

2025 H2 CSQ WA1

Additional Practice

Question 1

- (a) With reference to Table 1,
- (i) Identify and explain the relationship between Germany's GDP at constant prices and its unemployment rate between 2022 to 2023.
 - (ii) Describe the change in Germany's balance of trade over the period.
- (b) With reference to Extract 1,
- (i) Explain how "rising borrowing costs" will affect a nation's aggregate demand.
 - (ii) Explain one demand-side and one supply-side reason for the predicted contraction in Germany's economy.
- (c) The German economy is "expected to shrink by 0.2%" in 2024 (Extract 1).
Discuss the extent to which the shrinking of the economy will be a concern for the government.

- (a) (i) There is an inverse relationship between Germany's GDP at constant prices and its unemployment rate between 2022 to 2023. As the unemployment rate increased from 5.3% in 2022 to 5.7% in 2023, households' spending decision was affected. Households that expect their future income to reduce through the loss of their jobs, which would result in a loss of income, would increase their precautionary saving. Consequently, current consumer expenditure declines and AD hence decreases as well. This results in the decrease in the GDP at constant prices from 3.70 to 3.69 US \$Trillion as firms decrease output.
- (ii) There was an overall decrease in the balance of trade from 242.4 US \$Billions to 185.5 US \$Billions from 2018 to 2023. Germany's balance of trade was positive throughout, from 2018 to 2023. Hence, there was a trade surplus from 2018 to 2023.
- (b) (i) The cost of borrowing is measured by interest rate.
An increase in interest rate and hence a higher cost of borrowing creates a disincentive for households to borrow to finance their spending. As such, consumer expenditure falls. Additionally, the cost of borrowing is an explicit cost to firms in taking loans or an implicit cost of using their own funds for investment. The increase in interest rates and hence the rising explicit cost of investment, ceteris paribus, will lead to a decrease in the expected net rate of return on investment, reducing the willingness of firms to borrow to finance additional investment. As such, firms decrease their investments.
Since both consumer expenditure and investment are components of aggregate demand [$AD = C + I + G + (X-M)$], the fall in consumer expenditure and investment results in a fall in the nation's aggregate demand.
- (ii) A demand-side reason for the predicted contract in Germany's economy is the fall in export revenue. As mentioned in the extract, a decline in the Chinese economy has also

hit Germany's growth in the year to date, with the Asian market representing a key market for German exports, and Germany's global exports fell more than expected in October. Given that exports are demanded by households and firms abroad, a decline in the Chinese economy would mean a fall in domestic income. Chinese households with falling purchasing power will demand for less goods and services including exports from Germany. This results in a decrease in exports, which hence causes a fall in aggregate demand, since exports are a component of aggregate demand. The decrease in aggregate demand results in the real national income to decrease, signalling a contraction in Germany's economy.

A supply-side reason for the predicted contraction in Germany's economy is the energy price spikes. According to the extract, Germany was hit disproportionately by energy price spikes following the invasion of Ukraine due to its former reliance on Russian energy. As energy is an essential factor input across many industries, the unit cost of production would increase, represented as an upward shift of the AS curve, signifying that the same output can only be produced at higher prices. As the unit cost of production increases, firms will decrease output to protect profits. As firms reduce production, they also lay off factors of production, including labour, thus causing unemployment to increase. Real national income falls, which signals negative economic growth and the contraction in Germany's economy. Additionally, to protect their profits, firms will also pass on some of the increase in unit cost of production to consumers by raising prices of final goods and services, seen as an increase in general price level.

- (c) The 'shrinking of the economy' refers to negative economic growth, where the real GDP growth rates are negative. The government is concerned about the impact of the shrinking of the economy on the standard of living and the macroeconomic issues.

The shrinking of the economy may not be a concern for the government as it brings about some benefits, namely a decrease in inflationary pressure and an increase in the non-material standard of living.

Inflationary pressure will be reduced as the contraction in the economy was mainly caused by a decrease in aggregate demand (AD). As the AD decreases, firms reduce their demand for factors of production as they decrease output. This results in the decrease in the general price level and hence, the reduction in inflation rates. Export competitiveness for Germany thus increases as its relative inflation rates decreases.

The shrinking of the economy can also increase the non-material standard of living. As mentioned in extract 2, Germany's greenhouse gas emissions fell 3% in 2024 compared to the previous year, and one of the reasons for the decline was the economic weakness. This is because the decline in real GDP, as a result of the contraction in the economy, would result in firms reducing output. As firms reduce output, activities that result in environmental degradation such as the use of non-renewable resources and the emissions of greenhouse gases and waste are also reduced. This slows climate change and improves the quality of life. As such, the non-material standard of living increases.

On the other hand, the shrinking of the economy may be a concern for the government as it decreases material standard of living and increases unemployment.

The shrinking of the economy decreases the material standard of living. According to table 1, the population growth rate has been consistently higher than the growth in GDP at constant prices in Germany from 2022 to 2023. If the population growth rate continues to be higher

than the growth in real GDP, there will be a decrease in real GDP per capita, which in turn decreases households' purchasing power. This results in a decrease in the material standard of living as less needs and wants of households would be satisfied.

The shrinking of the economy worsens unemployment. As the AD falls, triggered by a fall in one or more components of AD, inventories accumulate. In response to the unplanned investment, firms cut back production and reduce the demand for factor inputs including labour. This sets off the reverse multiplier where reduced spending leads to falling incomes which cause a further cutback in spending. *Ceteris paribus*, demand-deficient unemployment, specifically cyclical unemployment, rises. This is in accordance to the data in table 1, which shows an increase in Germany's unemployment rate from 5.3% to 5.7% from 2022 to 2023 when the GDP at constant prices fell from 3.70 US \$Trillion to 3.69 US \$Trillion.

Overall, the shrinking of the economy is likely to be a large concern for the government. Given that the GDP at constant prices in Germany had already fallen from 3.70 US \$Trillion to 3.69 US \$Trillion from 2022 to 2023 (table 1), a further decrease due to the shrinking of the economy would mean a protracted contraction of the economy. The negative impacts of this contraction would also have affected the different economic agents such as consumers and firms for an extended period of time; and the adverse impact on unemployment, material standard of living as well as consumer and investor confidence would be more severe. While there may be a reduction in inflationary pressure, the shrinking of the economy does not address the root cause of the inflationary pressure, which is likely the energy price spikes that Germany was disproportionately hit by (extract 1). Hence, the adverse impacts outweigh the benefits, causing the shrinking of the economy to be a huge concern for the government.