

Name: _____ N° _____ Class _____

Monetary and Financial Economics
 Instituto Superior de Economia e Gestão

Progress Assessment Test, 11 April 2019, Duration of the test: 45 minutes

1. **Fill in the response grid on this page**, making a cross (X) on the correct answer. In case of error, cross over and put the cross in another box.
2. A right answer will be marked +1 point. A wrong answer will be marked -0.2 points.
3. Reply only if you think there is a high probability of being the correct answer. If you have many doubts leave it blank.
4. **It is not allowed to use mobile phones, calculators, or computers. Improper use will lead to cancellation of the test.**
5. The student may only leave the room after the test has finished.
6. The student gives back both the answer page and the questions pages.

Good luck!

Answer Grid:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) | a) |
| b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) | b) |
| c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) |
| d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) | d) |

1. In capital markets:

- A. There are transactions of bonds with an original maturity below one year.
- B. Takes place the intervention of the monetary authority.
- C. *There are transactions of long-term bonds.*
- D. None of the above answers is correct.

2. The secondary market:

- A. Allows for indirect financing.
- B. Allows for direct financing.
- C. Is the market where are trade only debt securities.
- D. *Is the market where securities are traded after their issuance.*

3. Leverage:

- A. *All the statements are correct.*
- B. Can contribute to increase the possibility of financing investments.
- C. Can contribute to increase the expected rates of return of the investments.
- D. It is commonly used by investors in financial markets.

4. Systemic risks:

- A. Can be reduced with strategies of portfolio diversification.
- B. Can be reduced with risk hedging.
- C. *Affect all assets traded in a market.*
- D. All the other answers are correct.

5. The Gordon model:

- A. Allows the determination of the price of a stock.
- B. Assumes that the dividend growth rate is constant.
- C. Assumes that the dividend growth rate is lower than the expected rate of return of the investment.
- D. *All of the above answers are correct.*

6. The dividends distributed by the firms:

- A. Are determined at the moment of issuance of the stocks.
- B. Are payments of debts incurred by the firm.
- C. Are annual coupon payments.
- D. *None of the above answers is correct.*

7. Regarding the hypothesis of the Markowitz model, we can state that:

- A. Securities are finitely divisible and there are no transaction costs nor taxes.
- B. Diversification is a factor that increases risk, since a portfolio with several financial investments increases global risk.
- C. *Investors assign identical expectations for the expected rates of return of the securities.*
- D. Each investor can influence financial markets since there is asymmetric information.

8. The Capital Market Line:

- A. Has its origin in the return of the free risk asset.
- B. Has a negative slope.
- C. Is tangent to the risky assets efficient frontier.
- D. *A and C.*

9. Assume the following information for two financial assets:

| Asset 1 | | Asset 2 | |
|-------------|--------------------|-------------|--------------------|
| Probability | Rate of return (%) | Probability | Rate of return (%) |
| 1/3 | 18 | 1/3 | 3 |
| 1/3 | 6 | 1/3 | 18 |
| 1/3 | 3 | 1/3 | 1 |

Based on the above information:

- A. Both the expected rate of return and the risk of asset 1 are higher than for asset 2.
- B. The expected rates of return of the two assets are identical.
- C. It is not possible to draw any conclusion regarding the risk of each asset.
- D. *The risk of asset 2 is higher than the risk of asset 1.*

10. The risk of two financial investments can be measured:

- A. *With the value of the variance and of the standard deviation.*
- B. By comparing the expected rates of return of each investment.
- C. Only with the standard deviation.
- D. None of the above answers is correct.

11. The efficient frontier is the part of the geometric locus of the opportunity investment set where each point corresponds to a portfolio that:

- A. *Has lower risk than the other portfolios with the same rate of return.*
- B. Has lower risk regardless of the rate of return of other portfolios.
- C. Is dominated by all other portfolios.
- D. B and C.

12. In a portfolio with two risky assets, the opportunity investment set can be represented by:

- A. Two lines, one with a negative slope and another with a positive slope if the correlation coefficient is +1.
- B. Two lines with a positive slope if the correlation coefficient is -1.
- C. *Two lines, one with a negative slope and another with a positive slope if the correlation coefficient is -1.*
- D. A line with a negative slope if the correlation coefficient is -1.

13. Consider the following information regarding 4 investment hypothesis:

| Investment | Expected return | Risk (standard deviation) |
|------------|-----------------|---------------------------|
| A | 200 | 100 |
| B | 200 | 50 |
| C | 300 | 100 |
| D | 400 | 50 |

Assuming that the investor is a rational agent:

- A. The investor will prefer D to B.
- B. The investor will prefer C to A.
- C. The investor will prefer B to A.
- D. All the previous hypothesis are correct.

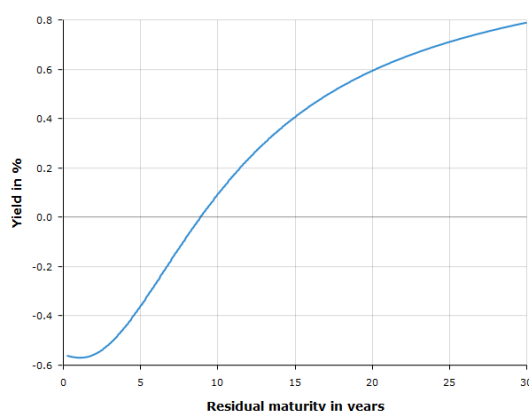
14. When there are expectations for the decrease of the inflation rate:

- A. The bond supply curve shifts to the right, implying an increase in the interest rate.
- B. The bond supply curve shifts to the left and the bond demand curve shifts to the right, implying a decrease in the interest rate.
- C. The bond supply and demand curves shift to the right, implying an increase in interest rates.
- D. None of the above answers is correct.

15. In the context of the Theory of Liquidity Preference with two assets, Money and bonds, when there is excess money demand:

- A. There is excess bond supply.
- B. There is excess bond demand.
- C. The bond market is in equilibrium.
- D. The money market is in equilibrium.

16. According to the expectations theory, the current yield curve:



Source: ECB, 24 March 2019.

- A. Indicates expectations of increasing interest rates.
- B. It is not possible to say anything about the expectations, since one need to know the liquidity premium.
- C. Reveals that the yield curve is always upward slopping.
- D. Indicates that, not considering the liquidity premium, the expectations imply an increase of the interest rates.

17. The theory of the liquidity premium allows the understanding of the following empirical evidences:

- A. Interest rates for different maturities co-move together throughout time.
- B. The *yield curves* have a positive slope when the short-term interest rates are low and a negative slope when the short-term interest rates are high.
- C. The yield curves have on average a slight positive slope.
- D. *All the previous answers are correct.*

18. On a given moment, there are multiple interest rates because:

- A. There are bonds with different risk levels.
- B. There are bonds with different levels of liquidity.
- C. The interest rates vary alongside the business cycle.
- D. *A and B are correct.*

19. Which is the correct statement?

- A. The risk premium is indirectly proportional to the difference of assets' liquidity
- B. *Assets with lower rating offer higher interest rates.*
- C. The risk premium compensates the shorter maturities.
- D. The increase of the relative risk of a bond reduces the risk premium.

20. When there are expectations of rising inflation, according to the Fisher Effect:

- A. *The prices of the bond decrease and the interest rates increase.*
- B. The prices of the bonds decrease and the interest rates decrease.
- C. The prices of the bonds and the interest rates decrease.
- D. The prices of the bonds and the interest rates increase.