

STAFF PAPER

June 2018

REG IASB Meeting

Project	Dynamic Risk Management		
Paper topic	Derivatives used for DRM purposes		
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Introduction

1. The purpose of this paper is to discuss the derivative financial instruments that will be addressed in the first phase of the Dynamic Risk Management (DRM) project. This paper also discusses designation and de-designation of derivatives.
2. This paper is structured as follows:
 - (a) Summary of staff recommendations (paragraph 3);
 - (b) Derivatives considered in the first phase of the DRM research project (paragraphs 4–21);
 - (c) Use of internal derivatives (paragraphs 22–27); and
 - (d) Designation and de-designation (paragraphs 28– 35).

Summary of staff recommendations

3. In this paper the staff recommend that:
 - (a) Interest rate swaps, including basis swaps and forward start swaps, and forward rate agreements (FRAs) should be addressed in the first phase of the DRM project as these will capture a significant portion of DRM hedging instruments. Given the use of interest rate options, although not absent, is not widespread due to market constraints, costs and their

complex nature, the staff will seek external feedback on whether interest rate options should be specifically addressed in the second phase as an extension of the DRM accounting model;

- (b) Only contracts with a party external to the reporting entity (ie external to the group or individual entity that is being reported on) can be designated within the DRM accounting model; and
- (c) Formal designation and documentation of derivatives should be required.

Derivatives considered in the first phase of the DRM research project

4. At the December 2017 meeting, the staff noted that the use of derivative instruments other than interest rate swaps, although not absent, is not widespread due to market constraints, costs and their complex nature. According to the Bank for International Settlements (BIS) in its 2016 *Triennial Central Bank Survey*,¹ the percentage of interest rate swaps compared with the total over the counter (OTC) interest rate derivatives turnover was 70%, FRAs represented 24% and options and other products represent the remaining 6% of total turnover. Turnover was defined as the gross value of all new deals entered into during a given period, and was measured in terms of the notional amount of the contracts. Turnover data was used to provide a measure of the OTC market activity and a rough proxy for market liquidity.
5. The staff would like to note that for the purpose of proposing which derivatives should be addressed in the first and second phases of the DRM research project, the staff is not distinguishing OTC derivatives from exchange-traded derivatives. The information from the 2016 *Triennial Central Bank Survey* has been used by the staff as a rough proxy for derivatives activity as that data was readily available. The staff would highlight that OTC derivatives may be more commonly used in the context of DRM because, as oppose to exchange traded markets where the contracts are standardised, OTC contracts can be customised to better suit an

¹ Central banks and other authorities in 52 jurisdictions participated in the survey. Given this is a triennial survey, the 2016 survey was the most recent available for consultation.

entity's specific risk management strategy given its existing asset and target profiles, as well as the dynamic nature of the managed portfolios.

6. In this paper we discuss the following types of derivatives:
 - (a) Interest rate swaps (including basis swaps and forward start swaps);
 - (b) FRAs; and
 - (c) Interest rate options.

Interest rate swaps

7. In an interest rate swap, the parties exchange interest payments determined based on a single currency. These swaps can be 'fixed for floating', whereby one party receives payments based on a floating interest rate (eg LIBOR) in exchange for making payments based on a fixed interest rate.² For example, an entity enters into a 5-year interest rate swap with a counterparty that requires the entity to pay a fixed rate of 5.00% and receive a variable amount based on a 3-month LIBOR reset on a quarterly basis. The variable and fixed amounts are determined based on a stated notional amount and settlement occurs periodically over the contractual life of the agreement.
8. Interest rate swaps are the most common type of derivatives used for DRM purposes and their practical application has been extensively discussed at previous Board meetings. In the following paragraphs we discuss two additional types of interest rate swaps (ie basis swaps and forward start swaps) also commonly used in practice.

Basis swaps

9. Interest rate swaps can also be 'floating for floating', whereby the parties exchange interest payments that are based on different floating rates (i.e. floating interest rates that are referenced to different basis, hence known as 'basis swaps'). These swaps are used when an entity wants to align the re-pricing of financial assets and financial liabilities. For example, assume an entity has 5-year floating

² Cross currency swaps have not been considered at this stage as the Board agreed the DRM accounting model should first focus on interest rate risk.

rate financial assets that re-price every 3 months to the then current 3-month LIBOR rate. The entity also has 5-year floating rate financial liabilities that re-price every month to the then current 1-month LIBOR rate. Given changes in 3-month LIBOR are unlikely to perfectly offset changes in 1-month LIBOR, the entity has not aligned re-pricing and, therefore, interest rate risk remains. In this scenario, the bank enters into a 5-year basis swap that pays 3-month LIBOR and receives 1-month LIBOR plus a fixed spread (ie 0.05%) in order to stabilise the net of interest income and expense.³ The entity could also achieve alignment by executing two fixed-for-floating interest rate swaps described in paragraph 7. The first would be a 5-year receive fixed, pay 3-month LIBOR interest rate swap and the second would be a 5-year pay fixed, receive 1-month LIBOR interest rate swap. A basis swap combines the two fixed-for-floating swaps into a single contract.

10. In other situations, an entity might transform all floating rate exposure into the same basis rate before taking actions to achieve its risk management strategy. For example, assume a bank has a portfolio of floating rate financial assets funded by core demand deposits. Given the portfolio of financial assets that yield different floating interest rates (for example, 3-month LIBOR, 6-month LIBOR, etc.), the bank uses basis swaps to transform the entire portfolio of financial assets into for example a 3-month LIBOR portfolio. Once all floating rate financial assets are transformed into the same basis rate (ie 3-month LIBOR), the bank takes the required actions to align the asset profile with the target profile and achieve stabilisation for the next 5 years.
11. Typically, hedge relationships using basis swaps do not meet the conditions for hedge accounting under IFRS 9 because by simply exchanging one variable rate for another, basis swaps do not eliminate fair value risk nor variability in future cash flows arising from changes in that variable interest rate. However, as discussed in paragraphs 9–10, these swaps can and are used in practice to achieve the entity's risk management strategy. In addition, as discussed at previous Board meetings, the DRM model proposes a new type of relationship, based on

³ Basis swaps are also used when an entity wants to swap two indices in the same currency (for example, an entity wants to exchange 3-month USD LIBOR for 3-month USD T-bill).

derivatives used to transform a portfolio of financial assets such that they align with a target profile. This type of relationship is neither a hedge of the exposure to changes in fair value nor a hedge of the exposure to variability in cash flows, as in IFRS 9. Asset transformation focuses on derivatives used to transform an entity's asset profile to a defined target profile regardless of whether financial instruments are fixed or floating rate. Consequently, the preliminary view staff view is that basis swaps should be addressed in the first phase of the DRM research project.

Forward start swaps

12. A forward start swap is a type of fixed-for-floating interest rate swap that comes into effect at a specified date in the future. Other than the start date, a forward interest rate swap is identical to a fixed-for-floating interest rate swap. For example, in 20X0 (trade date), two parties agree to exchange fixed for floating rate payments based on a given notional amount. The contract starts in 20X1 and cash flows will be exchanged from 20X1 until the end of 20X2, when the contract matures. Although the swap starts at a future date, and therefore periodic cash settlements will occur after the start date in 20X1, the fixed leg of the forward start swap is determined based on market conditions at the trade date.
13. In the context of the DRM model, these transactions could be used when an entity designates growth as part of the asset profile and target profile. As forward start swaps have the same characteristics of a fixed-for-floating interest rate swap described in paragraphs 7–8, other than the start date, it is staff's preliminary view that forward start swaps should be addressed in the first phase of the DRM research project.

FRAs

14. FRAs are derivative instruments where two parties exchange fixed for floating interest rate payments for a single period of time, starting at an agreed future date. In practice, FRAs and forward start swaps have many similarities (ie both contracts start at a future date and both define the period over which interest rate payments will be exchanged). However, while FRAs exchange fixed-for-floating interest payments for one period only, forward start swaps exchange cash flows

over multiple periods. Consequently, FRAs are sometimes described as a single-period forward start swap.

15. To illustrate, assume a bank expects to issue a 1-year fixed rate financial liability in 6 months time but the interest rate has not yet been determined. To lock the current 1-year market rate of 5.00%, the bank enters into a FRA in which the bank pays a fixed rate of 5.00% and receives the floating rate for 1 year. The start date of the FRA is the same as the expected issuance date of the financial liability (ie in 6 months time). As a result, the bank will pay the interest rate of 5.00% regardless of changes in the interest rate environment within the next 6 months.

16. According to the Bank for International Settlements (BIS) in its 2016 *Triennial Central Bank Survey*, FRAs represented 24% of the total OTC interest rate derivatives turnover. Therefore, considering a FRA is a derivative commonly used in practice to manage interest rate risk and the similarities to an interest rate swap, the staff's preliminary view is that FRAs should be addressed in the first phase of the DRM research project.

Interest rate options

17. Interest rate options are derivatives that give the right to the buyer to pay or receive payments based on a specific interest rate on a predetermined notional amount for a specified period of time. There is a wide variety of options commonly available, such as interest rate caps, interest rate floors, interest rate collars and swaptions.⁴ As discussed during the September 2017 Board meeting, interest rate options are sometimes used to hedge prepayment risk. However, due to their complexity, cost and market constraints, the use of interest rate options in the context of DRM is limited.

18. Furthermore, as noted in paragraph 4, according to the BIS in its 2016 *Triennial Central Bank Survey*, the share of options and other products in total OTC interest rate derivatives turnover was 6% only. Therefore, considering the complex nature

⁴ Interest rate caps are used when an entity wants to protect against rising interest rates, while interest rate floors are used when an entity wants to protect against a decrease in interest rates. Interest rate collars are a combination of an interest cap and floor in the same instrument. Finally, a swaption gives an entity the right, but not the obligation, to exchange fixed for floating interest rate payments through an interest rate swap.

of interest rate options and the fact that their use is not widespread, the staff propose to seek external feedback on whether interest rate options should be specifically addressed in the second phase of the DRM research project as an extension of the DRM accounting model. The staff expect to gather external feedback during the outreach which is expected to take place after the core areas of the model have been discussed with the Board.

19. The staff would like to note that when options are used, the approach towards managing net interest margin also changes. Options are usually used to manage prepayment risk. Using an option based strategy entities no longer allocate cash flows into buckets based on prepayment expectations but instead manage them based on their contractual tenors as any change in the cash flows as compared to the contractual tenures due to prepayments is now hedged with options, which compensate for such changes. As a consequence, such an approach necessarily has to incorporate an additional layer of complexity in the form of valuation techniques commonly used to estimate the fair value of an option. For example, common option pricing models used in practice provide a range of possible outcomes for different sets of assumptions (ie binomial model and Monte Carlo simulations). This is also one of the reasons why a more common approach when managing prepayable financial assets is to estimate customer behaviour and allocate the resulting expected cash flows into maturity buckets and use interest rate derivatives, other than options, to align the asset profile with the target profile, as currently considered in the DRM accounting model.

Preliminary staff view

20. As discussed earlier interest rate swaps (including basis swaps and forward start swaps) and FRAs account for 94% of the total OTC interest rate derivatives turnover. Therefore, the staff believe that these derivatives will capture a significant portion of derivatives used for DRM activities and thus provide an adequate basis for an early and thorough assessment of the model before gathering external feedback and progressing on to the second phase of the DRM research project.
21. The use of interest rate options in the context of DRM, although not absent, is not widespread due to market constraints, costs and increased complexity when

compared with interest rate swaps. Therefore, the staff will seek external feedback on whether interest rate options should be specifically addressed in the second phase of the DRM research project as an extension of the DRM accounting model. This is consistent with the Board's tentative decision to focus on developing the 'core areas' that are central to the model in the first phase of the DRM research project.

Question for the Board

Question for the Board

- 1) Does the Board agree with the preliminary staff view in paragraphs 20–21?

Use of internal derivatives

22. Some entities use internal derivative contracts to transfer risk exposures between different companies within a group or divisions within a single legal entity. In the context of financial institutions, these transactions may occur when an entity transfers risk from the banking division to the trading division through internal derivatives.
23. When deliberating on hedge accounting under IFRS 9, the IASB noted that, for financial reporting purposes, any transfer of risk within the reporting entity does not change the risk exposure from the perspective of that reporting entity as a whole. Consequently, as noted in paragraph 6.146 of the Basis for Conclusions of IFRS 9, the IASB decided to not allow for designation of internal derivatives in a hedge accounting relationship:

In the deliberations leading to the 2010 Hedge Accounting Exposure Draft, the IASB decided that internal derivatives should not be eligible hedging instruments in the financial statements of the reporting entity (for example, intragroup derivatives in the consolidated financial statements) because they do not represent an instrument that the reporting entity uses to transfer the risk to an external party

(ie outside the reporting entity). This meant that the related requirements in IAS 39 would be retained.

24. In other words, a prerequisite of hedge accounting under IFRS 9 is the need to demonstrate the existence of external derivatives as hedging instruments. Consequently, when internal derivatives are used for risk management purposes, financial institutions apply a variety of practices to achieve hedge accounting under IFRS 9. These practices include requiring trading divisions to externalise internal derivatives on a one-to-one basis or subsequently identifying and designating the best matching external derivative in the trading portfolio. These approaches create operational challenges, as it restricts the normal activities of a trading division and requires additional identification and tracking procedures.
25. The Discussion Paper *Accounting for Dynamic Risk Management: a Portfolio Revaluation Approach for Macro Hedging*, published by the IASB in April 2014 (the ‘2014 DP’), contemplated the use of internal derivatives, however this was under the assumption that all managed exposures in the PRA would be re-measured through the statement of profit or loss. As such, ‘the profit or loss from all internal derivatives would still however be offset so there would be no net impact on profit or loss (ie the risk management and the trading unit would have fully offsetting profit or loss from internal derivatives)’⁵. However, as noted in the PRA, ‘if the revaluation effect from the dynamic risk management activities were recognised in OCI, then that key consideration would no longer be valid – internal derivatives would affect reported profit’⁶. As the DRM accounting model proposes changes in fair value of the designated derivatives are deferred in Other Comprehensive Income when perfect alignment is achieved, the concerns raised in the 2014 DP regarding internal derivatives are equally applicable to the DRM accounting model.
26. The staff also highlight that, in paragraphs 31–39 of its *Fundamental Review of the Trading Book*, published in January 2016, the Basel Committee on Banking Supervision establishes strict limits on internal risk transfers between the banking

⁵ Paragraph 6.2.1 of the 2014 DP.

⁶ Paragraph A5.1.1 of the 2014 DP.

and trading books. Consequently, it is likely that the relevance of internal derivatives in the context of DRM has reduced as a result.

Preliminary staff view

27. Therefore, for the reasons stated in paragraphs 22–26, the staff believe that internal derivatives should not be eligible in the financial statements of the reporting entity under the DRM accounting model. This is also consistent with paragraph 6.2.3 of IFRS 9 which indicates that ‘only contracts with a party external to the reporting entity (ie external to the group or individual entity that is being reported on) can be designated as hedging instruments.’

Question for the Board

Question for the Board

- 2) Does the Board agree with the preliminary staff view in paragraph 27?

Designation and de-designation

28. The DRM accounting model proposes a new type of relationship based on derivatives used to transform a portfolio of financial assets such that they align with a target profile. In this context, the role of designation and de-designation within the DRM accounting model is to define what items are within the model’s scope and therefore part of performance assessment (ie items comprising the asset profile, derivatives used for the purpose of interest risk management, as well as an entity’s target profile). Therefore, the staff believe that requiring formal designation of derivatives will provide clarity regarding which items are in scope of the DRM accounting model. In particular, formal designation and documentation are the mechanisms by which an entity will demonstrate sufficient specificity to enable performance assessment and reclassification. As such, a derivative is designated in the DRM accounting model when the entity completes the necessary documentation requirements.

29. While the staff considered whether derivatives could be grouped for designation purposes similar to financial assets and financial liabilities ie consider designation on a portfolio basis, the staff do not think this is necessary. Derivatives can be designated either as a group or individually as long as the designation documentation is completed with sufficient specificity to ensure that the performance assessment and reclassification requirements of the model are complied with. The staff would also like to highlight that the volume of derivative contracts required for risk management is significantly less than the volume of financial assets and liabilities designated within the DRM model. This is because derivatives are executed after comparing the asset profile with the target profile and therefore the notional amount of derivatives are customised to suit a specific risk management strategy. Nonetheless, the staff believe that allowing designation of a group of derivatives could result in operational simplifications as it could reduce the amount of documentation required.
30. The staff also propose that a proportion of the notional amount of a derivative, such as a percentage of its notional amount, would be eligible for the purpose of the DRM model. However, an entity would not be allowed to designate a portion of the time period during which the derivative is outstanding. This is because there is usually a single fair value measure for a derivative instrument and is consistent with paragraph 6.2.4 of IFRS 9.⁷
31. At the February and March 2018 Board meetings, the Board agreed not to allow voluntary de-designation of portfolios within the asset profile and the target profile. This was on the same basis for the Board's decision to prohibit a free choice to revoke the designation of a hedging relationship under IFRS 9.⁸

⁷ According to paragraph 6.2.4(c) of IFRS 9, 'a proportion of the entire hedging instrument, such as 50 per cent of the nominal amount, may be designated as the hedging instrument in a hedging relationship. However, a hedging instrument may not be designated for a part of its change in fair value that results from only a portion of the time period during which the hedging instrument remains outstanding.'

⁸ For further information refer to paragraph 6.319 of the Basis for Conclusions of IFRS 9, where the Board noted that voluntary de-designation would allow hedge accounting to be discontinued even if the entity for risk management purposes continued to hedge the exposure in accordance with its risk management objective. The Board also considered that, in such situations, voluntary discontinuation of hedge accounting would be arbitrary and unjustifiable. The Board noted that the risk management objective had not changed and the other qualifying criteria for hedge accounting were still met, the ability to discontinue hedge accounting would undermine the aspect of consistency over time in providing information about that hedging relationship.

Consequently, the staff preliminary view is that the DRM model should not allow voluntary de-designation of a derivative when the risk management objective for that particular derivative remains the same.

32. As new derivatives are recognised under IFRS 9 and provided designation is consistent with the entity's risk management policies and procedures, an entity should update the derivatives designated within the DRM model accordingly. Similarly, derivatives within the DRM model should be removed from the DRM model as they are derecognised per the requirements of IFRS 9. Such updating would not represent a designation or de-designation event but instead a continuation of the existing relationship consistent with the mechanics proposed for the asset profile and target profile.

Preliminary staff view

33. The staff's preliminary view is that designation of derivatives should occur when the entity completes the necessary documentation requirements. While designation can occur on an individual or group basis, an entity must demonstrate sufficient specificity to enable performance assessment and reclassification.
34. In addition, the staff preliminary view is that the DRM model should not allow voluntary de-designation of a derivative when the risk management objective for that particular derivative remains the same.
35. Finally, the staff are of the preliminary view that the DRM accounting model should allow the designation of a proportion of the notional amount of a derivative, such as a percentage of its notional amount, however, an entity would not be allowed to designate a portion of the time period during which the derivative is outstanding.

Question for the Board

- 3) Does the Board agree with the staff preliminary view in paragraphs 33–35?