Second Prelim
ECON 1120 – Professor Steven Kyle
November 6, 2008

Part I: Multiple Choice. 10 points (each question is worth ½ point).

1. As the price level increases, the interest rate ___________ and the planned aggregate expenditure curve shifts __________ .
(a) Increases; upward
(b) Decreases; upward
(c) Increases; downward
(d) Decreases; downward

Answer: C

2. Each of the following will make the AD curve shift to the left except:
(a) A tax cut
(b) An open market sales of securities
(c) An increase in required reserve ratio
(d) A decrease in government spending

Answer: A

3. If the price of oil increases, what can government do to offset the inflationary effects of rising energy prices?
(a) Decrease in government spending
(b) Tax cut
(c) Decrease the reserve requirement ratio
(d) Decrease the discount rate.

Answer: A

4. Which of the following statements about the Phillips curve is *false*?
(a) It depicts the relationship between the inflation rate and the unemployment rate.
(b) During the 1960s, there seemed to be a trade-off between inflation and unemployment.
(c) The negative slope of the Phillips curve holds in the long run as well.
(d) Since the 1970s, it has been demonstrated that the relationship between inflation and unemployment is not a simple tradeoff.

Answer: C

5. Which of the following theories of unemployment assumes that the productivity of workers increases with the wage rate?
   (a) Sticky wages
   (b) Efficiency wages
   (c) Relative wage explanation

(d) Minimum wage

Answer: B

6. Stabilization policy has the following objective(s):
   (a) Keep interest rates stable.
   (b) Reduce inflation to zero.
   (c) Avoid financial sector meltdown
   (d) Smooth fluctuations in output, and maintain inflation at a rate consistent with sustainable growth and full employment.

Answer: D

7. Because of the balanced-budget amendment, Congress needs to reduce the deficit by 30 billion dollars next fiscal year. To do this, Congress proposes to cut spending by exactly 30 billion dollars. If they are to achieve the deficit target, which of the following assumptions must be true?
   (a) The deficit must remain at exactly $30 billion until the spending cuts are implemented.
   (b) The spending cut must induce firms and consumers to invest and consume less.
   (c) The government spending multiplier must be zero.
   (d) The spending cut must be balanced by an equal tax cut.

Answer: C

8. A bond is
   (a) A document that formally promises to pay back a loan under specified terms, usually over a specific time period.
   (b) A certificate that certifies ownership of a certain portion of a firm.
   (c) A certificate that certifies when the owner of an asset actually sells it for more than (s)he paid for it.
   (d) A certificate that certifies an increase in the value of an asset.

Answer: A

9. The Standard and Poor's 500 (S&P 500) is
   (a) An index based on the stock prices of the largest 500 firms traded on the New York Stock Exchange, the NASDAQ Stock Market, and the Chicago Mercantile.
   (b) An index based on the stock prices of over 5,000 companies traded on the NASDAQ Stock Market.

(c) An index based on the stock prices of the largest 500 firms traded on the New York Stock Exchange, the NASDAQ Stock Market, and the American Stock Exchange.
(d) An index based on the stock prices of 30 actively traded large companies.

Answer: C

10. If the FOMC orders the open market desk to purchase government securities,
    (a) The money supply will decrease, and the interest rate will increase
    (b) The money supply will decrease, and the interest rate will decrease
    (c) The money supply will increase, and the interest rate will increase
    (d) The money supply will increase, and the interest rate will decrease

Answer: D

11. Social Security was set up to be financed as a
    (a) Pay-as-you-go program
    (b) Fully funded program
    (c) Optional contributions program
    (d) Pay-from-the-start program

Answer: A

12. The following individuals qualify for social security benefits
    (a) All individuals over the age of 62 who have worked in covered employment
    (b) All individuals who are determined to be unemployed due to structural reasons
    (c) All individuals with incomes below the poverty line
    (d) All children under the age 18, whose parents currently work in covered employment
    (e) All of the above

Answer: A

13. Okun's law states a
    (a) Positive relationship between inflation and unemployment
    (b) Negative relationship between inflation and unemployment
    (c) Positive relationship between output and unemployment
    (d) Negative relationship between output and unemployment

Answer: D

14. Permanent income is
    (a) The portion of income which is expected to be constant throughout life
    (b) An individual's expected average retirement income
    (c) The average level of one's expected future income stream
    (d) Guaranteed income from the government

Answer: C

15. Assuming the income effect dominates the substitution effect, an increase in tax rates will
    (a) Lead to an increase in the quantity of labor supplied
    (b) Lead to a decrease in the quantity of labor supplied
    (c) No change in the quantity of labor supplied
    (d) May either increase or decrease the quantity of labor supplied

Answer: A

16. According to the Monetarist view of macroeconomics:
    (a) A 20% change in the money supply will lead to a less-than-20% change in nominal GDP.
    (b) A 20% change in the money supply will lead to a greater-than-20% change in nominal GDP.
    (c) A 20% change in the money supply will lead to a 20% change in nominal GDP.
    (d) A 20% change in the money supply will lead to a less-than-20% change in real GDP.

Answer: C

17. According to Keynesian economics, when the economy is experiencing inflation, the <u>best</u> course of action is:
    (a) Increase the money supply through open market operations
    (b) Do nothing; the economy will return to equilibrium on its own.
    (c) Reduce government spending or increase taxes
    (d) Cut taxes and increase incentives to save and invest, which will increase aggregate supply.
    (e) Use a monetary rule that accommodates real growth but not inflation

Answer: C

18. According to the "New Classicals", when the economy is experiencing inflation, the <u>best</u> course of action is:
    (a) Increase the money supply through open market operations
    (b) Do nothing; the economy will return to equilibrium on its own.
    (c) Reduce government spending or increase taxes
    (d) Cut taxes and increase incentives to save and invest, which will increase aggregate supply.

Answer: B

19. Suppose a nationwide natural disaster occurs and the federal government responds by decreasing direct transfers to individuals. Then in equilibrium, we would expect:
    (a) The price level to increase and the effect on aggregate output to be uncertain
    (b) The price effect to be uncertain and aggregate output to decrease
    (c) The price level to increase and aggregate output to increase

(d) The price level to decrease and aggregate output to decrease

Answer: B

20. Suppose in the economy, the input price level and the output price level rise and fall by exactly the same percentage. Then we can conclude:
(a) We are in the short-run, and the aggregate supply curve is upward sloping
(b) We are in the short-run, and the aggregate supply curve is vertical
(c) We are in the long-run, and the aggregate supply curve is upward sloping
(d) We are in the long-run, and the aggregate supply curve is vertical

Answer: D

PART II. Short Answer. 10 points (each question is worth 2 points).

Answer each question and draw a graph if requested. You must show your work to receive full credit.

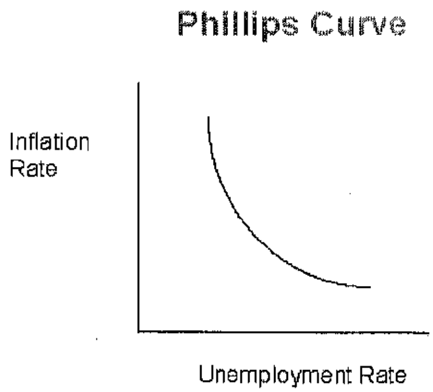
1. Briefly describe the income and substitution effects of a wage rate increase.

The substitution effect: work becomes more attractive relative to leisure because every hour spent in leisure now requires giving up a higher wage. So a higher wage would lead to a larger quantity of labor supplied as a result of this effect.

The income effect: after a wage rate increase, households earn more income by working the same number of hours. (If leisure is a normal good), people with higher income will spend some of it on leisure by working less.

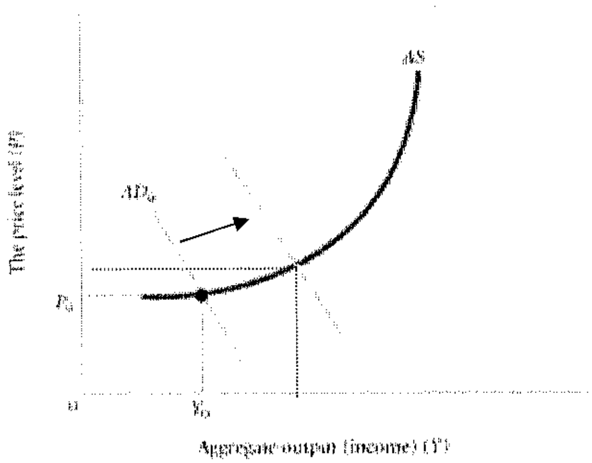
2. Briefly describe and graphically illustrate the Phillips curve.

The Phillips curve depicts the relationship between the inflation rate and the unemployment rate.



3. Suppose the economy is currently characterized by low output and low inflation. The Fed decides to intervene to boost economic activity. What should the Fed do? Show the effect of the Fed's policy on the equilibrium price level and the level of output using the AD-AS graph (hint: it is sufficient to show just this one graph).

In order to boost the economy, the Fed lowers the interest rate. The lower interest rate makes it cheaper for private firms to borrow, hence planned investment increases. As a result, aggregate expenditure goes up, increasing equilibrium output. Note that the price level has not changed, but equilibrium output has increased. Therefore the aggregate demand curve AD shifts outward. Equilibrium output is now higher and the price level is higher than before.



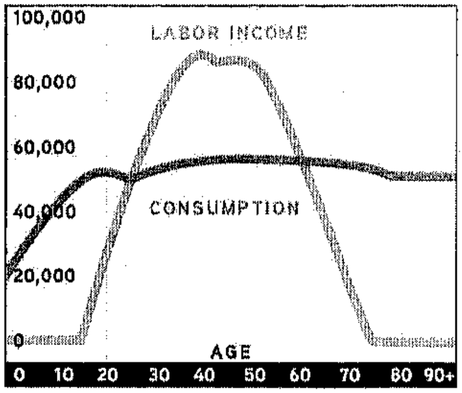
4. What is the difference between a stock and a bond? Briefly describe the three main stock price indices.

A stock is a certificate that certifies ownership of a certain portion of a firm. A bond is a document that formally promises to pay back a loan under specified terms, usually over a specific time period.

The three main stock price indices are the Dow Jones Industrial Average, the NASDAQ Composite and Standard and Poor's 500. The Dow Jones Industrial Average is an index based on the stock prices of 30 actively traded large companies. The NASDAQ Composite is an index based on the stock prices of over 5,000 companies traded on the NASDAQ Stock Market. The Standard and Poor's 500 is an index based on the stock prices of the largest 500 firms traded on the New York Stock Exchange, the NASDAQ Stock Market and the American Stock Exchange.

5. Briefly describe and graphically illustrate the Life-Cycle Theory of Consumption.

The Lice-Cycle Theory of Consumption states that households make lifetime consumption decisions based on their expectations of lifetime income. Please see graph below. The hump-shaped curve depicts income over one's lifetime, while the flatter line shows consumption. In the beginning of one's life, consumption is higher than earnings, and the difference must be borrowed from others. In the second stage of our lives, which corresponds to the working years, our income exceeds the level of consumption and we save. Finally, after retirement we again consume more than earn, therefore we must live on our savings.



PART III. Newspaper Analysis. 10 points (each question is worth 5 points).

Answer each question. You must show your work to receive full credit.

1. Read the following excerpt from an article that appeared in the New York Times on January 30, 2007:

Fed Has Yet to Set Target on Inflation

"Mr. Bernanke has long argued that publicly committing the central bank to an inflation target — probably 1 to 2 percent a year — would make its policy more transparent and open to the public. Its decisions would be easier for investors to anticipate, he argued, and the public might have greater confidence that inflation would indeed remain low. It is an idea that Mr. Greenspan staunchly opposed, arguing that it would bind the Fed to rigid rules and deprive it of crucial flexibility in reacting to economic surprises."

1.1 Briefly describe the concept of "inflation targeting".

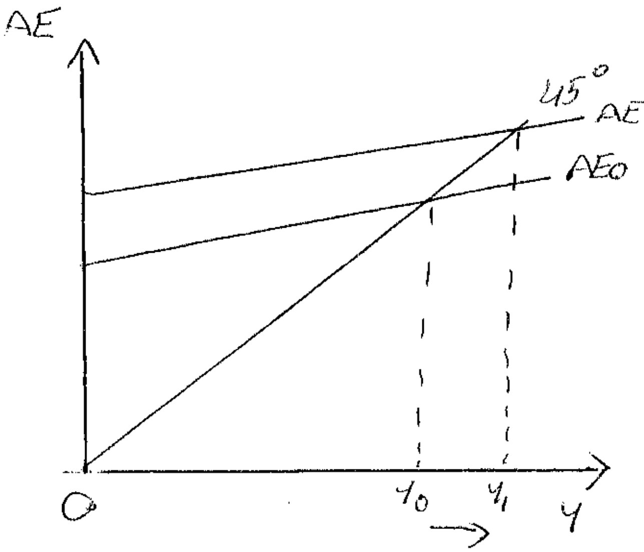
Inflation targeting is when a monetary authority chooses its interest rate values with the aim of keeping the inflation rate within some specified band over some specified horizon.

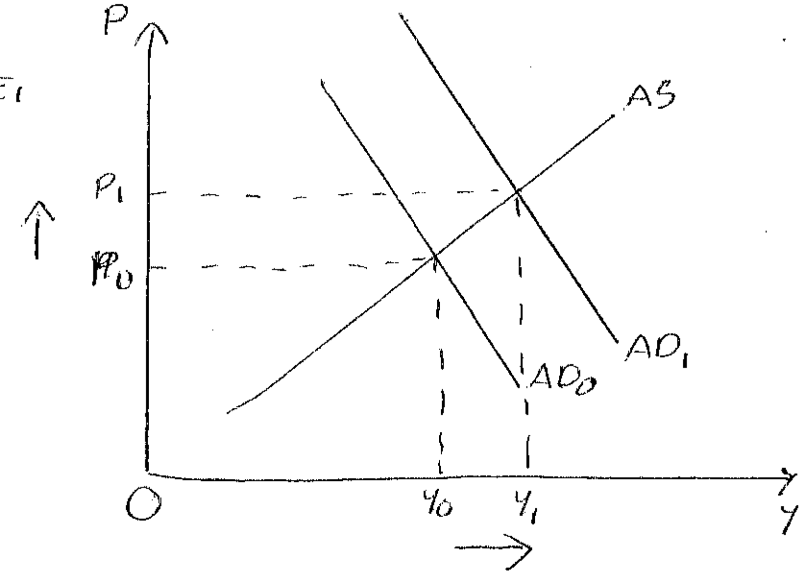
1.2 Alan Greenspan opposed inflation targeting arguing it would take away the Fed's ability to respond to "surprises". What is the "sacrifice" that the Fed has to make once it commits to inflation targeting? (Hint: which is the other economic variable the Fed might want to influence with monetary policy?)

Generally the Fed is concerned with stabilizing output and the price level. Once the Fed commits to an explicit inflation target, it looses the ability to respond to large changes in the level of output. This is the cost of inflation targeting.

1.3 Suppose Ben Bernanke responds to Alan Greenspan's criticism with the following argument: an active fiscal policy can compensate for the lack of monetary policy flexibility (implied by an explicit inflation target). Briefly describe and graphically illustrate what the government can do to increase the equilibrium level of output (hint: use the AD-AS graph as part of your analysis). What happens to the price level as a result?

The government can boost output by increasing its spending G or decreasing taxes T. A rise in G or a decrease in T will both increase Aggregate Expenditure and shift the AE curve up. As a result, the equilibrium output (corresponding to a constant price level) increases. Therefore, the aggregate demand curve shifts outward. The equilibrium price level rises. See graphs below.





2. Read the following excerpt from an article which appeared in the <u>New York Times</u> on October 31, 2008:

<u>Consumer Spending Drops for First Time in 2 Years</u>

"WASHINGTON (Reuters) - Consumers cut their monthly spending for the first time in two years during September, evidently bracing for hard times as jobs continue to disappear and credit conditions tighten. A Commerce Department report on Friday showed that consumer spending shrank by 0.3 percent in September and was flat in both August and July."

2.1 The article excerpt above links consumption spending to expectations of employment and earnings. Briefly describe the possible employment constraint on households' consumption behavior (hint: think of the relationship between the number of hours worked, income and consumption).

When households are constrained from working as much as they would like, they respond by consuming less. Consumers' budget determines how much they can consume, and this constraint falls with lower labor income. When consumers cannot find work, they expect to have a lower budget. As a result, they start consuming less.

2.2 Now suppose the government attempts to increase consumption spending by lowering taxes and increasing transfers. Discuss the potential effects of (1) lower taxes and (2) higher transfers on consumers' labor supply decision, income and consumption (hint: think of the substitution and income effects).

(1) Taxes affect the wage rate workers receive. Lower taxes increase the wage rate. The substitution effect then causes workers to work more. The income effect expands workers' budgets and causes them to work less. If the income effect dominates, labor supply decreases. Either way, income increases, and consumption spending increases as a result of the tax cut.

(2) A rise in transfer payments (such as Social Security benefits) increases non-labor income, which has a positive effect on consumption spending and a negative effect on labor supply (pure income effect.).

2.3 Now suppose that instead of government intervention, the Fed attempts to boost consumption spending using monetary policy. What should the Fed do if its sole purpose were to increase consumption spending in the economy? Briefly explain (hint: think of the interest rate and the opportunity cost of consumption).

The Fed should lower the interest rate in order to boost consumption spending. When the Fed lowers the interest rate, saving becomes less valuable as the interest paid on checking accounts falls. Therefore, the opportunity cost of consuming today (i.e. the forgone interest) decreases. With a lower opportunity cost of consumption, consumers will start to spend more today. A complete answer should also consider the income effect of lower interest rates: as the return on consumer's wealth falls, there is a negative income effect: consumers feel poorer when their saving at the bank earns less interest. Hence, the income effect of lower interest rates works against the substitution effect in achieving the goal of boosting consumption spending.