**Student’s answer**

Denmark had a fiscal surplus of 4.06% of GDP in 2021, which slightly decreased to 3.44% in 2022. This shift indicates that Denmark maintained an expansionary fiscal policy during this period. Italy, however, had a fiscal deficit of -8.85% in 2021, improving to -7.80% in 2022, suggesting a move towards a contractionary fiscal policy, aimed at reducing the deficit as a proportion of GDP.

Between 2021 and 2022, Denmark's expansionary fiscal policy was a response to the COVID-19 pandemic, designed to stimulate economic growth. However, in 2022, faced with soaring inflation, the Danish Ministry of Finance reversed this policy, implementing contractionary measures as part of their 'Reform Programme'. These measures included increased taxation, such as higher carbon taxes, and policies aimed at tightening the labor market (Ministry of Finance, 2022; IMF, 2022).

Conversely, Italy maintained a relatively expansionary fiscal stance in early 2022 despite the fiscal deficit reduction. Policies included reduced taxation on personal income and regional taxes, increased spending on energy prices, and social policies supporting displaced Ukrainians (European Commission, 2022). However, by mid-2022, Italy began shifting towards contractionary policies, with plans for increased taxation and labor market tightening (Minister of Economy and Finance, 2022).

Denmark's monetary policy in 2022 was characterized by a contractionary stance, with the central bank increasing benchmark policy interest rates four times. Additionally, a new reference rate for short-term interest rates, the "Denmark Short-Term Rate (DESTR)," was introduced to better track inflation (Danmarks Nationalbank, 2022). The rate was increased from 0.05% in January 2022 to 1.9% in December 2022 (Danmarks Nationalbank, 2023). Denmark operates under a fixed exchange rate system pegged to the Euro, which aims to prevent economic fluctuations and maintain financial stability, although it limits the effectiveness of monetary policy (Danmarks Nationalbank, 2022).

Italy, as a Eurozone member, adhered to the European Central Bank's (ECB) contractionary monetary policy in 2022. This policy included the reduction and eventual discontinuation of the Asset Purchase Programme (APP) and an increase of the key interest rates by 2.5 percentage points by December 2022 (European Central Bank, 2022).

Initially, Denmark's economy is at equilibrium point A, aligned with the target exchange rate (et). When Denmark adopts contractionary fiscal policies (reducing government spending and increasing taxes), the IS\* curve shifts from point A to point B. To maintain the fixed exchange rate, the Danish central bank buys domestic currency, which appreciates the currency back to the target exchange rate. This action shifts the LM\* curve left, resulting in a new short-run equilibrium at point C, with a lower output level (Y2).

Italy starts at equilibrium point A. The contractionary fiscal policy shifts the IS\* curve left to IS*2, and the contractionary monetary policy shifts the LM* curve leftwards. This results in a new equilibrium at point B, characterized by lower output (Y2) and a higher exchange rate. In a floating exchange rate system, monetary policy impacts the economy more significantly than fiscal policy.

In summary, both Denmark and Italy engaged in largely contractionary monetary and fiscal policies in 2022. For Denmark, this resulted in reduced output while maintaining the target exchange rate due to the fixed exchange rate system. Italy, with a floating exchange rate system, experienced a higher exchange rate and reduced output, demonstrating the different impacts of similar policies under different exchange rate regimes.