## UNIVERSITY OF THE PEOPLE

BUS 1104-01 Macroeconomics- AY2024-T1

Written Assignment Unit 4

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The state of the economy is determined by the intersection of the aggregate demand (AD) and aggregate supply (AS) curves. AD represents total spending at different price levels, while AS shows total production at different prices. Shifts in the AD or AS curves cause changes in real GDP and prices. For example, lower interest rates could shift AD right, increasing spending, output, and potentially inflation. Higher production costs could shift AS left, reducing output and GDP while raising prices. Analysis of AD and AS is key to evaluating how policies impact conditions like unemployment, inflation, and growth.

explanation of what happens with the aggregate demand in the short run if the Federal Reserve raises interest rates in the economy.

In the short run, aggregate demand (AD) will shrink if the Federal Reserve hikes interest rates in an economy that is initially experiencing full employment. The entire amount spent on goods and services across the economy is known as aggregate demand. Borrowing money costs more for households and companies when interest rates are higher. Loans, mortgages, and lines of credit have higher interest costs, reducing spending power. Additionally, higher interest rates provide more incentive for savings due to increased returns. This causes consumption spending by households to decline as more income is saved rather than spent. Businesses also reduce investment spending on new capital, equipment, and expansion projects since the cost of borrowing money for these investments rises with higher interest rates. The declines in consumer spending and business investment spending cause aggregate demand to decrease on a graph, economists depict this leftward shift in the aggregate demand curve, demonstrating how there is now less real GDP being desired at each price point.

explanation of what happens with the price level in the short run if the Federal Reserve raises interest rates in the economy

In the short term, the price level will decline due to the decline in aggregate demand. The price level is an economy-wide average of prices for products and services. According to the rule of demand, a regular good's price will normally decrease as demand declines, all other things being equal. In this case, the decreased spending from higher interest rates reduces demand in most major sectors of the economy. This puts downward pressure on prices, as firms must lower prices to try to sell their reduced output. Some exceptions could exist in niche markets with very inelastic demand. But overall, the aggregate price level will trend downward due to the contraction in aggregate demand.

explanation of what happens with the level of GDP in the short run if the Federal Reserve raises interest rates in the economy.

The fall in aggregate demand will also cause GDP to decrease in the short run from its initial full employment level. GDP is a measure of the total market value of all finished products and services produced over the course of an economy. When interest rates increase, the economy's immediate output and production drop because consumers and investors cut down on their expenditure. Firms are selling fewer goods and services due to reduced demand, so GDP falls below its potential. Even if firms try to maintain full production levels, inventories will accumulate unsold, also causing measured GDP to go down.

explanation of what happens with the unemployment rate in the short run if the Federal Reserve raises interest rates in the economy.

Finally, the fall in aggregate demand and GDP causes unemployment to rise in the short run. The economy was initially at full employment, meaning all available labor resources were fully utilized in production. But as spending and output decrease, firms now require fewer workers to meet

reduced production levels. They will start laying off employees or cutting back hours. Some new graduates or job seekers will also find it harder to find work amid fewer job opportunities. The unemployment rate increases because of this. As more employees are jobless than are needed and would be ready to work at the going rate of pay, there is now a labor shortage.

In conclusion, contractionary monetary policy results in a leftward shift in aggregate demand, lower prices, a decrease in GDP, and more unemployment in the near run. The Fed may want to reduce inflation, but doing so comes with trade-offs including slower growth and more unemployment as the economy moves farther from reaching full employment because of the decline in expenditure. Careful consideration is needed regarding impacts on all economic conditions.

Reference:

Greenlaw, S., & Shapiro, D. (2017). Principals of macroeconomics 2e. Openstax. Licensed under CC-BY 4.0. https://openstax.org/details/books/principles-macroeconomics-2e

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