

# Main\_Out

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library(ggplot2)
library(dplyr)
library(gghighlight)
library(forcats)
df <- read.csv("Counsumer_Price_Index.csv")

df <- df %>%
  rename(Location = i..Location)

sav <- df %>%
  filter(Location %in% c("IRL", "CAN", "AUS",
                        "USA", "FRA", "DEU",
                        "ESP", "ITA", "NLD", "OECD")) %>%
  filter(Time == "2022-12") %>%
  mutate(Location = recode(Location,
                           "IRL" = "IRELAND",
                           "AUS" = "AUSTRALIA",
                           "USA" = "UNITED STATES",
                           "DEU" = "GERMANY",
                           "CAN" = "CANADA",
                           "ESP" = "SPAIN",
                           "ITA" = "ITALY",
                           "FRA" = "FRANCE",
                           "NLD" = "NETHERLANDS")) %>%
  filter(Subject != "Energy")

order <- sav %>%
  filter(Subject == "Food") %>%
  arrange(Percentage) %>%
  select(Location) %>%
  unlist() %>%
  unname()

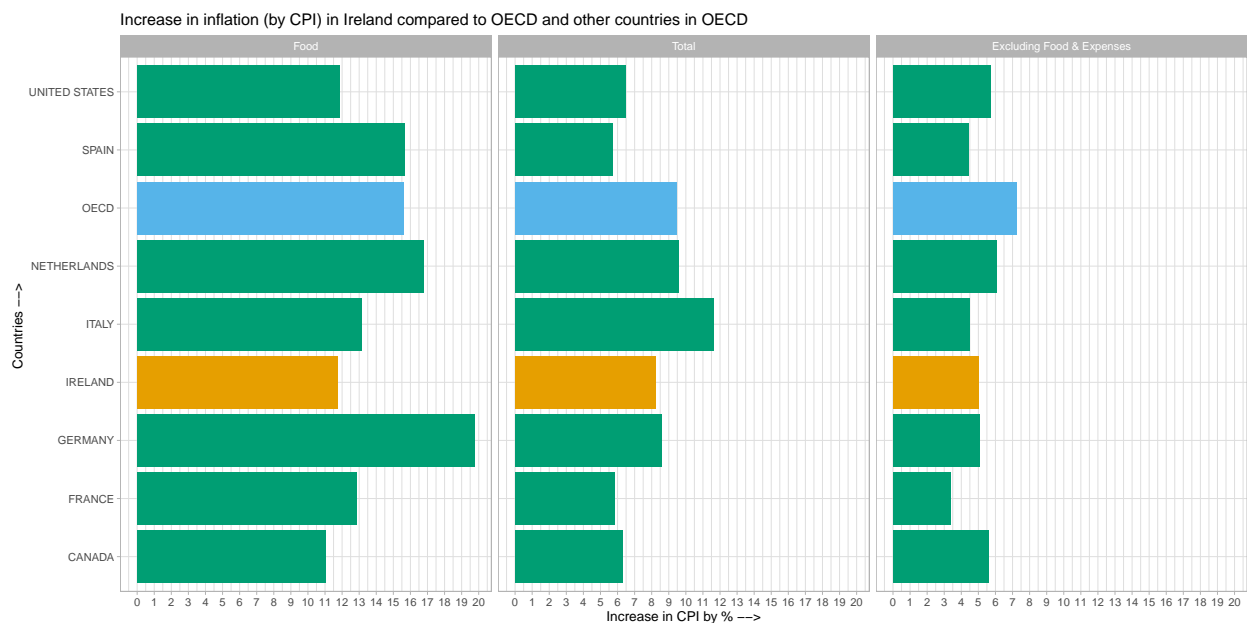
order <- replace(order, c(1,2), order[c(2,1)])

colorblind_colors <- colorBlindness::availableColors()
sav %>%
  ggplot(aes(x = factor(Location, levels = order), y = Percentage)) +
  geom_col(data = filter(sav, Location == "IRELAND"), fill = colorblind_colors[2],
           linewidth=0.2, position="dodge")+
  geom_col(data = filter(sav, Location == "OECD"), fill = colorblind_colors[3],
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    linewidth=0.2, position="dodge")+
  xlab("Countries --> ") +
  geom_col(data = filter(sav, !Location %in% c("OECD", "IRELAND")),
    fill = colorblind_colors[4], linewidth=0.2, position="dodge")+
  xlab("Countries --> ") +
  ylab("Increase in CPI by % -->")+
  facet_grid(~Subject,
    labeller = as_labeller(c("Food" = "Food",
      "Total" = "Total",
      "Total_Minus_Food_Energy" = "Excluding Food & Expenses")))+
  coord_flip()+
  labs(fill = "Country / Organization")+
  scale_y_continuous(breaks = round(seq(0, 20, by = 1),1))+
  scale_fill_discrete(name = "Country / Organization",
    labels = c("OECD", "Other countries in OECD", "IRELAND")) +
  theme(axis.text.x = element_text(angle = 90, vjust = 0.5, hjust=1),
    legend.position = "top",)+
  ggtitle(label = "Increase in inflation (by CPI) in Ireland compared to OECD and other countries in OECD")
  theme_light()

```



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order <- sav %>%
  filter(Subject == "Food") %>%
  arrange(Percentage) %>%
  select(Location) %>%
  unlist() %>%
  unname()

order <- replace(order, c(1,2), order[c(2,1)])

sav %>%
  mutate(Location = factor(Location, levels = order)) %>%
  ggplot(aes(x = Location, y = Percentage, color = Subject)) +
  geom_point(data = ~ mutate(., Percentage = if_else(Location == "Ireland", Percentage[NA], Percentage))

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    size = 4, position = position_dodge(0.5), na.rm = TRUE) +
geom_point(data = ~ filter(., Location == "IRELAND"),
    size = 6, position = position_dodge(1)) +
geom_linerange(data = ~ filter(., Location == "IRELAND"),
    aes(ymin = 0, ymax = Percentage),
    position = position_dodge(0.5),
    linetype = "dotdash") +
geom_linerange(data = ~ filter(., Location != "IRELAND"),
    aes(ymin = 0, ymax = Percentage),
    position = position_dodge(0.5), linetype = "dotdash") +
coord_flip()+
ggtitle(label = "Increase in inflation (by CPI) in Ireland compared to OECD and other countries in OECD") +
xlab("Countries --> ") +
ylab("Increase in CPI by % -->")+
scale_y_continuous(breaks = round(seq(0, 20, by = 1),1))+
scale_color_manual(name = "Type of Items",
    labels = c("Food", "Total", "Excluding food and energy"),
    values=c(unnamed(colorblind_colors[2]),
    unnamed(colorblind_colors[3]),
    unnamed(colorblind_colors[4])))+
theme(panel.grid.major.x = element_line(linewidth = .01, color="black"),
    panel.grid.major.y = element_blank(),
    legend.position = "top"
)

```

