7 Endnotes

1. Local Country is the name of a fictitious country. The code for its currency is LCC (Local Country Currency).

2. The KIR is called by many names around the world: discount rate, repo rate, bank rate, base rate, etc. We refer to it as KIR.

3. Ignoring notes and coins.

4. Imagine Mr Spender utilising a credit card (CC) facility at the local supermarket. When the latter deposits the CC receipt it receives a deposit and Mr Spender has accessed a loan. The latter is a bank asset and the former a bank deposit (= money). The bank earns the difference between the lending rate and the deposit rate.

5. This is a little simplified, but the gist is sound.

6. Because lending and borrowing domestically do not take place in this market.

7. *Dematerialisation* means that scrip (physical certificates) no longer exist, while *immobilisation* means that scrip exists but is placed in a scrip depository which holds them on behalf of the investors (usually this means one certificate).

8. The interest rate represents the cost to the farmer of holding a stock of maize, referred to as the "cost of carry". As we will show later, the rate used in calculations of the fair value price (FVP) of forwards / futures is the risk-free rate (rfr).

9. Based on the" arbitrage principle", i.e. if this were not the rate, arbitrage could take place.

10. The term "institutions" is used loosely in the financial markets to apply to the large investors, i.e. the retirement funds, insurers and securities unit trusts.

11. Certificates are only applicable in markets where dematerialisation or immobilisation has not been implemented.

12. In terms of credit risk management practices, companies have limits on their exposure to individual banks (and other institutions).

13. Certain banks act as market makers in FRAs.

14. "Joint Interbank Agreed Rate". In Local Country the banks some years ago agreed to create a series of reference rates which represent the market. They supply 1-day, 1-month, 2 month, 3-month, etc rates (at which they are prepared to take deposits from one another) to the local stock exchange (because it is a neutral party) which averages them and makes the averages available to the market.

15. It depicts a normally shaped yield curve.

16. Many authors prefer to write this example as: LCC 7.5125 / USD 1.0 or simply as R/$ 7.5125, meaning rand per dollar. Note that with this format the "/" in USD / LCC is not a mathematical sign.

17. Note that these forwards are merely touched upon here because the detail is covered in a separate book.

18. "Market making banks" refers to the fact that the foreign exchange market is "made" by the banks; they quote bid and offer exchange rates simultaneously at all times in response to the approaches of clients (importers, exporters, etc.).

19. Note here that we increase the number of decimals (from the market norm) for purposes of demonstrating the principle.

20. Note that this transaction increases bank liquidity (if it is the only transaction that day).

21.   This transaction decreases bank liquidity

22.   Example adapted from Steiner, R (1998: 7–8)

23.   See Steiner (1998: 177).

24.   "Short" sale means the sale of an instrument that the seller does not own. The seller borrows the instrument from an investor / lender for a fee and delivers it back to the lender when the short sale is unwound by the purchase of the instrument. A short sale is undertaken to profit opportunistically from an expected decline in price.

25.   In most derivative formulae the risk free rate (rfr) is used, and this is so because it is a well known and easily accessible rate. There is no standard definition for the rfr but most analysts / academics apply this term to the 91-day treasury bill rate.

26.   Prices are of course available minute to minute and the mark-to-market price is set once a day.

27.   JIBAR denotes "Johannesburg Interbank Agreed Rate". The JSE gathers in a series of JIBAR rates from the banks. They are averages of the main banks' rates for the relevant terms.

28.   The author acknowledges the assistance of Alan Joffe and Colin Wakefield in respect of this section.

29.   This is a code for a specific bond in Local Country denominated in the local currency.

30.   Assumed for purposes of the example; futures generally terminate in the middle of relevant months.

31.   We assume this for purposes of the example (spacing in the illustration); in practice the books close 10 days before the coupon dates.

32.   "Income" is too simple a description; it should be described as "accumulated value of income received during the life of the futures contract" (suggested by Colin Wakefield).

33.   Another assumption made is that bond transactions are settled on deal date (so that the example is rendered uncomplicated). In practice bond deals are settled on T+3. Thus, in the example, the fvd and the ftd should be regarded as settlement dates.

34.   In this regard see McInish (2000: 334).

35.   It is this property of the futures market, and the significant losses made by some irresponsible traders, that gives the futures market a bad name.

36.   In this regard see Falkena (1989: 39–59).

37.   With some assistance from Pilbeam, 1998.

38.   Because USD and ZAR interest rates are the same (assumed).

39.   Almost verbatim from www.jse.co.za. All the futures and their specifications can be found on this website.

40.   This section summarises the work of Collings, 1993.

41.   It is to be noted that the comparative advantage swap is almost extinct in the more sophisticated financial markets; this is because the differentials that exists will be arbitraged out or not exist in the first place because, clearly, incorrect credit risk pricing has occurred.

42.   The *Joint Interbank Agreed Rate* of the major banks in Local Country. The major banks agreed to create a series of rates to be used as benchmark rates. The various rates (overnight, 1 month. 2 months, 3 months, and so on) are supplied to an independent party (the exchange), averaged by them and made public.

43.   Example from Pilbeam,1998.

44.   Note that in the figures the platinum price is per ounce and therefore profits / losses are per ounce.

45.   All prices quoted hereafter are "per ounce".

46.   This section relies heavily on Hull (2000: 250).

47.   See Hull (2000: 255).

48.   Not supplied here.

49.   This section draws heavily from Hull (2000).

50.   Last mark to market price. In this regard see Hull (2000:285).

51.   This is a South African example.

52.   With assistance from Hull (2000:.543).

53.   The swaption-swap differences are similar to the differences between an option on forex and a forex forward. See Hull (2000: 543).

54.   Example (slightly) adapted from Pilbeam, 1998.

55.   A reminder: Joint Interbank Agreed Rate of Local Country, a benchmark rate (the average of the market participants' rates).

56.   These are South African bond indices.

57.   Example from Pilbeam, 1998.

58.   With some assistance from Saunders and Cornett, 2001. They also assisted with the currency option example.

59.   This is approximate because the market index could have differed from the SIV.

60.   See www.jse.co.za

61.   https://securities.standardbank.co.za/ost/nsp/BrochureWarepublic/Ost/products/warrants.html

62.   See https://www.warrants.standardbank.co.za/proxy/warrants/docs/ProductBrochures/CRW%20Brochure-Final.pdf

63.   See: https://securities.standardbank.co.za/ost/nsp/BrochureWarepublic/Ost/products/warrants.html
       (Accessed 12 01 2012).

64. Example from Pilbeam, 1998.

65. Example from Pilbeam, 1998.

66. See Pilbeam, 1998 and Hull, 2000.

67. Not always though; it depends on credit enhancement facilties.

68. There are other requirements as well, such as a liquidity requirement.

69. As high as 400 basis points above the AAA-rated paper (i.e. + 4%).

70. Definition from Hull (2000: 644)

71. Estimated by the British Bankers' Association at close to 40% of the market (in 1999).

72. Some contracts are also settled in cash.

73. Example much adapted from Lehman Brothers International (Europe), 2001.

74. Ibid.

75. Estimates by the British Bankers' Association in 1999.

76. See Applied Derivatives Trading Magazine (November 1998).

77. See: http://www.financialmarketsjournal.co.za/1stedition/printedarticles/printweatherderivatives.htm

78. Clemmons, L and Mooney, N (1999)

79. See: http://unfccc.int/essential_background/convention/items/6036.php

80. See: http://unfccc.int/essential_background/items/6031.php

81. See: http://unfccc.int/essential_background/kyoto_protocol/items/6034.php

82. See: http://unfccc.int/resource/docs/publications/08_unfccc_kp_ref_manual.pdf

83. See http://en.wikipedia.org/wiki/Carbon_credit

84. See: http://en.wikipedia.org/wiki/Carbon_credit

85. See: http://www.olympicvessels.com/derivatives.php

86. An estimated mid-price of the bids and offers of brokers at 17.30.
    See: http://www.balticexchange.com/default.asp?action=article&ID=5133 (Accessed 19 01 2012).

87. See: http://www.balticexchange.com/default.asp?action=article&ID=35 (Accessed 15 01 2012).

88. See: http://www.economist.com/node/16846627 (Accessed 12 01 2012).

89. See: http://www.clarksonsecurities.com/ (Accessed 12 01 2012).