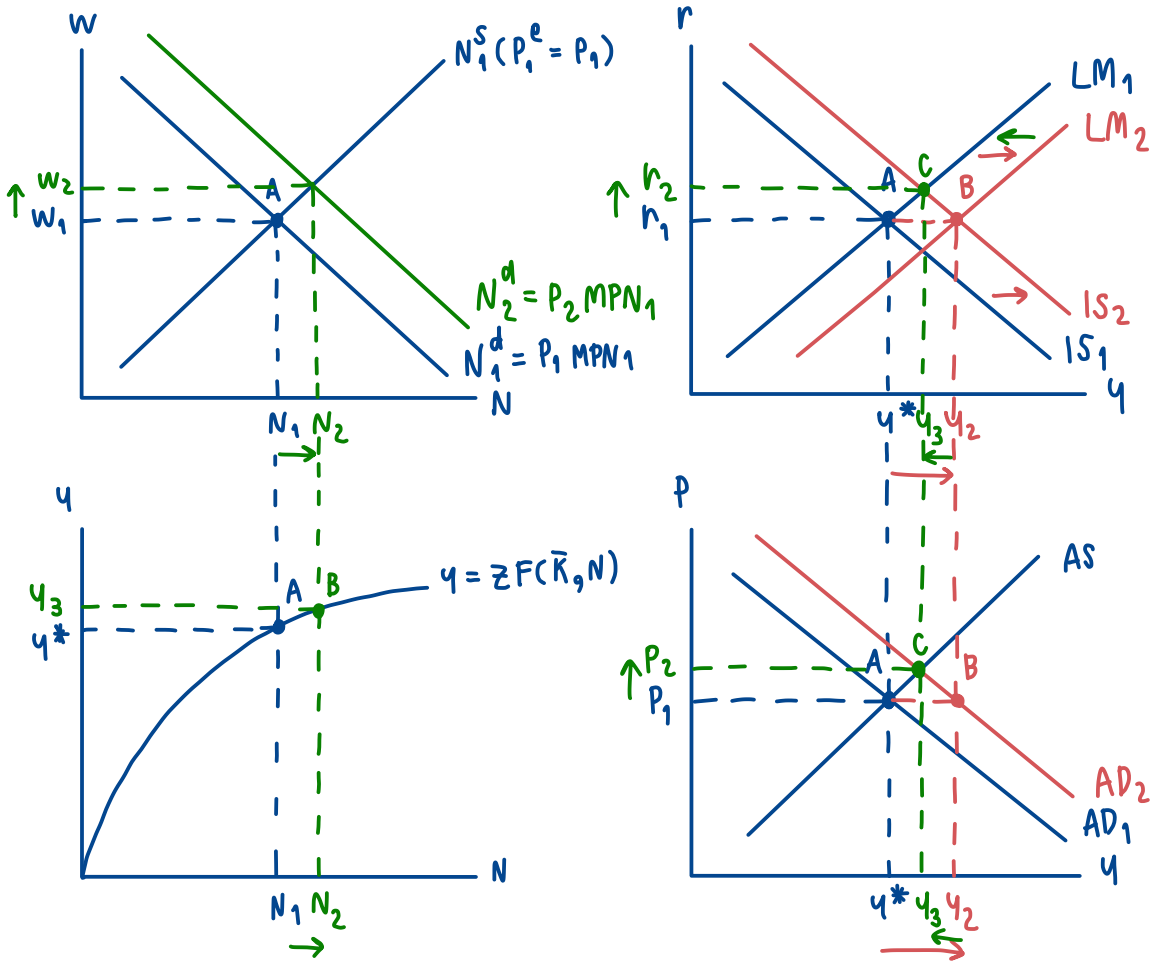
— GROUP 2 —

1.2) How does the Keynesian aggregate supply curve differ from the classical one? Is one of these specifications more appropriate than the other? Explain, being careful to state the time horizon to which your answer applies.

- The classical aggregate supply curve is vertical because the labor bargain is in terms of the money wage, we can assume that workers know the money wage but not the price level. In other words, higher values of the price level require proportionately higher levels of the money wage for labor market equilibrium. The real wage, employment, and therefore level of output are the same.
- The Keynesian aggregate supply curve is upward-sloping with the observation that the wage bargain is struck in terms of the money wage, not the real wage.
- The classical aggregate supply curve is more appropriate if it is in long run. However, the Keynesian aggregate supply curve is more appropriate if it is in short run with the fact that the wage and price are sticky.

1.4) Within the AD-AS model (4 diagrams), analyze the effects of fiscal expansion that is accompanied by a monetary accommodation. Is the size of fiscal multiplier large under the situation?



With fiscal expansion, IS curve shifts to the right from IS_1 to IS_2. Accompanied by a monetary accommodation, LM curve shifts to the right from LM_1 to LM_2. At r_1, output increases from y^* to y_2. At P_1, AD curve shifts to the right from AD_1 to AD_2 causing an excess demand for output.

To clear market, price increases from P_1 to P_2 making $\frac{M}{P}$ decreases from $\frac{M}{P_1}$ to $\frac{M}{P_2}$; LM curve shifts to the left from LM_2 to LM_3. A shift in LM curve leads to an increase in interest rate (r) from r_1 to r_2, and then a fall in consumption (C) and investment (I), aggregrate expenditure (AE), and therefore output (Y) from y_2 to y_3.

In addition, as price increases, value marginal product (VMP) increases; labor demand curve (N^d) shifts to the right from N_1^d to N_2^d. Consequently, wage (W) increases from w_1 to w_2, and then labor (N) increases from N_1 to N_2. Hence, output (Y) rises from y_2 to y_3. The new equilibrium is at point C. The initial equilibrium is at point A where output (Y) is at y^*, interest rate (r) is at r_1, price is at P_1, wage is at w_1, labor is at N_1.

Under the situation, the size of multiplier is large due to a shift in IS curve accompanied by a shift in LM curve making interest rate is fixed ($\bar{r}$). Thus, there is no crowding-out effect but only a price effect. Comparing to the effect of fiscal expansion without a monetary accommodation, output in this case increases more than that.

QUESTION 2

We focus on the SD of annual real GDP fluctuations as our measure of business cycle volatility. From the data, we observe that the average SD of real GDP in emerging countries is higher than that in developed countries. Moreover, emerging economies specialize in commodity production; developed countries have less fluctuations than emerging countries as the evidence of US and Argentina business cycles in Exhibit A. In Argentina, price and wage are more sticky so they are unsynchronized in adjustment of products within and across sector. In contrast, price and wage in the US can be more flexibly adjusted.

Therefore, business cycles in emerging economies are substantially more volatile than in developed ones.