厦门大学《经济学原理》课程试卷

王亚南经济研究院 2019 年级经济学本科国际化试点班

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试卷类型：（A 卷）

Principles of Economics

Final Examination

Part I
Multiple Choices (4 points each)

1. Which of the following statement is not true about GDP

   (a) **GDP measures the market value of all goods and services produced within a country.**

   (b) GDP does not include nonmarket goods such as leisure.

   (c) GDP does not include underground economy

   (d) GDP does not count inequality.

2. A farmer sells wheat to a baker for $20. The baker uses the wheat to make bread, which is sold for $30. What is the total contribution of these transactions to GDP?

   (a) $10

   (b) $20

   (c) **$30**

   (d) $50

3. Which of the following is not true? GDP is not a good measure of economic well-being because GDP

   (a) does not include goods and services produced at home.

   (b) does not include air quality.

   (c) does not consider income inequality.

   (d) **does not include export.**

4. Which of the following is not true?

   (a) **Real GDP is the production of goods and services valued at current prices.**

   (b) Real GDP is the production of goods and services valued at constant prices.

   (c) Real GDP is the production of goods and services valued at the prices of a base year.

   (d) Real GDP equals nominal GDP adjusted by GDP deflator.

5. Babe Ruth, the famous baseball player, earned $80,000 in 1931. Today, the best baseball players can earn more than 400 times as much as Babe Ruth earned in 1931. However, prices have also risen since 1931. We can conclude that?

(a) The best baseball players today are about 400 times better off than Babe Ruth was in 1931.

(b) Because prices have also risen, the standard of living of baseball stars hasn't changed since 1931.

(c) One cannot make judgments about changes in the standard of living based on changes in prices and changes in incomes.

(d) **One cannot determine whether baseball stars today enjoy a higher standard of living than Babe Ruth did in 1931 without additional information regarding increases in prices since 1931.**

6. The CPI is more commonly used as a gauge of inflation than the GDP deflator is because

(a) The CPI is easier to measure.

(b) The CPI is calculated more often than the GDP deflator is.

(c) **The CPI better reflects the goods and services bought by consumers.**

(d) The GDP deflator cannot be used to gauge inflation.

7. In computing the consumer price index, a base year is chosen. Which of the following statements about the base year is correct?

(a) The base year is always the first year among the years for which computations are being made.

(b) It is necessary to designate a base year only in the simplest case of two goods; in more realistic cases, it is not necessary to designate a base year.

(c) **The value of the consumer price index is always 100 in the base year.**

(d) The base year is always the year in which the cost of the basket was highest among the years for which computations are being made.

8. Anna, a U.S. citizen, works only in Germany. The value she adds to production in Germany is included

(a) in both German GDP and U.S. GDP.

(b) in U.S. GDP, but it is not included in German GDP.

(c) in neither German GDP nor U.S. GDP.

(d) **in German GDP, but it is not included in U.S. GDP.**

9. In the calculation of the CPI, sweaters are given greater weight than jeans if

(a) the price of sweaters is higher than the price of jeans.

(b) it costs more to produce sweaters than it costs to produce jeans.

(c) sweaters are more readily available than jeans are to the typical consumer.

(d) **consumers buy more sweaters than jeans.**

10. Last quarter in a closed economy GDP was 200,000. Expenditures on capital goods such as business equipment and structures was 19,000, inventory rose 1,000, and new construction of homes was 8,000. Consumption was 135,000 and taxes were 32,000. What was public saving?

(a) -4,000

(b) **-5,000**

(c) -14,000

(d) -6,000

Part II
Problems

Problem 1 (20 points)

Answer the following questions about the price index.

1. The price tag on a tennis ball in 1975 read 0.10 Yuan, and the price tag on a tennis ball in 2005 read 1.00 Yuan. The CPI in 1975 was 52.3, and the CPI in 2005 was 191.3.

   (a) What is the price of a 1975 tennis ball in 2005 RMB? Show your calculation. (5 points)
   Answer: $0.1/52.3 \times 191.3 = 0.365$**.**

   (b) How much does a 2005 tennis ball cost in the year 1975? Is it cheaper than the price of a 1975 tennis ball? (10 points)
   Answer: A 2005 tennis ball cost 0.27 Yuan in 1975 and is more expensive than a 1975 tennis ball.

2. Dewey earned a salary of $75,000 in 2001 and $95,000 in 2006. The consumer price index was 177 in 2001 and 266 in 2006. What is Dewey's 2001 salary in 2006 dollars? Show your calculation. (5 points) **Answer:** $75000/177 \times 266 = 112,711.86$

Problem 2 (20 points)

Determine the quantity demand, the quantity supply and interest rate for the loanable fund market in the following events. Please provide the details.

1. If there is a surplus of loanable funds, then (5 Points)
2. If there is a shortage of loanable funds, then (5 Points)
3. If the demand for loanable funds shifts to the right, then (5 Points)
4. If the supply for loanable funds shifts to the left, then (5 Points)

Ans:

1. **the quantity of loanable funds supplied is greater than the quantity of loanable funds demanded and the interest rate is above equilibrium.**
2. **the quantity of loanable funds demanded is greater than the quantity of loanable funds supplied and the interest rate is below equilibrium.**
3. **the equilibrium interest rate and quantity of loanable funds rise.**
4. **the equilibrium interest rate rises and the quantity of loanable funds falls.**

Problem 3 (20 points)

The country of Sporty produces two goods: footballs and basketballs. Below is a table showing prices and quantities of output for three years:

Year	Price of Footballs	Quantity of Footballs	Price of Basketballs	Quantity of Basketballs
2000	$10	120	$12	200
2001	12	200	15	300
2002	14	180	18	275

1. Calculate the nominal GDP for each year.
2. Use year 2000 as the base year, calculate the real GDP for each year.
3. Calculate the GDP deflator for each year.
4. Calculate the inflation rate in each year.

(1) Nominal GDP in 2000 = ($10 × 120) + ($12 × 200) = $3,600

Nominal GDP in 2001 = ($12 × 200) + ($15 × 300) = $6,900

Nominal GDP in 2002 = ($14 × 180) + ($18 × 275) = $7,470

（2） Using 2000 as the Base Year:

Real GDP in 2000 = ($10 × 120) + ($12 × 200) = $3,600

Real GDP in 2001 = ($10 × 200) + ($12 × 300) = $5,600

Real GDP in 2002 = ($10 × 180) + ($12 × 275) = $5,100

（3）

GDP deflator for 2000 = ($3,600/$3,600) × 100 = 1 × 100 = 100

GDP deflator for 2001 = ($6,900/$5,600) × 100 = 1.2321 × 100 = 123.21

GDP deflator for 2002 = ($7,470/$5,100) × 100 = 1.4647 × 100 = 146.47

（4） inflation rate in 2001: (123.21-100)/100=23.21%

Inflation rate in 2002: (146.47-123.21)/123.21=18.88%

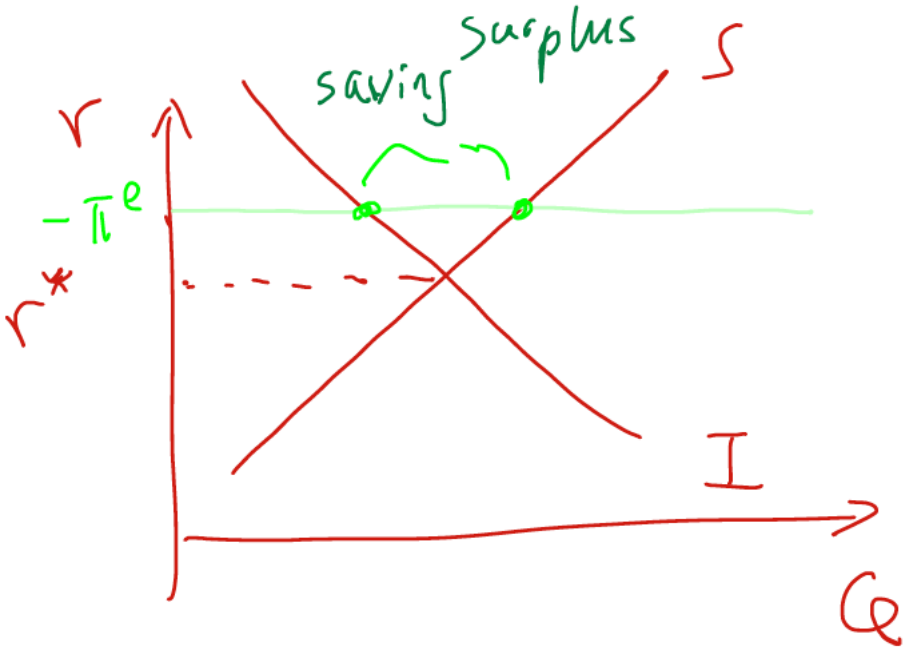
Problem 4 (20 Points)

The relationship between real interest rate r and nominal interest rate i is given by the Fisher equation:

$$i = r + \pi^e$$

, where π^e is expected inflation.

1. Suppose the economy is closed. In special circumstances, such as in a severe recession, the demand for investment decreases so much that the equilibrium real interest rate r^* is significantly below 0. In this case, the loanable funds market may not be able to reach equilibrium because the nomial interest rate $i \geq 0$. This is called the **zero lower bound** problem. Draw a supply and demand diagram of the loanable funds market to illustrate this scenario.



2. To increase investment and help the market reach equilibrium, central banks have experimented with **negative nomial interest rates**. In practice, negative rates are engineered by charging fees on the bank excess reserves. Suppose that doing so will not change inflation expectation or the supply of savings or investment demand, how negative should the nomial rates be in order for the loanable funds market to clear?

   Answer: $-\pi^e$