EXAM, December 11, 2007

11, 2007 Student's name

- 1) The simple return for the portfolio is 17 per cent. The log return is equal to:
 - a) 15,0%.
 - b) 15,7%.
 - c) 17,0%.
 - d) 18,1%.
- 2) If the correlation coefficient between two assets is _____, then the two assets can be combined to form a zero risk portfolio.
 - a) -1.
 - b) 0.
 - c) 0,5.
 - d) 1.
- 3) Which of the following risk measures is not a sensitivity measure ?
 - a) duration.
 - b) currency gap.
 - c) delta.
 - d) gamma.
- 4) The spot rate for one year is 10 per cent. The forward rate for the second year is 10 per cent. The twoyear zero-coupon bond's price with a par value equal to 1 is:
 - a) 0,80.
 - b) 0,83.
 - c) 0,89.
 - d) 1,07.
- 5) Spot rate $z_3 = 7$ per cent. Spot rate $z_2 = 8$ per cent. The forward rate for a capital market instrument ${}_{3}f_2$ is:
 - a) 5%.
 - b) 8%.
 - c) 9%.
 - d) 11%.
- 6) What is the price impact of a 200 basis point decline in yield on a 20-year par bond. The bond price will
 - a) rise by 200 basis points.
 - b) drop by 200 basis points.
 - c) rise by 2400 basis points.
 - d) drop by 2400 basis points.
- 7) What is the price impact of a 200 basis points increase in yield on a bond with a modified duration 3 and convexity of 20 ?
 - a) +0,56%.
 - b) -0,56%.
 - c) + 5,6%.
 - d) 5,6%.
- 8) A bank has 1000 PLN in assets with duration of 0,5. Duration of all liabilities and equity is 0,3. What is the impact on equity value if all interest rates fall 200 basis points ?
 - a) + 4 PLN.
 - b) 4 PLN.
 - c) + 40 PLN.
 - d) 40 PLN.
- 9) A bond price has increased from 1000 to 1001 as interest rate dropped by 2 basis points. Duration is approximately equal to:
 - a) 2,5.
 - b) -2,5.
 - c) 5.
 - d) -5.
- 10) If the exchange rate value of the Polish zloty goes from US\$0.33 to US\$0.30, then
 - a) The zloty has appreciated, and the Polish will find U.S. goods cheaper.
 - b) The zloty has appreciated, and the Polish will find U.S. goods more expensive.
 - c) The zloty has depreciated, and the Polish will find U.S. goods cheaper.
 - d) The zloty has depreciated, and the Polish will find U.S. goods more expensive.

- 11) The PLN/USD spot is at 3, the one year PLN deposit rate is 6%, and the one year USD deposit rate is 3,25%. The one-year PLN/USD forward rate is:
 - a) 2,92.
 - b) 3,00.
 - c) 3,08.
 - d) 3,12.
- 12) Consider a portfolio of 100M of governments bonds. The modified duration is five years, and the worst increase in yields observed over a month at the 95% level was 40 bp. The approximate portfolio monthly VaR at the 95% level is equal to _____.
 - a) 0,4 M
 - b) 2 M
 - c) 4 M
 - d) 95 M
- 13) A money market desk holds a floating rate note with an seven-year maturity. The interest is floating at three-month LIBOR rate, reset quarterly. The next reset is in one week. The approximate duration of the floating rate note is ______.
 - a) 7 years
 - b) 3 years
 - c) 3 months
 - d) one week
- 14) To convert VaR from a one day holding period to a ten day holding period the VaR number is generally multiplied by:
 - a) 1,65
 - b) 2,33
 - c) 3,16
 - d) 10
- 15) A US Treasury bill selling for \$96 with 120 days to maturity and a face value of \$100 should be quoted on a bank discount basis at:
 - a) 12,0%.
 - b) 12,5%.
 - c) 13,0%.
 - d) 13,5%.
- 16) Which of the following are not related to operational risk ?
 - a) fluctuations in exchange rates.
 - b) errors in trade entry.
 - c) errors in preparing Master Agreement.
 - d) late confirmation.
- 17) The portfolio consists of A-rated bonds (\$30 million) and B-rated bonds (\$70) million. The one-year probabilities of default are 1 per cent and 5 per cent respectively. The recovery rates are 70 per cent and 30 per cent respectively. The expected credit loss from this portfolio is \$_____ million.
 - a) 1,26
 - b) 2,54
 - c) 3,12
 - d) 4,16
- 18) Market value of assets is 1000, long term debt is 200, equity is 300, volatility of ROA is 5%. Distance to default is equal to:
 - a) 2.
 - b) 3.
 - c) 4.
 - d) 8.
- 19) Credit quality is NOT measured by:
 - a) credit ratings.
 - b) credit spreads.
 - c) default probabilities.
 - d) credit provisions.
- 20) Recovery rates _____ during recession and _____ during expansion.
 - a) increase, decrease
 - b) decrease, increase
 - c) are relatively stable in time.
 - d) do not depend on macroeconomic situation.