Surname……

Name……

Group…….....

Financial Markets

International – Fall 2026

Midterm Exercise. October 26th

(You can answer to the examination in Spanish or in English language)

The exercise has the following structure:

- Test. **(4 points)**. Each correct question +0,4 (incorrect - 0,15).
- Three short questions. **(3 points)**. 1 point each question.
- Exercise **(1 point)**. 0,5 points each question.
- Press article **(2 points)**. 0,5 points each question

TEST QUESTIONS (4 points)

- Each correct question: + 0,4 points.
- Each incorrect question: - 0,15 points.
- Unanswered questions: 0 points.

1. **Cash in circulation plus the reserves that commercial banks hold at the central bank are:**
   a) The money supply (M2)
   b) The central bank's equity
   c) The monetary base
   d) The central bank's assets

2. **In the Federal Reserve's "dot plot", each dot represents:**
   a) The interest rate implied by futures markets
   b) One FOMC participant's view of the appropriate federal funds rate at the end of a given year
   c) A rate decision already approved for the next meeting
   d) One FOMC participant's inflation forecast

3. **A bond pays an annual coupon of 4%. If the market yield on similar bonds is 5%, the bond will trade:**
   a) At a premium
   b) At par
   c) At a discount
   d) It cannot be determined without knowing the maturity

4. **The maximum potential loss of a short seller is:**
   a) Theoretically unlimited
   b) Limited to the price at which the shares were sold
   c) Limited to the margin deposited with the broker
   d) Zero, because the shares are borrowed

5. **A credit card charges an APR of 12% compounded monthly. Its effective annual rate (EAR) is closest to:**
   a) 12.00%
   b) 12.36%
   c) 12.68%
   d) 13.00%

6. **An investment returns +50% in year 1 and −50% in year 2. Which statement is correct?**
   a) Arithmetic average 0%; geometric average 0%
   b) Arithmetic average 0%; geometric average ≈ −13.4%
   c) Arithmetic average ≈ −13.4%; geometric average 0%
   d) Both averages are ≈ −25%

7. **According to the liquidity preference theory, an upward-sloping yield curve reflects that:**
   a) Investors require a premium to hold longer maturities
   b) Markets expect a recession
   c) The central bank is expected to cut rates
   d) Short-term bonds are riskier than long-term bonds

8. **A bank whose assets are worth more than its liabilities, but which cannot pay all the depositors who want to withdraw their money today, has a problem of:**
   a) Solvency
   b) Exchange-rate risk
   c) Credit risk
   d) Liquidity

9. **According to Diamond and Dybvig (Nobel Prize 2022), deposit insurance helps to prevent bank runs because:**
   a) It eliminates the credit risk of bank loans
   b) It removes the incentive to withdraw just because depositors fear that others will withdraw
   c) It guarantees the capital of bank shareholders
   d) It raises the interest rate paid on deposits

10. **Which of the following is an example of monetary policy rather than fiscal policy?**
    a) A reduction in income tax
    b) An increase in public spending
    c) Issuing more government debt to finance a deficit
    d) The central bank raising its policy rate

SHORT QUESTIONS (3 points)

Each question: 1 point each question

1) What is a bank run? Explain why banking is built on confidence, why a liquidity problem in one bank can become systemic, and how deposit insurance and the central bank help to prevent it.

2) Draw a simplified central bank balance sheet and show where the monetary base appears. After 2008 the Federal Reserve roughly doubled the monetary base, but the money supply (M2) and inflation did not grow in the same proportion. Why?

3) Compare a centralized exchange supervised by a regulator such as the SEC with an OTC market and with a decentralized protocol such as Uniswap, in terms of price discovery, supervision and liquidity.

EXERCISE (1 point)
0,5 points each question

a) A 3-year bond has a face value of €1,000 and pays an annual coupon of 5% (cash flows in the table). The market yield is 4%. Calculate the price of the bond. Is it a premium, par or discount bond? Why?

	Year 1	Year 2	Year 3
Cash flow (€)	50	50	1,050
Present value at 4% (€)			

b) One year later, just after receiving the first coupon, the market yield rises to 6% and you sell the bond. Calculate the selling price and your holding period return (HPR). Compare it with the 4% yield you expected when you bought the bond and explain why this happens.

PRESS ARTICLE (2 points)
International finance and monetary policy. 0,5 points each question

Tokyo raises the cost of cheap money

On 18 September 2026 the Bank of Japan raised its policy rate to around 1.25%, its highest level in three decades. Two days earlier, the US Federal Reserve had raised its own target range to 3.75%–4.00%.

For years, near-zero Japanese rates made the yen the world's favourite funding currency: investors borrowed cheaply in yen, converted the money into dollars and bought higher-yielding assets such as US Treasuries. This is the yen carry trade.

That model is now being tested. Ten-year Japanese government bond yields have climbed above 3%, their highest level since the mid-1990s, giving Japanese savers more reasons to keep their money at home.

Markets still remember August 2024: days after a small Japanese rate hike, the yen jumped and Japanese stocks fell around 12% in a single session, as leveraged investors rushed to close their positions at the same time.

October 2026

a) Explain how the yen carry trade described in the text works. Using the policy rates mentioned, what is the approximate interest-rate differential the strategy earns today?
b) The carry trade is exposed to interest-rate risk and to exchange-rate risk. Explain each one, and why the strategy can lose money even if US interest rates do not change.
c) Why can higher Japanese bond yields affect bond prices and borrowing costs in other countries, such as the US or Spain? Relate your answer to the competition for global savings between governments and AI investment.
d) In one sentence: what does the August 2024 episode have in common with a bank run?