

Quiz#1
EE312 Macroeconomic Theory
Section 046402

Instructor: Panit Wattanakoon
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Instructions

1. Use the tools we study in chapter 3 to analyze and answer the questions
2. Write out your ID at the upper right of the first page
3. There is 1 question with 4 subquestions. Answer only in the given space.

Question 1 (100 points) The Thai economy is initially at the equilibrium. COVID-19 forces the Thai government to impose a lock down policy. Curfew restricts people mobility and shopping malls are shut down. People are not allowed to spend freely than they would otherwise do. Work-at-home policy is mostly applied for all labors.

(1.1) **(10 points)** Identify the shock. What happens toward aggregate demand and/or aggregate supply?

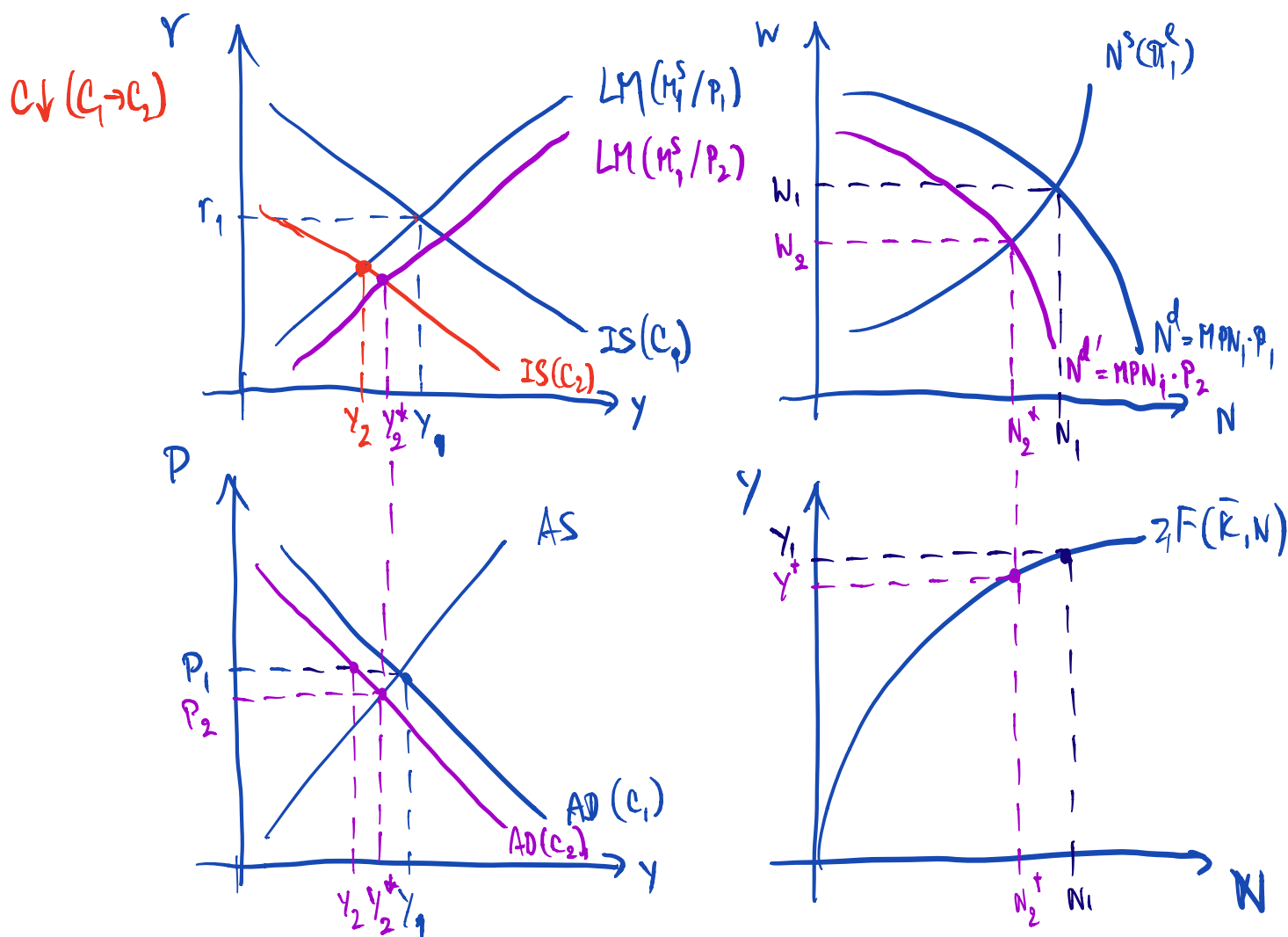
1. A negative AD shock from a fall in autonomous consumption.
2. A negative AS shock from work-at-home policy as marginal product of labor falls. Or any other reasonable explanation.

(1.2) **(40 points)** Explain the process of adjustment in short run. Fill in all the blank space below. Hint: Pick only one shock

1. If real interest rate remains the same ($\bar{r}$), DAE shifts *right*
 $\Rightarrow$ output (Y) *↓* for all level of r
 $\Rightarrow$ IS shifts to the *left*; the size of shift is $\frac{1}{1-b-i_2} \Delta C$
2. As Y *↓*, Real money demand *↓*, Excess *supply for money* *Excess demand* bonds, Bond price *↑* and equilibrium interest rate *↓*
 As r *↓*, investment *↑*, output *↑* (move along IS curve) the second effect is called the *crowding-out* effect.
3. From (1) and (2), IS curve shifts to the *left* and then Y *↓* for all levels of price. Hence, AD shifts to the *left* Y *↓* and P *↓*

- Labor market
As $P \downarrow$, real wage $\uparrow$ and $Y \uparrow$ (movement along AS curve)
- IS-LM
As $P \downarrow$, real money supply $\uparrow$ to $\frac{M_1^s}{P_1}$
LM shifts to the $\uparrow$ right
Output $\uparrow$
This is called the $\uparrow$ price effect.

(1.3) (40 points) Draw diagrams. Show how the shock identified in (1.1) affects equilibrium interest rate, output, price, nominal wage, and employment. Hint: 4 diagrams.



(1.4) (10 points) Explain self-correcting mechanism toward the long-run equilibrium. Fill in all the blank space below.

After time passes by, workers realize that they should change their $\uparrow$ price expectation

1. If nominal wage remains the same ($\bar{W}$), labor will choose $\uparrow$ less leisure than work.
 $\Rightarrow$ employment (N) $\uparrow$ for all level of $\bar{W}$.
 $\Rightarrow N^s$ shifts to the $\uparrow$ right.

2. As $N \uparrow$, given price fixed, $Y \uparrow$, AS shifts $\uparrow$ right towards $\uparrow$ full employment equilibrium