

Project Work

Monetary Policy Rate in simple terms is a tool used by the Central Bank (eg. Bank of Ghana) to control the flow of money in the economy. When the Bank of Ghana increase the Monetary Policy rate, people borrow less money because it becomes expensive to borrow money and people save more. If the Monetary Policy Rate reduces, it is cheaper to borrow money and people save less and spend more money.

The data presented in the table below is the monthly Monetary Policy Rate of Bank Of Ghana recorded from 2019 to 2022.

Let's take a look at the data:

Month (%)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Year												
2022	14.5	14.5	17	17	19	19	19	22	22	24.5	27	27
2021	14.5	14.5	14.5	14.5	13.5	13.5	13.5	13.5	13.5	13.5	14.5	14.5
2020	16	16	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
2019	16	16	16	16	16	16	16	16	16	16	16	16

1. The Monetary Policy Rate (MPR) of Ghana being 14.5% for January 2023 means that the Bank of Ghana has set the interest rate at which it lends money to commercial banks and other financial institutions at 14.5%. This rate serves as a benchmark for other interest rates in the economy.

When the MPR is higher, borrowing money from the central bank becomes more expensive, and this tends to reduce borrowing and spending in the economy. On the other hand, if the MPR is lower, borrowing becomes cheaper, which can encourage borrowing and spending.

So, with an MPR of 17% in March 2022 as compared to 14.5% in January 2022, it indicates that borrowing money from the central bank in Ghana is relatively expensive, which might lead to lower borrowing and spending levels in the economy.

Problem

1. Find the average Monetary Policy Rate (MPR) for the [start year] to [end year]

(Hint: To calculate the average monthly percentage rate (MPR) for a specific year, we need to use the following formula: $\text{AVG. MPR} = (\text{SUM of MPRs from Jan to Dec}) / 12$. This means that we add up all the monthly percentage rates for that year and then divide the total by 12. For example, if we want to find the average MPR for 2019, we would add the MPRs from January 2019 to December 2019 and then divide the sum by 12. This would give us the average MPR for 2019.)

2. Compare the yearly AVG. MPR for the four years.

3. Ratio of Increase in MPR:

Calculate the ratio of increase in the Monetary Policy Rate (MPR) from [Start Year] to [End Year]. To do this, find the difference between the MPR in January [Start Year] and the MPR in January [End Year], and then compare it to the increase in the MPR over the same period. Express your answer as a simplified ratio.

4. Assuming the MPR increases at the same rate, find the MPR for each month in [End Year] + 1 (eg. 2023 + 1 = 2024).

5. Present your answer in Question 4 using a diagram.