

國立清華大學 107 學年度碩士班考試入學試題

系所班組別：計量財務金融學系碩士班 甲組、乙組

考試科目（代碼）：經濟學（4902、5002）

共 5 頁，第 1 頁 *請在【答案卷、卡】作答

請依序作答，若沒有依照順序，後果自行負責。

- 簡答題：每題 5 分，共 60 分。除了寫出正確答案以外，還需要簡單陳述正確答案的相關內容。若只寫答案沒有陳述正確答案的內容，不予計分。若陳述錯誤，亦不予計分。

1. According to the Friedman-Lucas money surprise model, we should expect a stable relationship between
 - (A) the inflation rate and the level of real output.
 - (B) the inflation rate and deviations of real output from trend.
 - (C) deviations in the inflation rate from what it is expected to be and the level of real output from trend.
 - (D) deviations in the inflation rate from what it is expected to be and deviations in real output from trend.
2. According to the Central Bank Learning Story, if the central bank believes that the Phillips curve relationship is stable, it will choose a point at which real output will be
 - (A) below trend and inflation will be lower than expected inflation.
 - (B) below trend and inflation will be higher than expected inflation.
 - (C) above trend and inflation will be lower than expected inflation.
 - (D) above trend and inflation will be higher than expected inflation.
3. Time inconsistency means
 - (A) taking different decisions at different times despite facing the same situation.
 - (B) making policy choices that violate the intertemporal budget constraint.
 - (C) adding a random factor to decisions.
 - (D) deciding to do something tomorrow, and then doing something different tomorrow.

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4. The balance of payments improves
- (A) when there is an exchange rate appreciation.
 - (B) when there is an exchange rate depreciation.
 - (C) when the interest rate rises.
 - (D) never.
5. In response to a temporary change in total factor productivity, the adoption of capital controls under a fixed exchange rate
- (A) amplifies the effect of this disturbance on both domestic output and the domestic nominal money supply.
 - (B) amplifies the effect of this disturbance on domestic output and dampens the effect on the domestic nominal money supply.
 - (C) dampens the effect of this disturbance on domestic output and amplifies the effect on domestic nominal money supply.
 - (D) dampens the effect of this disturbance on both domestic output and the domestic nominal money supply.
6. In response to a positive technology shock, which prediction of the sticky price model is difficult to reconcile with the data?
- (A) Employment decreases.
 - (B) Output increases.
 - (C) The price level decreases.
 - (D) Money is procyclical.

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共_5_頁，第_3_頁 *請在【答案卷、卡】作答

7. Investment demand shocks in the Keynesian sticky wage model are not a likely explanation of the typical business cycle because the model counterfactually predicts that
- (A) consumption is procyclical, investment is procyclical, and average labor productivity is countercyclical.
 - (B) prices are procyclical, the real wage is countercyclical, and average labor productivity is countercyclical.
 - (C) prices are countercyclical, the real wage is countercyclical, and average labor productivity is countercyclical.
 - (D) employment is procyclical, prices are procyclical, and average labor productivity is countercyclical.
8. In real business cycle theory, the persistence of shocks to total factor productivity is justified by
- (A) the fact that some capital depreciates every period.
 - (B) the observation of Solow residuals.
 - (C) the fact that Taylor rules have been used in post-war United States.
 - (D) the fact that capital takes some time to build.
9. Which of the following is NOT a feature of recent U.S. business cycles?
- (A) The time series of deviations from trend in real GDP is quite choppy.
 - (B) The time series of deviations from trend in real GDP is quite smooth.
 - (C) There is no regularity to the amplitude of fluctuations in real GDP above trend.
 - (D) There is no regularity to the frequency of fluctuations in real GDP above trend.

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共 5 頁，第 4 頁 *請在【答案卷、卡】作答

10. Which of the following statements is the most accurate about the behavior of the U.S. unemployment rate over the last half of the twentieth century?
- (A) Both the cyclical behavior of the unemployment rate and the trend behavior of the unemployment rate are well explained by changes in the level of aggregate economic activity.
- (B) The cyclical behavior of the unemployment rate is well explained by changes in the level of aggregate economic activity, and the trend behavior of the unemployment rate is well explained by demographic factors.
- (C) The cyclical behavior of the unemployment rate is well explained by demographic factors, and the trend behavior of the unemployment rate is well explained by changes in the level of aggregate economic activity.
- (D) Both the cyclical behavior of the unemployment rate and the trend behavior of the unemployment rate are well explained by demographic factors.
11. We assume leisure is a normal good. This implies that
- (A) households maximize utility.
- (B) preferences over consumption are well defined.
- (C) an increase in taxes decreases the demand for leisure.
- (D) an increase in the wage increases demand for leisure.
12. A competitive equilibrium is Pareto optimal if there is no way to rearrange or to reallocate goods so that
- (A) anyone can be made better off.
- (B) no one can be made worse off.
- (C) someone can be made better off without making someone else worse off.
- (D) someone can be made better off without making everyone else worse off.

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● 計算題：共 40 分。

寫下答案即可，所有的計算過程不需要列出來，請勿自設符號。

假設代表性個人只存活 2 期 $t = \{0, T\}$ ，未來 T 期時只有二種情況，分別是 good state (以 G 表示) 以及 bad state (以 B 表示)，符號 $E(\cdot)$ 代表期望值。

此代表性個人的效用函數為 $u(c_t), t = \{0, T\}$ ，其中 c_0 為當期的消費水準，下一期在 good state 之下的消費為 c_t^G ，在 bad state 之下的消費為 c_t^B 。同理，代表性個人當期的所得為 y_0 ，下一期在 good state 之下的所得為 y_t^G ，在 bad state 之下的所得為 y_t^B 。假設時間偏好率為 θ 。

整個經濟體系除了購買消費品 c_t 以外，還可以購買股票 z_t 。若當期 $t = 0$ 購買股票時，下一期該股票在 good state 下會發放股利 d_t^G ，在 bad state 下會發放股利 d_t^B 。假設 P_0 為股票當期的價格， P_t^G 為下一期 good state 之下的股票價格， P_t^B 為下一期 bad state 之下的股票價格。假設代表性個人沒有任何 endowment。假設此代表性個人要極大化跨期的效用。

1. 20% 請寫下代表性個人極大化的跨期的效用函數以及預算限制式。
2. 20% 市場結清 (market clean) 為其均衡條件，請問均衡下，最適的股票價格為何。