

Syllabus Update for Exam FM and the ACTEX Study Guide

Derivatives Material for McDonald Text

The examination committee has just made the third edition of *Derivatives Markets* the only recommended text for financial derivatives on exam FM. They have removed the second edition from the list, and the student who was using the second edition must now deal with two new sections of material – Sections 15.3 and 15.4. These sections discuss how synthetic combinations of financial derivatives and other assets can be used to create new products or to deal with tax and regulatory issues. The underlying principles behind this use of synthetics are already discussed in a number of places in the existing February 2013 ACTEX study guide for exam FM. Here are some examples of how topics from the new sections are already covered in the existing study guide:

- 1) On page 447 in section 15.3 of *Derivatives Markets* there is an extensive discussion of an equity-linked CD. The ACTEX FM guide covers this topic beginning on page M9-18.
- 2) On page 455 in section 15.4 of *Derivatives Markets* there is a discussion of the use of collars to enter into a forward sale of a stock and defer tax. This was mentioned in our discussion of collars on page M10-16. Note that it is also possible to use a new instrument called a variable prepaid forward to achieve the same objective. This is discussed in Section 15.4, but the new instrument is easily derived from first principles.
- 3) On page 458 in section 15.4 of *Derivatives Markets* there is a discussion of a structured note issued by Marshall and Isley to deal with regulatory capital issues. This was discussed beginning on page M10-21 of the FM study guide. One minor deletion of text is required in this discussion. In the second line of the section beginning with ***Why do this?*** we state that Chapter 15 of McDonald is not required for exam FM, and that is no longer true.

In summary, the basic reasoning and intuitions behind the new sections 15.3 and 15.4 are already covered in the existing guide, so that the student who thoroughly studies our guide should be prepared to deal with questions related to these new sections. It has been pointed out to us that although Sections 15.3 and 15.4 have been added to the syllabus, there has been no concurrent change in the learning objectives or sample questions for exam FM.

There is another problem for the student attempting to read 15.3 and 15.4. These sections assume that the student is familiar with the basics of the Black-Scholes pricing model and some exotic options, but that material is not on the exam FM syllabus. Thus the student who uses our existing study guide can read much of the discussion in 15.3 and 15.4 but may have trouble with details in some of the discussion. The text assumes that the

student can compute the value of a call and uses the function BSCall on page 447 and following, but this is MFE material from Chapter 12 of the text. Similarly the section starting with *Asian Options* on page 449 relies on MFE material from Chapter 14. On page 450 the discussion of the Barclay's reverse convertible relies on analysis of knock in options which are also MFE material from Chapter 14.

The basic concepts of application of synthetic securities in 15.3 and 15.4 are very important and we applaud their inclusion in the exam syllabus. We feel that the existing guide already provides the student with the basic understanding to get the big picture of this material. However the new sections may be a bit difficult to deal with at points because of prerequisite issues.