

Student Name	
Student ID	

**INTRODUCTION TO MONEY AND BANKING
MIDTERM EXAM**

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1. The exam will be marked out of **75 points**. The test results are be counted towards **20%** of the final grade in the course.
2. The exam consists of two parts. The first part of the exam has **20 multiple choice** questions (**1 point each**). The second part has **3 explanatory problems**, with a total weight of **55 points**.
3. Answer the multiple choice questions on the Scantron answer sheet. Answer all other questions in the examination booklet.
4. Make sure to indicate your student number on the examination booklet and on the Scantron answer sheet.
5. Students are allowed to use one sided A4 page with course notes.
6. Students can use calculators.
7. Students are required to hand in the questions with their asnwrs.

	MC	Q 1	Q 2	Q 3	Total grade	Grade in %
Student's grade						
Maximum possible	20	10	20	25	75	100

Good luck!

Part I (20 points). Indicate the letter of your choice for each question on the Scantron answer sheet. All questions in this part carry equal weight (**1 point each**)

1. When you take \$1,000 and deposit it in your account, for example, at the Bank of Montreal, you are participating in the process of:
 - a. Direct finance.
 - b. Indirect finance.

2. Which of the following best describes the behaviour of the money aggregates M1 and M2?
 - a. While both M1 and M2 tend to rise and fall together, they often grow at very different rates.
 - b. M1 tends to grow at a much faster rate than M2.
 - c. While both M1 and M2 tend to move closely together over periods as short as a year, in the long run they tend to move in opposite directions.
 - d. While both M1 and M2 tend to move closely together over periods as a year, in the long run their growth rates are vastly different.

3. Which of the following are debt instruments?
 - a. A Canada government bond.
 - b. A bond issued by Ford Motor Company.
 - c. A share of IBM stock.
 - d. Both (a) and (b).

4. Keeping everything else constant, when the Bank of Canada _____ the money stock, the money supply curve shifts to the _____ and the interest rate _____.
 - a. Decreases; left; falls
 - b. Increases; left; rises
 - c. Increases; right; rises
 - d. Decreases; right; rises
 - e. Decreases; left; rises

5. Which of the following is *not* a goal of financial regulation?
 - a. Reducing adverse selection
 - b. Ensuring the soundness of the financial system
 - c. Reducing moral hazard
 - d. Ensuring that investors never suffer losses

6. A potential borrower usually has better information about the potential returns and risks of the investment projects he plans to undertake than does the lender. This inequality of information is called:
 - a. Reverse causation
 - b. Adverse selection
 - c. Asymmetric information
 - d. Moral hazard
 - e. Risk sharing

7. Financial markets improve economic welfare because
 - a. They allow funds to move from those without productive investment opportunities to those who have such opportunities
 - b. They allow consumers to time their purchases better
 - c. They weed out inefficient firms
 - d. They do each of the above
 - e. They do (a) and (b) above

8. Economists find no completely satisfactory way to measure money because
 - a. Money supply statistics are a state secret
 - b. The “moneyness” or liquidity of an asset is a matter of degree
 - c. The Bank of Canada does not employ or report different measures of money supply
 - d. Economists find disagreement interesting and refuse to agree for ideological reasons
 - e. None of the above

9. If Mary deposits \$100 of her currency in her chequing account, then
 - a. M1 will increase by \$100
 - b. M1 and M2 will not change
 - c. M2 will fall by \$100
 - d. M2 will increase by \$100

10. Economists consider the _____ to be the most accurate measure of interest rates:
 - a. Simple interest rate
 - b. Yield to maturity
 - c. Bank rate
 - d. Coupon rate
 - e. The yield on a discount basis

11. The present value of a lottery prize paying \$1 million each year for twenty years, discounted at a rate of 10 percent, is worth
 - a. Exactly \$20 million
 - b. Between \$20 million and \$30 million
 - c. \$18 million
 - d. More than \$30 million
 - e. Less than \$10 million

12. If you start with \$100, if the simple interest rate on one-year loans is i , and if you make a series of simple loans for n consecutive years, how much do you have at the end of those n years?
 - a. $\$100 + i^n$
 - b. $\$100 + (1+i)^n$
 - c. $\$100 \times i^n$
 - d. $\$100 \times (1+i)^n$
 - e. None of the above

13. Which of the following are true for discount bonds?
- The purchaser received the face value of the bond at the maturity date
 - Canada bonds and notes are examples of discount bonds
 - A discount bond is bought at a price below its face value
 - All of the above
 - Only (a) and (b) of the above
14. The nominal interest rate minus the expected rate of inflation
- Is a more accurate indicator of the tightness of credit market conditions than is the nominal interest rate
 - Is a better measure of the incentives to borrow and lend than is the nominal interest rate
 - Defines the real interest rate
 - Indicates all of the above
 - Indicates only (a) and (c) above
15. You would be more willing to purchase Canada bonds, other things equal, if
- Gold becomes more liquid
 - You expect interest rates to rise
 - You inherit \$1 million from you Uncle Harry
 - Any of the above occurs
 - Either (b) or (c) of the above occurs
16. If the probability of a bond default increases because corporations begin to suffer large losses, then the default risk on corporate bonds will _____ and the expected return on these bonds will
- increase; increase
 - decrease; decrease
 - decrease; increase
 - increase; decrease
17. Which of the following long-term bonds has the highest interest rate?
- Municipal bonds
 - Corporate AAA bonds
 - Canada bonds
 - Corporate BBB bonds
18. The risk structure of interest rates is explained by differences in
- The bond's relative maturity.
 - The bonds' relative default risks.
 - The bonds' relative liquidity.
 - All of the above.
 - Only (b) and (c) of the above.

19. In the market for money, an interest rate below equilibrium results in an excess _____ for (of) money and the interest rate will _____.
- a. Supply; fall
 - b. Supply; rise
 - c. Demand; rise
 - d. Demand; fall
20. Figure 1 below illustrates the effect of an increased rate of money supply growth. From the figure, one can conclude that the
- a. Liquidity effect is larger than the expected inflation effect and interest rates adjust quickly to changes in expected inflation.
 - b. Liquidity effect is smaller than the expected inflation effect and interest rates adjust quickly to changes in expected inflation.
 - c. Liquidity effect is larger than the expected inflation effect and interest rates adjust slowly to changes in expected inflation.
 - d. Liquidity effect is smaller than the expected inflation effect and interest rates adjust slowly to changes in expected inflation.

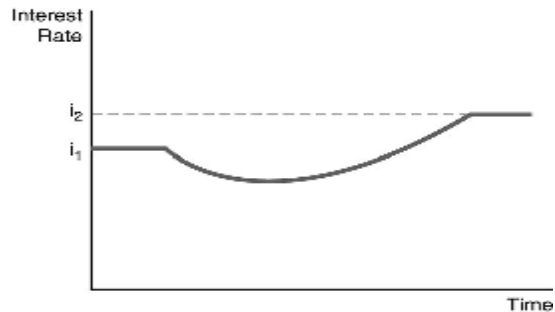


Figure 1

Part II

Question 1 (10 points)

Using the properties of money, explain why houses are not used as money.

Question 2 (20 points)

Consider the following news about financial markets.

Corporate Bond Spreads Rise Most Since November: Credit Markets¹

February 07, 2010, 09:53 PM EST By Sapna Maheshwari and John Detrixhe

Feb. 8 (Bloomberg) -- Corporate borrowing costs are rising at the fastest pace in more than two months on concern that worsening government finances will slow the global economy and make it harder for companies to meet debt payments.

The extra yield investors demand to own corporate bonds instead of government securities widened 4 basis points last week to 169 basis points, the most since the period ended Nov. 27, according to the Bank of America Merrill Lynch Global Broad Market Corporate Index. Spreads widened for three weeks, the longest stretch in about a year, while those for U.S. high-yield, high-risk companies expanded by the most since August.

- a. **(10 points)** According to this passage, what factors influenced the behaviour of the interest rates for corporate bonds? Use the supply and demand analysis for bonds or the liquidity preference framework to explain the impact of each of the factors on the corporate interest rates. Provide graphical illustration of your answer.
- b. **(10 points)** Use the risk structure of interest rates to explain why the yield on corporate bonds increased in the last week.

¹ <http://www.businessweek.com/news/2010-02-07/corporate-bond-spreads-rise-most-since-november-credit-markets.html>.

Question 3 (25 points)

This question is based on the information on the Australian government coupon bonds, summarized on the next page. The information is given for February 9, 2010.

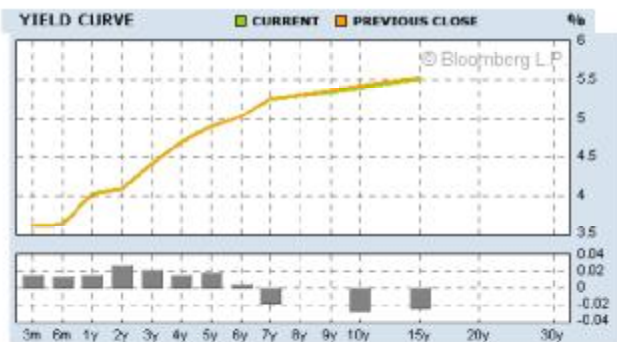
- a. (10 points)** Find the Australian government bond maturing on 03/15/2019. According to the information in the table,
- 1) What is the price this bond, if its face value is equal to \$1,000?
 - 2) What is its coupon payment?
- b. (10 points)** Imagine that you have a table containing the information on the Australian government bonds published exactly a year ahead, on February 9, 2011. In the table, the current price for the bond maturing on 03/15/2019 is equal to 105.15.
- 1) Compute the rate of return on holding this bond between February 9, 2010 and February 9, 2011.
 - 2) Assuming that the rate of inflation during the holding year was 1%, compute the value of the realized real return.
- c. (5 points)** If the interest rates on *all* Australian government bonds rose by two percent over the course of the year, which bond would you prefer to have been holding? Explain your answer.

Government Bonds

AUSTRALIA BRAZIL GERMANY HONG KONG JAPAN UK US

Australian Government Bonds

	COUPON	MATURITY DATE	CURRENT PRICE/YIELD	PRICE/YIELD CHANGE	TIME
3-MONTH	0.000	04/23/2010	99.31 / 3.62	0.007 / .015	11:00
6-MONTH	0.000	05/21/2010	99.03 / 3.63	0.006 / .014	11:00
1-YEAR	5.250	08/15/2010	100.61 / 4.04	-0.011 / .016	00:40
2-YEAR	5.750	06/15/2011	102.11 / 4.11	-0.04 / .027	00:40
3-YEAR	5.750	04/15/2012	102.71 / 4.42	-0.047 / .021	00:40
4-YEAR	6.500	05/15/2013	105.36 / 4.70	-0.054 / .016	00:40
5-YEAR	6.250	06/15/2014	105.13 / 4.92	-0.076 / .019	00:40
6-YEAR	6.250	04/15/2015	5.03 / 5.03	-0.023 / .004	00:40
7-YEAR	6.000	02/15/2017	5.24 / 5.24	0.104 / -.018	00:40
10-YEAR	5.250	03/15/2019	99.07 / 5.38	0.2 / -.029	00:40
15-YEAR	5.750	05/15/2021	102.05 / 5.50	0.21 / -.025	00:40



Reserve Bank of Australia Interest Rates

CURRENT VALUE: 3.75



Related News

- [Greek Government Bonds Surge as EU's Rehn Offers 'Support in Broad Sense'](#)
- [U.K. Gilts Decline After House Price Increase Stokes Inflation Speculation](#)
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