

# Changes to the Banking Supervision Handbook

*Commentary on new document BPR140: Market Risk*

*November 2020*

## Purpose of the document

1. This document provides explanatory commentary on the exposure draft document BPR140: Market Risk, which is being published with this consultation as part of the restructured Banking Supervision Handbook documents making up the new capital adequacy framework. This document discusses the general approach to drafting BPR140 from the existing Handbook source material, and flags a number of interpretation issues that have been identified in that process.
2. As with all the other BPR exposure drafts, each section in BPR140 includes information on the source material, and notes if the wording has been revised compared to the source, or else marks the definition as new text.
3. Unlike the other BPR documents (apart from the Glossary), the current draft of BPR140 has not benefited from working group feedback. The commentary below therefore includes a few specific questions, highlighted in bold, on which we would welcome feedback. We would also welcome any general feedback on whether the new layout and drafting of BPR140 succeeds in clarifying the market risk capital calculation.
4. Our overarching objective in re-writing the market risk material has been to clarify the existing requirements, without materially changing the methodology. Clearly this approach is now very old, and the Basel market risk framework has gone through several iterations since this was implemented. A full update of the approach may be considered in due course, but is not part of our term plans in the near term.

## General approach

5. BPR140 combines the market risk sections of BS2A (Part 10) and BS2B (Part 7) with the market risk guidance in BS6. The BS2A and BS2B sources are virtually the same, although the BS2B text is laid out differently in a few places. The Correspondence Tables published with this consultation provide the full detail on where each section of these parts of BS2A and BS2B and each paragraph of BS6 have ended up in BPR140 (see Tables (3) and (4)).
6. As a broad point, some of the BS6 text overlaps with the BS2A/B requirements, and hence can be deleted (Appendix 1 lists the deletions). However, a fair amount of BS6 provides quite specific details of what is required to carry out the BS2A/B calculations. We propose that these be presented as requirements, not guidance, where applicable. (All individual cases are noted in the following.)
7. Some of the problems with the combined material from BS2A, BS2B and BS6 reflect their history. Until 2008, the market risk calculations were set out in the disclosure Orders in Council (OiCs), since they were only needed for disclosure purposes. These were converted into capital requirements as part of the Reserve Bank's implementation of Basel II. Some of the discussion of disclosure in BS6 is thus out of date, or not needed. Also, this explains why some of the methodology for disclosure prior to 2008 was expanded by using guidance in BS6, given the laborious process needed to revise OiCs.
8. The main source document is the Basel Committee's 1996 Market Risk Amendment (to the Basel Capital Accord – Basel I): <https://www.bis.org/publ/bcbs24.pdf> . But some of the material relies specifically on the April 1993 consultation draft of that document: <https://www.bis.org/publ/bcbs11a.pdf> . (Cross-references will be fully worked out as part of preparing the correspondence tables.)

## Order of material

9. With the aim of improving clarity, the high-level structure of BPR140 is as follows: Part A includes an overview, definitions, scope of the calculation, and the calculation of the total capital charge for

market risk; Part B sets out the calculation of the capital charge for interest rate risk; Part C sets out the calculation of the capital charge for currency risk; and Part D sets out the calculation of the capital charge for equity risk. And then within the interest rate risk calculation, Part B starts by specifying the allowable netting, and the allocation of instruments. These steps then set up the information needed to feed into the calculations for (1) directional interest rate risk (net open position) (2) vertical disallowance (basis risk); (3) horizontal disallowance (yield curve risk).

## Overview (sections A1.1 – A1.2)

10. Section A1.1 is adapted to reflect the new structure (and to be common for IRB and standardised banks).
11. Exclusions from scope are only covered in BS6, so these need to be added as rules in BPR140, which are in section A1.2. BS6 material explaining these exclusions has been included as guidance. Explanatory material on the Basel source is also added here as guidance: this comes from BS6 paragraphs 13 and 14, although heavily cut.

## Definitions (section A1.3)

12. We have deleted the definitions of aggregate equity/ FX / interest rate exposure, as these are not used anywhere. The definitions of financial asset/ instrument/ liability have been moved to the Glossary, as these are universal definitions based on NZ IFRSs, as has the definition of equity.
13. In the source, the definitions of equity, FX, and interest rate exposure, and market risk exposure, are only used in the introductory section discussing the purpose of capital requirements for market risk. These have been cut as well, since the exposure (a measurement concept) is dealt with by defining the capital requirement. Equity risk, currency risk, and interest rate risk (that is, the general concepts) are now defined in the Glossary by reference to NZ IFRSs.
14. Note that “foreign currency” risk is now referred to as currency risk – across the BPR documents, we have rationalised the various uses of the terms foreign exchange, foreign currency, and currency risk to refer to just currency risk.
15. The end-result for the definitions section is that there are only a few definitions left in BPR140, and these are very context-specific: they have been kept here to be the primary source, and are referred to from the Glossary. Other more general terms (that are still needed) have gone to the Glossary.
16. The following section covers specific issues on the definition of rate-insensitive products in section A1.3, and related material in BPR140 on the determination of which products they are.

### *Rate-insensitive products*

17. The definitions of rate-insensitive products (RIPs) have been streamlined to reduce repetition. Also, the 20% limit on the proportion that can be treated as seasonal has been split out of the definition, as it is better addressed as part of the methodology (see section B3.2).
18. A bigger problem is that the definitions and even the terms used for RIPs are inconsistent between BS6 and BS2A/B:
  - BS6 (paragraph 24) says an “interest rate insensitive retail product” is any financial asset or liability for which the bank considers the interest rate earned/ paid is insensitive to changes in the general level of interest rates.
  - BS2A/B defines a “rate insensitive asset” (for example) as a financial asset the amount of which is unlikely to increase or decrease as a result of a material change in market interest rate if the

interest rate applicable to that asset (which may be zero) does not change, or does not change materially.

19. This shows some confusion over whether it is the interest rate or the amount that is insensitive to changes in general interest rates. There is also guidance in BS6 noting that these are generally low or zero interest rate products. In combination, this points to products on which the bank does not need to change interest rates when general market rates move, because the holders are not sensitive to changes in rates, and will generally maintain their balance regardless: ie, low interest rate products, which the customer holds for reasons other than earning a good return (or borrowing at a market rate of interest).
20. To deal with this, section B3.2(1) now sets out the core concept in a way that aims to combine these points, and the definition of rate-insensitive asset (and liability) now cross-refers to section B3.2, as there is an element of the bank's judgement in assessing what is covered.
21. Also, we have adopted the BS2A/B version of the term, ie "rate-insensitive products", rather than the BS6 version because: (1) the word "interest" is not needed in the context; (2) the meaning of "retail" is not clearly defined anywhere. While most RIPs will fall under some concept of "retail", we think the test for RIPs can be left as purely behavioural.
22. On a related point, BS6 paragraph 20 provides guidance on allocating instruments to time bands, and the last bullet deals with "wholesale term liabilities and retail term deposits (excluding those identified below)". There are two problems with this:
  - the wholesale/ retail split is not explicitly defined; and
  - it is unclear what "below" refers to.
23. From the context, we think "below" must refer to BS6 paragraphs 24-29, which are under the heading "Interest Rate Insensitive Retail Products". As noted above, we think we can define RIPs without the need to use the term "retail" or to define it. Section B3.5(2)(f) has been adapted from BS6, para 20, last bullet, accordingly.
24. The guidance after section B3.2(1) draws on BS6 para 25, but what would be viewed as "low interest" accounts has been changed from "say, 3 per cent interest or less" to 0.5% or less, in view of persistently low interest rates.

## Total market risk capital calculation (section A2.1)

25. This material has been brought up front: it seems clearer to define the aggregate as the sum of the components, and then explain those components. Also, the reference to aggregating across currencies has been cut from here: it seems clearer to complete the cross-currency aggregation within each type of risk, and then simply define total capital for market risk as the sum of the capital requirement for the three types of risk. BS6 paragraph 15 has been added as explanatory guidance.

## Capital charge for interest rate risk (Part B)

### Overview (subpart B1)

26. **Section B1.1:** BS2A and BS2B give two inconsistent methods for aggregating capital for interest rate risk across currencies: either (i) sum the absolute values of the amount in each currency (BS2A section 126(1) and BS2B section 7.2); or (ii) take the greater of the absolute value of the sum across long position currencies, and the absolute value of the sum across short position currencies (BS2A section 131 and BS2B section 7.8).
27. BS6 paragraph 51 aligns with the less conservative approach (BS2A 131, BS2B 7.8), and makes clear the distinction between our approach and Basel's more conservative approach. This distinction goes right back to the Basel 1996 market risk amendment and our implementation of it in our disclosure regime (see Basel 1996 (link above), Part A.1, paragraph 9). It seems that we added the sections following the more conservative approach when we included a market risk capital requirement as part of implementing Basel II in 2008.
28. In the draft BPR140, we have left in place what seems to have been our intended approach since 1996. Although this is less conservative than the Basel measure, our approach includes banking book exposures, whereas Basel only applies to the trading book. Question: Is this how you have been calculating total interest rate exposure to date?
29. The description of the calculation has been expanded to make it a bit clearer, and also now clarifies that the currencies covered include NZD.
30. **Section B1.2** reflects the revised order of Part B, that is, the netting (where allowed) and the allocation of instruments to time buckets has to come first, as the outputs from those processes are then needed to calculate the net open position, basis risk and yield curve risk. Section B1.2 is mostly new material (expanded from BS2A section 126(2) and BS2B section 7.3), explaining the steps. There is also guidance added to clarify how pluses and minuses are combined.
31. **Sections B1.3 to B1.5** combine material on scope and valuation of instruments (from BS2A/B and BS6) and on the treatment of derivatives (from BS6 only). This seems the right location for this material, as it provides rules for allocating various sorts of instruments (or components thereof) to appropriate time bands and currencies, and the values to be used.
32. **Section B1.3** mainly covers the valuation to be used for instruments, as set out in BS2A section 127(2) / BS2B section 7.4(b), but the point about equity being excluded (from BS2A section 127(1) and BS2B section 7.4(a)) has also been included (section B1.3(1)).
33. The source material has been expanded and revised as follows:
  - the term "market related contract", as used throughout BS2A and BS2B, is not clearly defined. As elsewhere we have replaced this with "derivative". (Note that BS6 discusses the valuation of derivatives and has no references to "market related contracts".)
  - the text referring to "recognised" and "unrecognised" instruments dates back to the original disclosure OiCs, and at that point (which was pre-IFRS) derivatives were generally not recognised on the balance sheet. So we have split the valuation approach to use for "unrecognised instruments or market-related contracts" into three cases: unrecognised instruments, derivatives other than options, and options (a special case). (The respective valuation approaches are discussed further below.)

- For a non-option derivative, the valuation approach here needs to be applied to the relevant component parts of the instrument and their currencies, derived in accordance with section B1.4 (from BS6 paragraph 30). Section B1.3(2) cross-refers to this.
- One question this raises is what types of instrument that are still not recognised on the balance sheet (under IFRS) should be included in the scope of this calculation, as giving rise to interest rate risk. (The same question arises for FX or equity risk, see below.) This might cover, for example, commitments to lend, guarantees, underwriting facilities etc. **Question: Does BPR 140 need to give guidance on what should be included?**
- The currency conversion approach (section B1.3(4)) has been expanded somewhat to be more precise, in line with the approach specified in BS6 for valuations to use for FX and equity risk (see BS6 paragraphs 59 and 69).

*Valuation of unrecognised financial instruments or recognised derivatives.*

34. As noted above, we have split this into three cases:

- For unrecognised instruments that are not derivatives, “face or contract amount” still seem appropriate. **Question: Do you agree that “face or contract amount” is still a suitable valuation approach for such instruments?**
- For options, special considerations apply, see below.
- For derivatives other than options, we have used “the principal amount of the underlying or of the notional underlying instruments, updated in line with the current market valuation of corresponding actual instruments”, for the following reasons –

35. The current BS2A/B instructions refer to “face or contract amount”, while BS6 refers variously to “contract amounts” or “notional values”. While this is not entirely clear or consistent, it seems clear that for derivatives (other than options) recognised on the balance sheet, the basis for volatility measurement for market risk purposes should be the notional principal amount, rather than the mark-to-market value on the balance sheet. This intention is also clear from eg the treatment of swaps given in BS6, which are required to be split out into a notional asset and notional liability corresponding to the notional swap value.

36. However, the original Basel source document (1996, para 17) says that the amounts should be “the market value of the principal amount of the underlying or of the notional underlying”. As we understand it, this means that the notional principal should be varied in line with market movements. It seems preferable to follow the Basel source, although we have adapted the wording as a notional underlying instrument will not in itself have a market value. This should also deal with a problem that the current BS2A/B valuation of derivatives creates (a bank has recently raised this issue with us):

- Namely, it can create a spurious valuation mismatch: for example, a bank purchases a bond with \$100mn face value along with a matching hedge, for example an interest rate basis swap for the same notional principle that converts the bond from fixed to floating rate. The BS2A/B market risk valuation rules mean that the bond will be measured at carrying value, which (assuming it is held for trading) may fluctuate with market interest rates or credit spreads. The treatment of derivatives means that the swap is included as both an asset and a liability, each with a notional principal of \$100mn, which stay at fixed value. So although there is an effective hedge in economic terms, the treatment creates a valuation mismatch, which will add to the interest rate risk capital charge.

**Question: Do you agree that adopting the original Basel version of the valuation approach is an improvement?**

37. Another problem has been pointed out with the valuation approach, namely a possible mismatch arising from the timing of initial recognition. This can arise when the point of recognition varies, depending on the type of instrument. For example a bank may issue foreign currency debt and purchase a currency swap, which in economic terms occurs at the same time, to ensure an effective currency hedge. However, accounting recognition happens when the obligation arises. For the debt, this occurs when the transaction is settled, which may be a few days after trade date, whereas for the derivative, the obligation and hence recognition arises on the trade date. Again, this will temporarily add to market risk capital requirements in a way that does not reflect economic reality.

**Question: Do you agree this is a problem? Can you suggest any amendment to the rule text or additional guidance to address the problem?**

38. **Section B1.4** provides the methods for breaking down various types of derivative into equivalent components to be allocated to time bands and currencies as applicable. This is only in the BS6 guidance but has been converted mainly to rules in BPR140.
39. The reference to “foreign exchange contracts” at the start of BS6 paragraph 30 is somewhat obscure, since this is all within the context of interest rate risk. We have assumed it refers to the interest rate risk on products with a cross-currency element, and so have referred to that in section B1.4(1). Cross-currency basis swaps are given as an example. Section B1.4(2) is new text expanding on the same point, ie different legs of a cross-currency swap each give rise to an amount equal to the swap notional principal, allocated to the relevant time band, and allocated to the interest rate risk sub-calculation for the currency in question.
40. It seems self-evident that the relevant principal amount for each component part is just going to be the notional principal of the derivative, however we have kept this BS6 text in the guidance boxes within section B1.4. The valuation rule in section B1.3(3)(b) then applies to these notional principal amounts.
41. **Section B1.5** sets out the treatment of interest rate options. As with other derivatives, the treatment of interest rate risk on options is currently specified just as guidance in BS6, but it should really be part of the measurement approach.
42. For other derivatives, it works to have one section (B1.4) converting the instruments into their component parts, which are then subject to the general valuation approach (B1.3), and feed into the relevant time band and currency. This does not work so well for options.
43. The simplest approach for options is to value them using the delta-equivalent amount, and feed that into the calculation – this is done for FX and equity options (see below). However, for interest rate risk, the BS6 guidance gives the alternatives of either using a bank’s own approach, or using the Basel methodology, which in turn provides several alternative approaches: for banks that do significant options trading, BS6 refers specifically to the Basel “delta-plus” methodology. This involves adding factors for the gamma and vega risks to the capital charge (that is, add-ons for possible valuation movements arising from changes in the price of the underlying, or of volatility).
44. While this gives an approach to options that may be too open-ended, fixing this would require significant policy changes and consultation. In the longer term we may consider adopting the new (2016) Basel standardised approach to market risk. Given competing priorities, we do not see any value in spending significant time on an improved implementation of the Basel 1996 approach.

**Questions: What methodology does your bank currently use to calculate the capital requirement for interest rate risk on options? Does the BPR140 text accommodate your current approach?**

### *Exclusion of matched positions (subpart B2)*

45. **Subpart B2** deals with long/short amounts that can be netted off and then left out of the allocation of amounts to time bands, so we have put it before that allocation. This material all comes from section 128 of BS2A / section 7.5 of BS2B. The BPR140 text is basically much the same as the source, although Tables B2.3 and B2.4 try to explain more clearly how the “maximum gaps” work.

### *Allocating instruments to time bands – subpart B3*

46. **Subpart B3** deals with allocating asset and liability amounts to relevant time bands for each currency. Again, this has been moved up in the order, because it is another building block for the calculation of the actual interest rate risk components. This is a fairly short section in BS2A (sections 127(4) and (5)) and BS2B (sections 7.4(d) and (e)), but there is a lot of explanatory material in BS6 (paragraphs 17-30). Subpart B3 of BPR140 aims to combine these into a coherent set of rules and guidance.
47. Since rate-insensitive products (RIPs) are a special case, and rate-sensitive products are the residual, RIPs are dealt with first. B3.1(2) provides a pointer to the two different cases.
48. In BS2A and B, the meaning of RIPs is explained only in the definitions. BPR140 Section B3.2(1) and associated guidance provide more explanatory material taken from BS6. The same goes for seasonal RIPs: B3.2(2) provides the 20% limitation on seasonal RIPs as a proportion of total RIPs (rather than the limit forming part of the definition, as at present). The guidance box providing illustrations comes from BS6 para 26. (See further discussion of RIPs in the context of the definitions at section A1.3 above.)
49. The allocation of RIPs to time bands (section B3.3) comes straightforwardly from the BS2A and BS2B sources noted.
50. For the allocation of rate-sensitive products to time-bands, we have combined the “hard” rule in BS2A section 127(4) / BS2B section 7.4(a) with the guidelines in BS6 paragraphs 19-22, to produce BPR140 **sections B3.4 and B3.5**. Section B3.4(b) provides the link from the simple rule to the more expansive principles. The trading book/ banking book reference in BS6 para 20 has been replaced by “held for trading or held to maturity”, since the treatment is the same either way, so the exact boundary is irrelevant.

### *Directional interest rate risk (Subpart B4)*

51. BS2A/B and BS6 cover the same basic calculation here, but the way it is framed in BS6 appears much clearer. The BS6 description as the “net open interest rate exposure” seems more intuitive than “directional interest rate risk”. Also, the BS2A/B approach talks about the “change in the value of each instrument”, which is derived by risk-weighting, whereas BS6 refers to calculating the net long/short position in each time band first, and then risk-weighting that position: the answer is the same, but the BS6 guidance seems clearer. This also helps because the net position in each time band then feeds in more easily to the later stages of the interest rate risk calculation (the disallowances). BPR140 section B4.1 reflects these points.
52. In BS2A/B, the purpose of the “interest rate changes” column (Table 10.1 in BS2A and BS2B) is not clear: it serves no functional purpose in the calculation. The equivalent in BS6 (Table 1) has a further row for “duration weights”: in the Basel sources, these only appear in the April 1993 draft version, where it is clear that (risk weight) = (duration weight) x (interest rate change). The guidance after section B4.1 aims to explain what the interest rate change column means, and that it is provided for information only. **Question: is there any need to keep this column and explanatory material?**

### *Directional interest rate risk alternative – bank’s own calculation method*

53. In the BS6 explanation of this calculation, paragraph 35 states the following: “Banks which have the capacity to calculate the actual modified duration of their financial assets and liabilities, can derive their exposure to directional risk using their own systems, provided the assumed changes in interest rates are no less conservative than those contained in Table 1 [*corresponding to Table B4.1 in BPR140*].”
54. This option is provided under the Basel market risk approach, and was implicitly available when we required market risk exposure to be calculated for disclosure purposes only: the OiCs allowed a bank to use any alternative calculation method, provided that its aggregate interest rate exposure was not materially lower than that calculated using the standard approach (see eg Schedule 8, clause 1, in the 2005 version of the full and half year OiC for New Zealand-incorporated banks <https://gazette.govt.nz/notice/id/2005-au363>). BS6 paragraph 35 seems to narrow down the options by referring specifically to the modified duration approach.
55. However, when we converted the OiC disclosure requirements to minimum capital requirements in 2008, we carried over only the specified standard approach. Consultation on BS2A/B at the time did not raise any questions about this, and the current text clearly makes only the standard approach available. We have therefore not kept this text from BS6 in the draft BPR140.

**Question: Do you use the standard approach specified in BS2A/B for calculating exposure to directional interest rate risk, in your capital ratio calculations?**

### *Vertical disallowance (basis risk) (Subpart B5)*

56. As elsewhere, BPR140 uses the more intuitive BS6 description of the risk, namely “basis risk”, rather than “vertical disallowance” from BS2A/B, which merely describes the calculation methodology. BS6 paragraph 49 broadly covers the same material as BS2A section 129(2) / BS2B section 7.6(b), so has not been separately cited as a source.
57. The description of the calculation has been simplified in various ways:
- the risk-weight for each time band only has to be applied at the end of the summing within the time band, so this is in section B5.2(3).
  - rate-insensitive (“RI”) products feed in to the calculation as {Abs(RI assets) + Abs(RI liabilities)}. This is in section B5.2(2)(b), which combines, but also aims to be clearer than, BS6 paragraph 49(b) and BS2A section 129(2)(b) / BS2B section 7.6(b) (but does not include the risk-weighting step).
  - Text in BS2A/ BS2B referring to “the lesser of X and Y, or if they are equal, X” has been cut as it is unnecessary.
  - BS2A sections 129(2)(c)-(d) / BS2B sections 7.6(b)(iv)(A)-(B) have been simplified in section B5.2(3): the component [20% x abs(RI products)] is part of the calculation either way, and the other component is added only if it is positive, which is better expressed by adding “zero or X amount, whichever is greater”.
58. The statement that the vertical disallowance must have the same sign as the directional interest rate risk (BS2A section 129(3) / BS2B section 7.6(c), and BS6 paragraph 46) has been clarified by expressing it as an instruction rather than an aspiration, and guidance has been added as well, to explain the reason for this (see section B5.3 and guidance). This is also flagged in the introductory section B5.1.

### *Horizontal disallowance (yield curve risk) (subpart B6)*

59. The current BS2A/B text specifies the calculation of horizontal disallowance without any explanation of what it represents. Subpart B6 now provides some explanation drawing on BS6 paragraphs 38-40, and uses the term “yield curve risk”. The terms “across-zone” and “within-zone” replace “inter-zone” and “intra-zone”, as that seems to make the meaning more immediately and intuitively clear.
60. As elsewhere, the order has been reversed, so that section B6.1(3) summarises the whole calculation first, cross-referring to the component calculations that follow. The guidance box following gives a summary description of the whole methodology, and the purpose of it.
61. Section B6.2: this replicates the calculation method set out in BS2A section 130(b) / BS2B section 7.7(b). But it refers back to the “risk-weighted net position” which has already been calculated for each time band, rather than repeating the calculation. It also looks ahead, by adding the calculation of the “residual position” in each time zone, which is carried forward for calculating across-zone disallowances. Bolding has been used to try and pull out more clearly terms that are defined at one point and then used again later in the calculation.
62. The across-zone disallowance calculation set out in long, dense subsections in BS2A/B (BS2A section 130(c), BS2B section 7.7(c)) has been broken down into the separate sections B6.3 to B6.6. The “residual position” in each time Zone comes from earlier sections, while:
- the “Net residual position” in time Zone 1 is calculated in Section B6.4 and feeds into the Zone 1/ Zone 3 disallowance in section B6.6;
  - the “Net residual position” in time Zone 2 is calculated in Section B6.4 and feeds into the Zone 2/ Zone 3 disallowance in section B6.5; and
  - the “Net residual position” in time Zone 3 is calculated in Section B6.5 and feeds into the Zone 1/ Zone 3 disallowance in section B6.6.

**Q: Would it help if we could also present this calculation in the form of mathematical formulae?**

### Currency risk

63. The BS2A/B source material has been reorganised into **sections C1.1** (calculation method), **C1.2** (scope), and **C1.3** (valuation). The calculation method is straightforward.
64. The scope (**section C1.2**) is divided into items that must be excluded, and items that must be included.
- On exclusions (section C1.2(1)), some of the material in BS6 paragraph 56 is additional to what is in BS2A/B, so has been incorporated as rules rather than guidance. The reference to instruments “issued by an associate of the registered bank” has been changed to “issued by an associate of any member of the banking group” (in line with BS6 paragraph 64, equity risk treatment).
  - On inclusions (sections C1.2(2) to (4)), BS2A/B only refers to instruments “whether recognised or unrecognised”, so the additional detail in BS6 paragraph 60 has been added, with the broad categories of instrument stated as requirements, while the more detailed explanation of each category is given as guidance. **Questions: Are the recognised/ unrecognised categorisations out of date? Are these descriptions still applicable?**
65. The valuation rules in **section C1.3** combine the source material from BS2A/B with material from BS6 paragraphs 58-59 where the latter appears to provide greater clarity. In particular:

- The phrase “using the relevant spot exchange rate” from BS2A/B has been replaced with the more precise version from BS6 paragraph 59.
- It is not clear in BS2A/B when the option to use a present value approach applies (see BS2A section 132(3)(b) and BS2B section 7.9(b)(ii)). BS6 paragraph 58 seems more helpful, and this is reflected in BPR140 section C1.3(5). But although this is provided in the current approach, it is not clear whether it remains relevant. **Question: Is the option to use the “present value” approach useful / meaningful?**

66. The text around using the “face or contract amount” for non-option derivatives has been amended in line with the approach for interest rate risk (see above).

## Equity risk

67. The equity risk material has been re-organised in line with FX risk, so **section D1.1** sets out the calculation method, **section D1.2** the scope, and **section D1.3** the valuation approach.
68. In the existing material, the list of exclusions from scope include any investment in an associate of the registered bank (BS2A/B) or of the banking group (BS6 paragraph 64). It seems to us that an equity holding in an associate of any member of the banking group should be viewed as structural, and hence out of scope. (Also, an entity can only be an associate of a legal entity, eg of a member of a banking group, not of the banking group itself.) This would apply equally for the solo capital calculation, so there is no need to specify a separate approach for that case.
69. Guidance in BS6 paragraph 64 notes that equity investments in the registered bank’s subsidiaries cancel out on consolidation: we do not think this needs noting, but we have added guidance that for the solo capital ratio calculation, equity in a subsidiary should be excluded as a structural position.
70. The list of instruments to be included (from BS6 paragraph 67) has been incorporated into the requirements. The valuation methodology comes mainly from BS2A/B, but (as for currency risk) incorporating the BS6 guidance on using the bank’s own present value approach, and on converting FX amounts into NZD.
71. BS6 paragraph 66 refers to using the present value (PV) approach for equity instruments, analogously to the currency risk case. However, the BS2A/B source material does not include any equivalent to the PV option it gives in the currency risk case. The pre-Basel II OiCs likewise only give the PV option in the currency risk case. In any case, we question whether a PV approach is applicable to valuing equity instruments. So we have not included this material from BS6 in section D1.3.
72. The text around using the “face or contract amount” for non-option derivatives has been amended in line with the approach for interest rate risk (see above). The treatment of a net equity futures position is already singled out in BS2A and BS2B, and we have kept this – see section D1.3(1)(b).

## Appendix 1

### *BS6 material proposed to be cut*

74. Some of the material in BS6 simply describes requirements in BS2A/B that are already clear, or duplicates BS2A/B material. Such material is not included in BPR140. This Appendix summarises what has been cut.
75. BS6 paragraph 6 is cut, as it is all covered in BS2A/B.
76. BS6 paragraphs 7-12 are cut – there are unnecessary since they are only about disclosure, and the detail is in the disclosure OICs.
77. BS6 paragraph 16 duplicates BS2A/B material and so has been cut, except for the reference to the Appendix which sets out the worked example.
78. BS6 paragraph 18 is cut, as it is duplicated in BS2A/B.
79. BS6 paragraph 23 is deleted, as it is superfluous.
80. BS6 paragraph 27: the first sentence is cut as it seems wrong: allocation of seasonal RIPs to time bands should be based on expected seasonal increases and decreases in balances rather than in interest rate repricing, since these are by definition not rate-sensitive (as per BS2A section 127(5)(c), BS2B section 7.4(e)iii), reflected in BPR140 section B3.3(2) and (3)). The rest of paragraph 27 provides the rationale for the 20 per cent cap on seasonal RIPs, and has been cut as it is not essential, and the data referred to would be extremely out of date.
81. BS6 paragraph 28 has been cut as it is duplicated in BS2A/B.
82. BS6 paragraph 29 is cut: this explains why standard time band allocations are used for core rate-insensitive products. This dates from when this approach was used only for disclosure, not for capital ratios, so it seems unnecessary now.
83. BS6, paragraphs 31-33 are cut because the detail is already in BS2A/B.
84. BS6 paragraph 35: the option of a bank using its own calculation of actual modified duration for each instrument has been cut, as it is not provided for in BS2A/B.
85. BS6 paragraphs 41-45 have been cut, as they really just explain the calculations in a way that is already covered by BS2A/B. Paragraphs 38-40 provide more helpful guidance that adds to the understanding of the horizontal disallowance methodology, so they have been reflected in BPR140.
86. BS6 paragraph 48 is slightly confusing and hence has been cut: it says that assets and liabilities should be divided into two categories for calculating the vertical disallowance, but (1) this is no different from the allocation for the whole purpose of the market risk calculation, and (2) it refers to instruments that are not RIRPs as “securities”, which seems to be narrower than implied by the general definition (eg corporate loans are also not RIRPs).
87. BS6 paragraphs 52 to 54 have been cut because they just describe the disclosure requirements.
88. BS6 paragraph 55 has been cut, as it just provides introductory text.
89. BS6 paragraph 57 is cut as it duplicates BS2A/B text.

90. BS6 paragraphs 61-62 have been cut, as they do not add anything to what is in BS2A sections 133/134 and BS2B sections 7.11 and 7.13.
91. In BS6 paragraph 66, the reference to the present value approach seems incorrect, so this has not been kept. The rest of this paragraph duplicates BS2A/B material.
92. BS6 paragraphs 63, 65, 70, 71 have been cut, as they just describe the equity risk approach, which duplicates BS2A/B material. Paragraph 68 is cut because it repeats part of paragraph 66.