

Writing sample

Financing the deficits of government budgets can be achieved by two approaches. One is the debt-financing meanwhile the other is debt-monetizing. For the latter, budget deficits get financed by money creations; governments issue bonds which are purchased by the central bank. Under the financing method, this can be viewed as a policy coordination between fiscal and monetary policy; the expansion fiscal policy is followed by the monetary expansion. The ultimate effect of the policy mixtures is to generate a stimulative effect to the real economic activities, a rise in the general price level, and the level of employment activities.

The impact of this debt-monetizing policy can be predicted (explained) by using the IS-LM/AD-AS framework that we discussed in class. To understand this, we begin with assuming the initial condition as given in figure 1 below. In the figure, equilibrium output is Y_0 while equilibrium price is P_0 ; this is shown in the subfigure 1b where we present the AD-AS figure. (The equilibrium point can be indicated by “A0” in the figure.) The equilibrium is consistent with the level of equilibrium interest rate r_0 , which is shown in the subfigure 1a where the IS_0 and LM_0 curves are presented. (The equilibrium can be indicated by “E0” in the figure.)

Consider the effect captured by the IS-LM framework. The expansionary fiscal policy, e.g. the increase in government spending, leads to an increase in the aggregate spending. The impact of this change can be captured by a right shift in the IS curve from the IS_0 to IS_1 . Under the fixed interest rate regime, the rise in government spending will cause an increase in output through the multiplier effects; this causes the equilibrium to move towards E1 where the Keynesian multiplier works to its fullest extent with the equilibriums output Y_1 . When interest rate can be adjusted, the crowding-out effect will occur. The effect captures the situation when a rise in market interest rate, following the expansion of income, partially offsets the increase in private spending. This weakens the effect of government purchase as compared to case when interest rate remains fixed; as shown in the figure 1a, the equilibriums with endogenous interest rate can be captured by the equilibrium point E2 where equilibrium output and interest rate are Y_2 .

The effect of government purchase would be generally captured by the equilibrium E2 if the government uses the regular bond-financing method. However, when the government chooses the debt-monetizing approach, the amount of bonds issued by the government will be automatically purchased by the central bank. This can be thought of a scenario in which the central bank conducts the open market operation purchase after the budget deficit policy. This compounding effect can be captured by the shift of LM curve from LM_0 to LM_1 ; central bank increases the money supply after the government deficits policy. As captured by the figure 1a, interest rate will be falling down because of the liquidity injection. The accommodating effect of monetary authority helps bringing the interest rate down, and hence causing an expansion in private

spending. This further expands the output. Taking into account all the effects, the equilibrium situation can be captured by E_3 where output ultimately remains at y_3 .

Given the fixed price equilibrium, the holistic effect of debt monetizing can be captured by the AD-AS framework as well. The policy causes the AD curve to shift from AD to AD' ; the equilibriums output is y_3 which is consistent with the predicting impacts under the IS-LM model. When the price can be adjusted, economy will experience an excess demand at the price P_0 . This leads to an increase in the price, and slight decline in the quantity demanded. The equilibriums with price adjustment can be indicated by E' where the equilibrium output is y' and equilibriums price is P' . The increase output is smaller under the price-adjusting equilibrium. The reason is because the increase in price will partially undo the increase in nominal money supply, causing the increase in real money supply to smaller than under the fixed price system. The effect of this mechanism can be captured by the shift of LM curve from LM_1 to LM' where equilibrium interest rate (r') is slightly higher than the level implied from the fixed-price equilibrium (r_3).

