

國立臺北大學九十六學年度碩士班招生考試試題

系(所)別：國際企業研究所

科 目：經濟學

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可 不可使用計算機

- 一、若貨幣指數(P)符合貨幣方程式 $PT=MV$ 之關係,且 $\ln(V)=\ln(T/M)$,
- (1)依據表列 T 與 M 之統計數字試算 2002-2006 年之貨幣指數?(15%)
- (2)試比較貨幣指數(P),CPI,PPI,GDP 指數間之關係,說明美國政府可能採取了甚麼政策?有那些相關之經濟理論可支持你的推論?(15%)

Year	存款貨幣(T)	貨幣供給額(M)	貨幣指數(P)	CPI	PPI	GDP 指數
2001	1055	5206	100.00	100.00	100.00	100.00
2002	1351	5591		101.60	97.80	102.70
2003	1578	5981		103.90	103.00	104.20
2004	1650	6261		106.70	109.40	106.60
2005	1720	6534		110.30	117.40	111.00
2006	2075	6840		113.90	122.90	113.70

T,M 單位為百億美元

- 二、1992 年歐盟通過馬斯垂克協議,正式進入整合進程之單一貨幣階段,會員國應執行符合四項要件,試以相關經濟理論說明不符合要件國家在執行政策時會造成甚麼樣的結果。(20%)

- 三、Assuming that a frequently used utility function is the **Cobb-Douglas** utility function, which can be represented in the following form:

$$U(X, Y) = a \log(X) + (1-a) \log(Y),$$

subject to the constraint that all income is spent on the two goods:

$$P_x X + P_y Y = I, \text{ and in the meantime, let } a = 0.5, P_x = \$2, P_y = \$4, \text{ and } I = \$200$$

To find the demand functions for X and Y, we first write the Lagrangian:

$$\Phi = a \log(X) + (1-a) \log(Y) - \lambda(P_x X + P_y Y - I). \text{ Please answer the following questions:}$$

(1) What does that mean by Lagrange Multiplier? (15%)

(2) $X=?$ (5%)

(3) $Y=?$ (5%)

- 四、A consumer's consumption-utility function for a two-period horizon is $U = C_1 C_2^{0.6}$; his income stream is $Y_1 = 1000, Y_2 = 648$; and the market rate of interest is 8%. Please do the following questions:

(1) Determine the values for C_1 and C_2 that maximize his utility. (15%)

(2) Is he a borrower or lender? (10%)

試題隨卷繳交