

COVID-19 and the CPI: Is Inflation Underestimated?

COVID-19 had caused a massive change in consumer spending, this means that the current Consumer Price Index (CPI) may be irrelevant. This is because the basket purchased has changed significantly from what it was before the pandemic. As a result, the inflation estimation may now be inaccurate. It appears that nearly all regions around the world have reported underestimated inflation due to the sudden adjustment of CPI weights. For example, there were under-weighting of the rise in food prices while there were over-weighting of falling transport prices. These changes seem to have been moderated once lockdowns were eased, however. To elaborate, the current methods for calculating CPI were first designed without considerations that the economy has the possibility of sudden changes. Therefore, there were many challenges in setting the CPI during the pandemic as many different statistics have to be reviewed.

Some of the reasons that have caused CPI adjustments to be inaccurate are due to the sudden changes in declining income and the changes in consumer spending patterns where spending on non-essential items declined. Contrastingly, spending on food for home consumption increased. However, this spending may also be inaccurate because of the lack of product details from payment records. In addition to this, factors such as product disappearances caused by the lockdown of suppliers that led to rising essential items prices and the rapid growth in online purchases could also have caused measurement errors in the CPI.

In order to calculate the pandemic's impact on a country's spending patterns, Reinsdorf explains that we can assume that their changes are similar to that of the United States or Canada, although lower-income countries may see some differences considering these countries have fewer people who can work at home. There is also a minor difference in spending changes between Canada and the United States as Canada has a larger weight adjustment on clothes as well as a smaller weight on transport which may cause different results depending on whether calculations are using weights based on Canada or the United States.

In response to the pandemic, the basket-tracked by CPI and the basket bought have now become larger than normal which means that it is now inaccurate. Therefore, the rebasing of the CPI should be done as soon as possible but not too soon as this would mean that results would become too inaccurate. It should also not be done during the unsteady period of COVID-19. Reinsdorf also states that the 5-year international standard for CPI updates is likely too long when conditions are shifting too rapidly. Moreover, the updated

CPI weights should be based on electronic payment records to reflect the current climate of COVID-19 spending patterns. One problem of this may be in the lack of product detail in its data required for accurate classification. In addition, chaining the CPI that has pandemic spending patterns may negatively affect the accuracy of CPI in the long-term. An alternative to this may be to conduct sub-annual chaining for more relevant data. However, this also risks chain drift distortions. Other useful additions for accurately calculating CPI, would be to use a supplementary COVID-19 index. The *Essential Products CPI*, for example, showed high inflation in the first half of April.

Furthermore, creating new special procedures for updating the CPI may be required to develop more rapid sets of weight and produce more accurate data as well as for updates in 2021 that accounts for the drop in spending patterns. Although the underestimated inflation may have been a short-term problem, the effects that it can cause between the changing spending patterns and CPI weights clearly affects the accuracy. Therefore, a supplementary COVID-19 index can be used to account for the actual prices paid by consumers during the pandemic since data obtained from credit cards and payment records are too inaccurate.

References

International Monetary Fund. (2020). COVID-19 and the CPI: Is Inflation Underestimated? *IMF Working Paper*, 1–21.