EXAM: FINANCIAL MARKETS AND INSTITUTIONS (JAN-FEB23-1) - 90 minutes

SOLUTIONS

A) MULTIPLE CHOICE QUESTIONS (1 point each, no penalties, at least 5 to pass)

1 In a fully amortised loan where the share of principle is fixed, the share of interests is…
- a decreasing

2 The recent evolution of regulation and supervision of financial intermediaries shifted towards:
- d more prudential and transparency requirements

3 In the majority of countries the largest issuer of bonds is represented by…
- a governments

4 The initial public offering (IPO) is the procedure by which:
- b the stocks of an existing firm become public for the first time

5 Compared to open-end mutual funds, closed-end ones…
- c attract fewer volumes

6 The most important portion of the economic performance of a commercial bank is represented by:
- b its interest margin

7 When a central bank provides liquidity through open market transactions, in its balance sheet…
- a bonds and reserves increase

8 After the USD, the largest market share in the market for foreign currencies is held by…
- c the EUR and the JPY

9 If a floating mortage provides a cap, this means that its interests…
- a can not be higher than the cap

10 I sold a stock option, strike price 100 and premium of 5. If at the exercise date the price of the stock is 120, I gain:
- a if it is a put option, 5

B) OPEN QUESTION (10 points, check your handwriting and don't exceed the space below)

Why do central banks influence mostly interest rates in order to obtain price stability?

The objective of price stability, after the definition of a nominal anchor (typically inflation, but also money aggregates) requires to use tools that are available to the central bank, that experience an impact fast, that are easily communicated to market players, and that are able to influence prices. In choosing between interest rates and money aggregates, the former fulfil better these requirements, despite lagging between action and effects. Greater (smaller) rates lead to lower (greater) credit, lower (greater) investments, slowdown (push) to economic activity, lower (greater) supply soon and demand after, that leads to a lower (greater) level of prices.
This, however, assumes an optimal interaction between the liquidity effect, the inflationary effect and the income effect of the monetary policy.

C) EXERCISE (10 points, briefly explain your calculations and don't exceed the space below)

Bond A is a zero-coupon with a duration of 3 and a current price of 89. What is the price that a newly issued two-year 5% annual coupon bond should have today to offer the same yield to maturity?

1. YTM of ZC: (100/89)^(1/3)-1= 3,96%

2. PV of CB: 5/(1+3,96%)+105/(1+3,96%)^2=101,961