(FX_{FC} - FX_{FC_0}\right)^j \quad (3a)$$

Where $\mathrm{C_J}$ and AT_{j} are the coefficients of the Taylor expansion for $CET1$ and $AT1$ respectively.

Accordingly, around FX_{FC_0}, $Tier\ 1$ can be approximated as:

$$Tier\ 1 \sim (C_0 + AT_0) + (C_1 + AT_1)\cdot(FX_{FC} - FX_{FC_0}) \quad (4a)$$

The first derivative of CR_{MaxOP} defined in (1) is:

$$\frac{\partial Tier1}{\partial FX_{FC}} = \frac{\left(\frac{\partial Tier1}{\partial FX_{FC}}\cdot\left(RWA_{NoFX_{FC}}\right) - \frac{\partial RWA_{NoFX_{FC}}}{\partial FX_{FC}}\cdot\ Tier1\right)}{RWA^2_{NoFX_{FC}}} \quad (5a)$$

Considering the approximation in $(4a)$ it holds that $\frac{\partial Tier1}{\partial FX_{FC}} = C_1 + AT_1$, and accordingly the sensitivity in $(5a)$ is:

$$\frac{\partial Tier1}{\partial FX_{FC}} = \frac{(C_1 + AT_1)\cdot RWA_{NoFX_{FC}} - \frac{\partial RWA_{FX_{FC}}}{\partial FX_{FC}}\cdot CET1}{RWA^2_{NoFX_{FC}}} \quad (5a)$$

Setting the derivative to zero, a condition neutralizing the sensitivity of CR_{MaxOp} with respect to FX_{FC} is obtained:

$$C_1^{Optimal} = \frac{CET1\cdot\frac{\partial RWA_{NoFX_{FC}}}{\partial FX}}{RWA_{NoFX_{FC}}} - \ AT_1\ (6a)$$

Where $C_1^{Optimal}$ is the value of C_1 neutralising the sensitivity of CR_{MaxOp} with respect to FX_{FC}.

The net open position (NOP) calculated in accordance with 352(2) can be written as the sum of long and short FX-positions stemming from items that have not been deducted from the $CET1$ and the sum of long and short FX-positions stemming from items that have been deducted from the $CET1$ (which have been in any case included in the calculation of the net open position). Accordingly:

$$NOP \ = \ OP_{CET1} + OP_{ExCET1} \ \ (7a)$$

Where:

- OP_{CET1} is the resulting net open position stemming from items that have not been deducted from the $CET1$.

- OP_{ExCET1} is the resulting net open position stemming from items that have been deducted from the $CET1$.

It should be noted now that OP_{CET1} is a good approximation of C_1. Indeed, the open position stemming from items that have not been deducted from the $CET1$ represents a good approximation of the coefficient measuring the impact on the $CET1$ of small changes in the exchange rate. In other words, the open position OP_{CET1} is the delta sensitivity to the foreign-exchange rate, and C_1 represents such delta, as it is the coefficient that multiplied by the value of a change in the exchange rate provides (at the first order) the gain/loss that institution's portfolio faces following such change. For example, if e.g. OP_{CET1} increases of USD 10 Million to a shock of 1 bp in the exchange rate EUR/USD, then $CET1$ increases of USD 10 Million as well.

Similarly, AT_1 represents the delta sensitivity to the foreign-exchange rate of additional tier 1 instruments; in other words, AT_1 represents the coefficient that multiplied by the value of a change in the exchange rate provides (at the first order) the appreciation/depreciation of the additional tier 1 instruments following such change.

Combining that:

a. $C_1^{Optimal}$ is the value of C_1 for which the sensitivity to the ratio has a sensitivity equal to 0 with respect to changes in the relevant exchange rate;

b. $C_1 \cong OP_{CET1}$ following the reasoning in the previous paragraph;

It derives that if the institution has an open position stemming from items that have not been deducted from the $CET1$ that is equal to $C_1^{Optimal}$ then CR_{MaxOP} is non-sensitive (to the first order) to changes in the exchange rate. In formulas:

$$if\ OP_{CET1} = C_1^{Optimal}\ then\ \frac{\partial CR_{MaxOp}(FX_{FC})}{\partial FX_{FC}} = 0\ in\ FX_{FC} = FX_{FC_0}$$

Accordingly, $C_1^{Optimal}$ is the size of open position capping the size of the long structural open position that can be excluded from the net open position as it represents the amount neutralising the sensitivity of the CR_{MaxOp} to changes in the exchange rate.

As a result, these guidelines require the institutions to calculate the maximum open position ($MaxOP$) that can be recognised as structural as defined by the following formula:

$$MaxOP = Tier1 * \frac{\frac{RWA_{NoFX_{FC}}(1.01 \cdot FX_{FC_O}) - RWA_{NoFX_{FC}}(FX_{FC_O})}{0.01 \cdot FX_{FC_O}}}{RWA_{NoFX_{FC}}(FX_{FC_O})} - AT_1 \quad (*\,a)$$

Where $MaxOP$ is expressed in the foreign currency FC.

5.3 Annex II: stylised examples of the application of the structural FX provision

In the examples below, the value of the items has been already translated in EUR. Accordingly, even if the item is denominated e.g. in USD (and accordingly subject to the EUR/USD risk), its value is already converted in EUR.

$MaxOP$ and S_OP have been already translated in reporting currency (i.e. EUR) as well.

Example 1: identification of positions of type A and B at solo level for an institution with EUR as reporting currency and assuming all positions to be banking-book positions.

	value in EUR		value in EUR
Assets 1 in EUR	400	Liabilities in EUR	450
Assets 2 in EUR	100	Liabilities in GBP	20
Asset 3 in GBP – participation	20		
Assets 4 in GBP	30		
		CET1 in EUR	80

Assets and Liabilities in blue do not bear FX-risk for an institution reporting in EUR.

The FX-position corresponding to an asset in green is of type A, since the item bearing FX-risk is an investment in the subsidiary.

Assets in yellow are positions of type B, as they are not investments in a subsidiary.

Example 2: identification of positions of type A and B at consolidated level

<u>Parent bank at solo level reporting in EUR:</u>

	value in EUR		value in EUR
Assets in EUR	400	Liabilities in EUR	450
Assets in EUR	100		
Assets in GBP - participation	20		
Assets in GBP	30		
		CET1 in EUR	100

Subsidiary at solo level reporting in GBP:

	value in EUR		value in EUR
Assets in GBP	300	Liabilities in GBP	200
Assets in USD	100	Liabilities in USD	20
		CET1 in GBP	180

Institution at consolidated level reporting in EUR:

	value in EUR		value in EUR
Assets in EUR	400	Liabilities in EUR	450
Assets in EUR	100		
Assets in GBP	300	Liabilities in GBP	200
Assets in GBP	30		
Assets in USD	100	Liabilities in USD	20
		CET1 in EUR	260

Assets and Liabilities in blue do not bear FX-risk for an institution reporting in EUR.

Assets and liabilities in green are assets are stemming from the investment of the parent bank in the subsidiary, and the currency of the corresponding FX-positions coincides with the currency of the subsidiary at solo level (i.e. GBP). Accordingly, such FX-positions are positions of type A.

All other FX-positions corresponding to assets and liabilities in yellow are of type B.

Example 3: identification of positions of type A and B at consolidated level

The parent bank P owns the subsidiary S1 which owns the subsidiary S2.

Parent bank P reports in EUR at solo level, Subsidiary S1 reports in GBP at solo level and Subsidiary S2 reports in DKK at solo level.

The group 'P+S1+S2' reports in EUR at consolidated level. The group 'S1+S2' reports in GBP at sub-consolidated level.

Assumption: all positions are banking book positions.

Parent bank at solo level reporting in EUR:

	value in EUR		value in EUR
Assets in EUR	400	Liabilities in EUR	300
Assets in GBP – participation in S1	150		
		CET1 in EUR	250

Subsidiary S1 at solo level reporting in GBP:

	value in EUR		value in EUR
Assets in GBP	300	Liabilities in GBP	200
Assets in DKK – participation in S2	100		
		CET1 in GBP	200

Subsidiary S2 at solo level reporting in DKK:

	value in EUR		value in EUR
Assets in DKK	200	Liabilities in DKK	100
		CET1 in DKK	100

Group (P+S1+S2) at consolidated level reporting in EUR:

	value in EUR		value in EUR
Assets in EUR	400	Liabilities in EUR	300
Assets in GBP	300	Liabilities in GBP	200
Assets in DKK	200	Liabilities in DKK	100
		CET1 in EUR	300

FX-positions corresponding to assets and liabilities in green are positions of type A.

Assets and Liabilities in blue do not beat FX-risk at consolidated level.

<u>Group (S1+S2) at sub-consolidated level reporting in GBP:</u>

	value in EUR		value in EUR
Assets in GBP	300	Liabilities in GBP	200
Assets in DKK	200	Liabilities in DKK	100
		CET1 in GBP	200

FX-positions corresponding to assets and liabilities in green are positions of type A.

Assets and Liabilities in blue do not bear FX-risk at sub-consolidated level.

Example 4: Computation of the maximum open position

Suppose the institution is hedging the CET1 ratio, and suppose that the competent authority identified all positions as eligible to be exempted. In addition, for the sake of simplicity, it is assumed that no own funds requirements exist for market risk (except FX risk), operational risk, counterparty credit risk and CVA risk.

	value in EUR		value in EUR
Assets 1 in EUR	400	Liabilities in EUR	450
Assets 2 in EUR	100	Liabilities in GBP	40
Assets 3 in GBP	20		
Assets 4 in GBP	40		
		CET1 in GBP	70

The risk weights for credit risk (and corresponding risk-weighted assets) are those reported below:

Type of asset	RW	RWA for Credit Risk
1	0.75	300
2	0.3	30
3	0.5	10
4	0.4	16

Accordingly:

Total RWA (without FX-charge)	356
CET1	70
CET1 ratio (without FX-charge)	0.196629213

Applying the formula for the calculation of the maximum open position:

$$MaxOP = 5{,}1123\ EUR$$

As a result[19]*:*

Net open position structural	20
Max. open position	5.112359551
Capital charge for FX	14.88764045

Here below, it is proved that the capital ratio remains constant if the open position in the foreign currency equals the maximum open position. For doing so, the open position in the foreign currency is partially closed increasing the value of the liabilities in the foreign currency, and decreasing of the same amount the liabilities in the domestic currency.

	value in EUR		value in EUR
Assets 1 in EUR	400	Liabilities in EUR	435.1123596
Assets 2 in EUR	100	Liabilities in GBP	54.88764045
Assets 3 in GBP	20		
Assets 4 in GBP	40		
		CET1 in EUR	70

‘new’ net open position	5.112359551

The CET1 ratio (without FX-charge) has not changed. Suppose now to apply a shock of 20% to the exchange rate (e.g. following appreciation of the foreign currency). Accordingly, the ‘new’ balance sheet is:

[19] Explanation of the figures:

Net open position in GBP (value in EUR) = Assets 3 in GBP + Assets 4 in GBP – liabilities in GBP = 20 + 40 – 40 = 20

Capital charge for FX = net open position structural – Max open position = 20 - 5.112359551 = 14.88764045

	value in EUR		value in EUR
Assets 1 in EUR	400	Liabilities in EUR	435.1123596
Assets 2 in EUR	100	Liabilities in GBP	65.86516854
Assets 3 in GBP	24		
Assets 4 in GBP	48		
		CET1 in EUR	71.02247191

It can be obtained:

total RWA (without FX-charge)	361.2
CET1 ratio (without FX charge)	0.196629213

Accordingly, the CET1 ratio is actually constant if the open position in the foreign currency equals the maximum open position. It is worth mentioning that where the open position equals the maximum open position, the CET1 ratio without FX-charge actually coincides with the 'real' CET1 since after the permission of the competent authority the FX-charge is equal to 0. In this sense, the 'real' CET1 is constant with respect to changes in the exchange rate.

Example 5: Computation of the maximum open position for an institution hedging the T1 ratio

Suppose that the institution hedges the T1 ratio. Suppose that part of the T1 instruments have been issued in the foreign currency, and the remaining ones in the reporting currency. In addition, for the sake of simplicity, it is assumed that no own funds requirements exist for market risk (except FX risk), operational risk, counterparty credit risk and CVA risk.

	value in EUR		value in EUR
Assets in EUR	400	Liabilities in EUR	300
Assets in GBP	300	Liabilities in GBP	200
		Liabilities in EUR -T1	25
		Liabilities in GBP -T1	25
		CET1 in EUR	150

Where 'Liabilities in EUR - T1' and 'Liabilities in GBP - T1' are the Tier 1 instruments issued in EUR and GBP respectively.

Suppose the risk weight for credit risk to be 0.8 for assets in EUR, and 0.5 for assets in GBP. The total RWA (without FX charge) = 470 EUR[20]. The T1 ratio is = 0.42553.

[20] *RWA with no FX-charge = 0.8 *400 + 0.5 * 300 = 470.*

Computing the maximum open position with the formula applicable to institutions hedging the T1 ratio (and translating its value in the reporting currency):

$$MaxOP = 38{,}83\ EUR$$

Again, here below, it is checked that actually the T1 ratio is constant if the open position of the institution equals the maximum open position. Again, as in example 4, the open position (75 = 300 – 25 – 25) in the foreign currency is partially closed increasing the value of the liabilities in the foreign currency, and decreasing of the same amount the liabilities in the domestic currency.

	value in EUR		value in EUR
Assets in EUR	400	Liabilities in EUR	263.8297872
Assets in GBP	300	Liabilities in GBP	236.1702128
		Liabilities in EUR -T1	25
		Liabilities in GBP -T1	25
		CET1 in EUR	150

The 'new' open position equals the maximum open positon, i.e. it is equal to 38.82978723 EUR. The T1 ratio equals the one calculated above, i.e. T1 ratio = 0.42553.

Applying a shock of the 25% on the exchange rate, the 'new' balance sheet is:

	value in EUR		value in EUR
Assets in EUR	400	Liabilities in EUR	263.8297872
Assets in GBP	375	Liabilities in GBP	295.212766
		Liabilities in EUR -T1	25
		Liabilities in GBP -T1	31.25
		CET1 in EUR	159.7074468

It can be obtained that RWA (without FX charge) = 507.5 EUR. The T1 = 215.9574468.

Accordingly, T1 ratio = 0.42553, i.e. the ratio didn't change after the shock applied to the exchange rate.

Example 6: Calculation of the sensitivity as prescribed in the guidelines

Suppose that the competent authority assesses that all positions in the BB are eligible to be exempted. Positions in the TB are not suitable for the exemption because one of the minimum requirements for a position to be exempted is that it belongs to the BB.

	value in EUR		value in EUR
Assets in EUR	10000	Liabilities in EUR	8000
Assets in GBP (BB)	2000	Liabilities in GBP (BB)	1000
Assets in GBP (TB)	1000	Liabilities in GBP (TB)	0
		CET1 in EUR	4000

Suppose in this case the assets in the TB to be a UK-index, subject to equity risk and FX-charge (and no specific risk), and all BB positions to attract only credit risk with a corresponding RW =75%. It can be obtained that:

RWA (without FX-charge) =	*0.75*10000 + 0.75*1000 + 1000*0.08*12.5 = 10000*
CET1 ratio (without FX-charge) =	0.4

In addition, it can be obtained (with the formula included in the guidelines) that the maximum open position that can be exempted has a size equal to 1000. Accordingly:

$$sensitivity = \frac{S\_OP\ -\ MaxOP}{RWA_{NoFX\_FC}} = 0$$

This because the maximum open position equals the open position that is eligible to be exempted.

Suppose the target of the institution to be the perfect hedge (i.e. target = 0), then the range within which the sensitivity should be is defined as:

$$Sensitivity\ \in \left[0 - \frac{0.05{\cdot}1000}{10000}\ ; 0 + \frac{0.05{\cdot}1000}{10000}\right] = \left[0 - \frac{0.05{\cdot}1000}{10000}\ ; 0 + \frac{0.05{\cdot}1000}{10000}\right] = [-0.5\%;\ +0.5\%]$$

Now, considering to apply a shock of the 10% to the exchange rate, the 'new' balance sheet is:

	value in EUR		value in EUR
Assets in EUR	10000	Liabilities in EUR	8000
Assets in GBP (BB)	2200	Liabilities in GBP (BB)	1100
Assets in GBP (TB)	1100	Liabilities in GBP (TB)	0
		CET1 in EUR	4200

The maximum open position in this new scenario is equal to 1126.83 EUR.

Computing the sensitivity above under this new scenario we get:

$sensitivity = -0.262\ \%$

Example 7: Items at historical cost

	value in EUR		value in EUR
Assets in EUR	10000	Liabilities in EUR	8000
Assets in GBP at HC	1000		
		CET1 in EUR	3000

The CET1 of the institution is not sensitive to changes in the FX-rate EUR/GBP (unless e.g. a big shock occurs and the item at HC is impaired). Accordingly, the maximum open position is:

$$MaxOP = 0$$

Accordingly, as outlined in the background, these guidelines foresee a special treatment for items that are held at historical cost, i.e. if the item at HC is structural, then it can be exempted.

5.4 Overview of the question for consultation

Q1. Would you consider beneficial to limit the S-FX provision to hedge the CET1 ratio aiming at creating a level playing field in the EU? Please provide a rationale.

Q2. Which of the three ratios is your institution hedging?

Q3. For how many and for which currencies do you currently have the permission to exclude some positions from the corresponding net open position? For how many and for which currencies do you plan to request the permission following the adoption of these guidelines?

Q4. Could you please provide the list of the 10 most material currencies if the materiality of a currency were assessed in accordance with measure A and measure B? Please provide also the value taken by measure A and measure B for those currencies.

Measure A: percentage of the open position in the foreign currency (without considering any waiver) with respect to the open position in the reporting currency.

Measure B: percentage of the open position in the foreign currency (without considering any waiver) with respect to the total own funds of the institution.

Q5: Do you deem the provision included in paragraph 25 clear or do you think it could lead to a different interpretation than the one outlined in the text above included in the box? Please elaborate.

Q6: Are the structural positions for which you plan to ask the permission mainly positions of type A (i.e. meeting the condition in the paragraph above), or positions of type B? Could you please provide a rough estimation of the percentage of positions of type A on the total foreign-exchange position that you will potentially include in the request to the competent authority? For example, if the institution plans to request to exclude a net position = 100, and 80 of such net open position is due to positions of type A, then the percentage of positions of type A on the total foreign-exchange position that the institution will potentially include in the request to the competent authority is 80%.

Q7. Could you please provide the percentage of the net open position that you plan to request to exclude with respect to the net open position that your institution has without any waiver?

Q8. Do you agree with the exclusion of positions that are not eligible to be structural from the sensitivity that is used for assessing the intention of the institution to hedge the ratio, or would you prefer to have those positions included although they cannot be exempted? Please elaborate.

Q9. Are there currently FX-risk positions that you kept open in the trading book for the purpose of hedging the ratio? Why did you not include such positions as part of the banking book since the main purpose of those positions is to hedge the ratio?

Q10. Do you think that by excluding positions that are non-eligible to be exempted, it will be easier for institutions to meet the requirement of keeping the sensitivity stable over time? Please elaborate.

Q11. Is your institution currently required to keep the sensitivity of the ratio stable over time where requesting the permission referred to in Article 352(2)? If not, how do you justify the intention of hedging the ratio? Please elaborate.

Q12. Do you agree with the definition of the range in paragraph 27(d)? Do you think that 0.05 is an appropriate value?

Q13. Could you provide a description of the risk-management framework within which your institution operates for managing structural positions that have been taken for hedging the ratio (e.g. how your institution currently computes the sensitivity of the ratio to changes in the exchange rate, the level of granularity at which the boundaries referred to in paragraph 27(i)(i) are defined, exc.)? Do you think that these guidelines are in line with the current risk-management within which institution operates for managing SFX positions? If not, which are the differences?

Q14. Is it easy for institutions to 'transfer' the concept of net open position in the context of the internal model? What are the methodologies that institutions may use for excluding positions for which they may receive the permission referred to in Article 352(2) from their internal models?

Q15. What is the size of non-monetary items that are held at historical costs with respect to the size of institution's balance sheet?

Q16. Do you think that the formulas presented above provide a good estimate of the position that is offsetting the sensitivity of the ratio with respect to changes in the exchange rate? If no, why? Are there any adjustments that you would recommend? Please elaborate.

Q17. Do you think that is operationally feasible to compute the maximum open position and the sensitivity on a monthly basis?

Q18. Do you currently include Additional Tier 1 instruments, and Tier 2 instruments that are issued in the foreign currency in the net open position referred to in 352(2)? Please elaborate.

Q19. What is in percentage the amount of Additional Tier 1 instruments, and Tier 2 instruments that your institution issued in foreign currency with respect to the total amount of own funds of your institution?

Q20. What is the percentage of the amount of Additional Tier 1 instruments, and Tier 2 instruments that your institution issued in a foreign currency with respect to the net open position that your institution has in that foreign currency?

Q21. Is there anything in the approach outlined in these guidelines that could create issues of compatibility with the treatment foreseen in any non-EU jurisdictions in which EU institutions operate? If so, please elaborate.