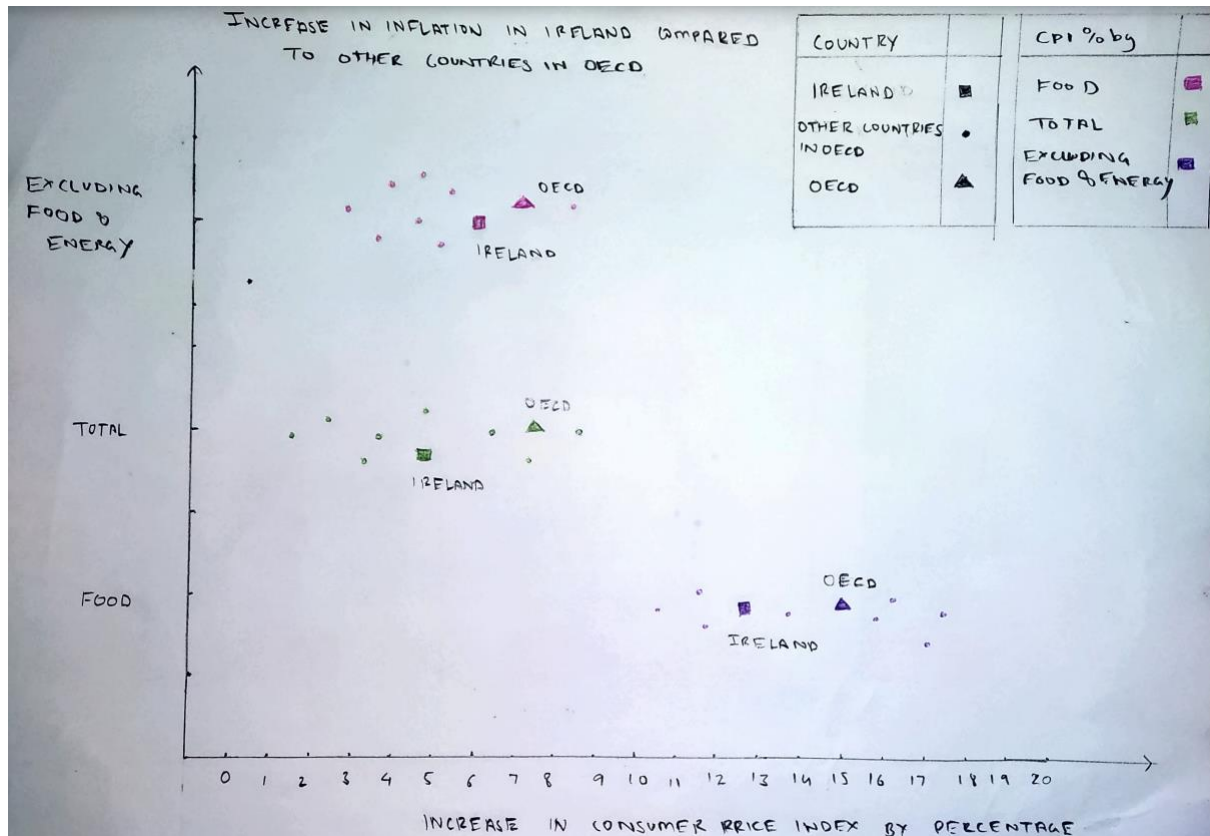


Assignment 1

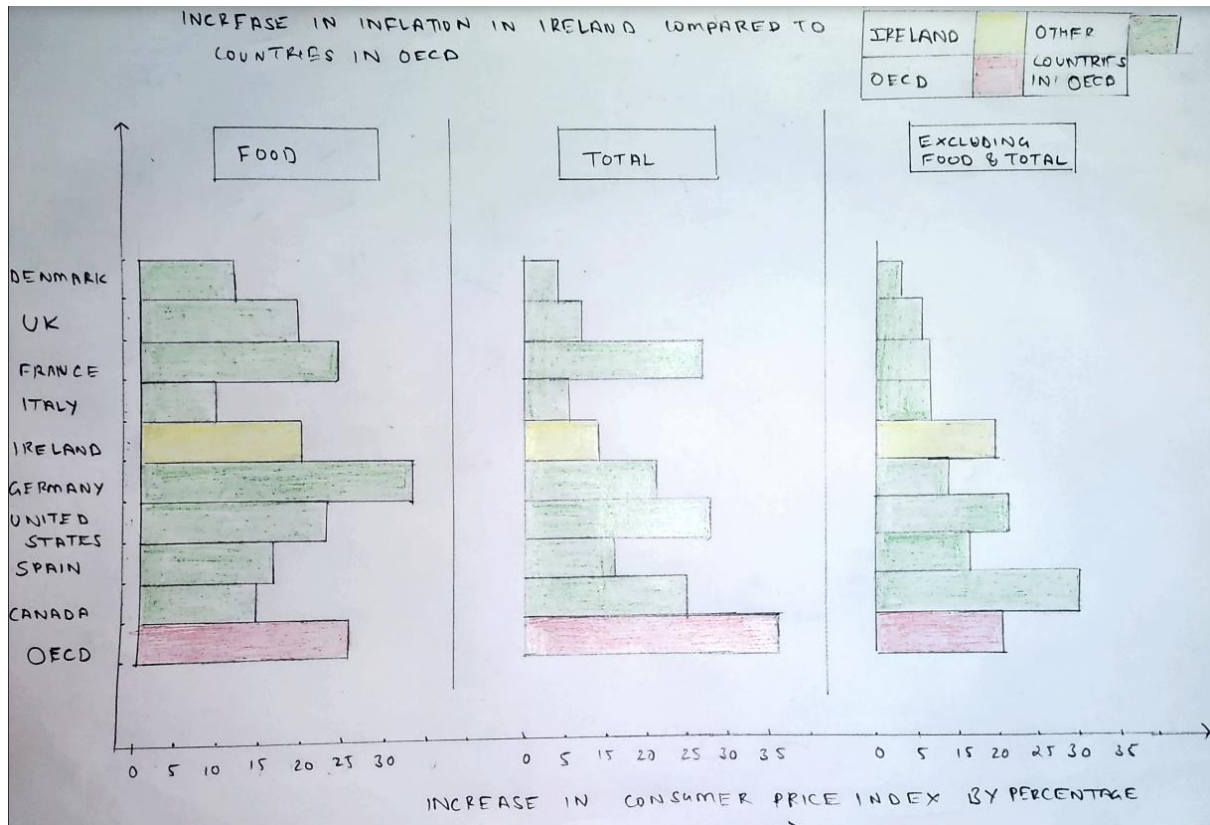
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1. Produce a colour drawing* of a dot plot approach that shows the most recent CPI values for 8 countries and a group of nations organisation for the following 3 measures: Total, Food and Total excluding Food and Energy.



2. Produce a colour drawing* of an equivalent bar chart approach that visualises the same information.



3. Discuss your approach and whether the dot or bar approach will be more effective in communicating the information required to support your article. (about half a page)

Answer:

In the above bar and dot plots, there are different aspects where using either a bar plot or a dot plot would be useful.

The visualizations should be assessed based on the use case. In this case, we have to visualize the increase in inflation in our country compared to other 8 other countries and one group of nations. Therefore, in this case, to compare inflation in Ireland, 8 other countries from OECD are considered along with the combined averaged data of OECD countries.

1. Bar Plot: The bar plot looks better in the pre-attentive test of visualization (Where are your eyes drawn to?). As it takes much less time to interpret and make out the basic idea the plot is trying to convey. By coloring the country of concern and the group of nations differently the crux of the visualization becomes apparent early.

Limitations :

- Conveys excessive information that is not the main objective of the plot.

2. Dot Plot: Although it conveys less information compared to the bar plot (CPI for each country could be figured out in the bar plot), the main objective of the visualization is to compare the increase in CPI for the country of concern with other related countries which is realized in the graph. In a way, the dot plot visualizes less information but it doesn't miss out on relevant data in the context of the problem.

Limitations :

- It takes much longer to interpret compared to the bar plot as it has two aesthetic attributes country (shape) and color (% of CPI by (food, energy, etc)). A possible solution could be to label some points of interest in the graph (eg. points with minimum and maximum cpi values could be labeled on the graph along with the country of concern and group of nations average).
- There is no support for the measure values on the scale. Could be fixed by using the Lollipop plot.