

Main_Out

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2023-02-13

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library(ggplot2)
library(dplyr)
library(gghighlight)

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 %>%
  group_by(Location) %>%
  summarise(sum = sum(Percentage)) %>%
  arrange(desc(sum)) %>%
  select(Location) %>%
  unlist() %>%
  unname()

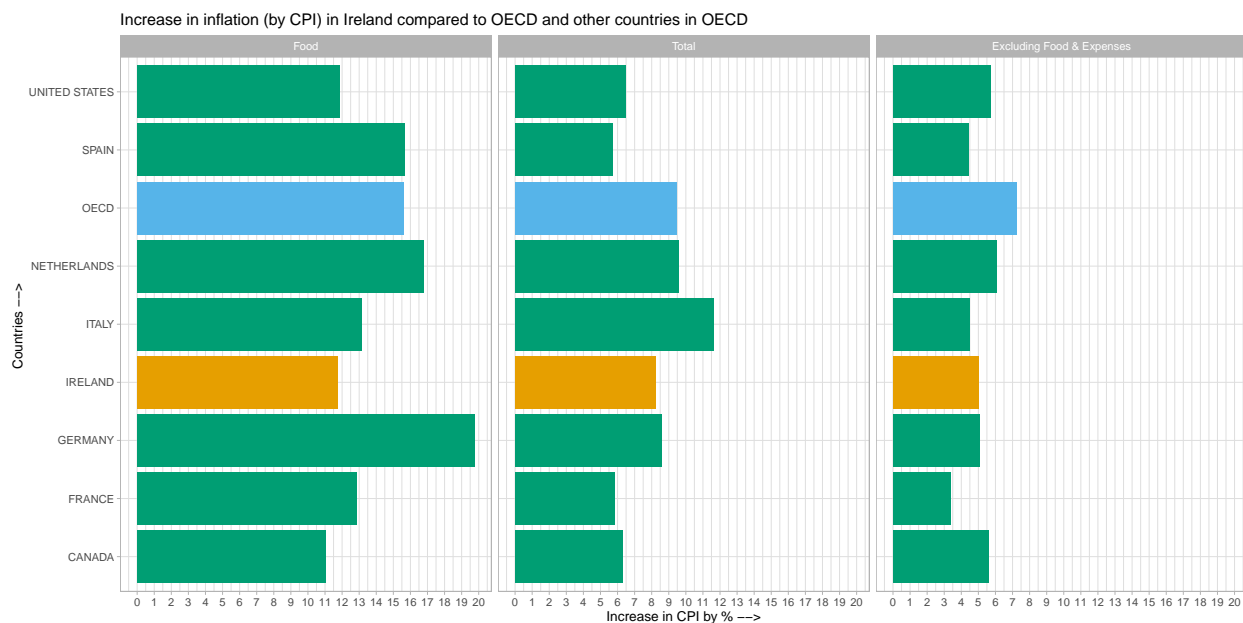
colorblind_colors <- colorBlindness::availableColors()
sav %>%

ggplot(aes(x = factor(Location, 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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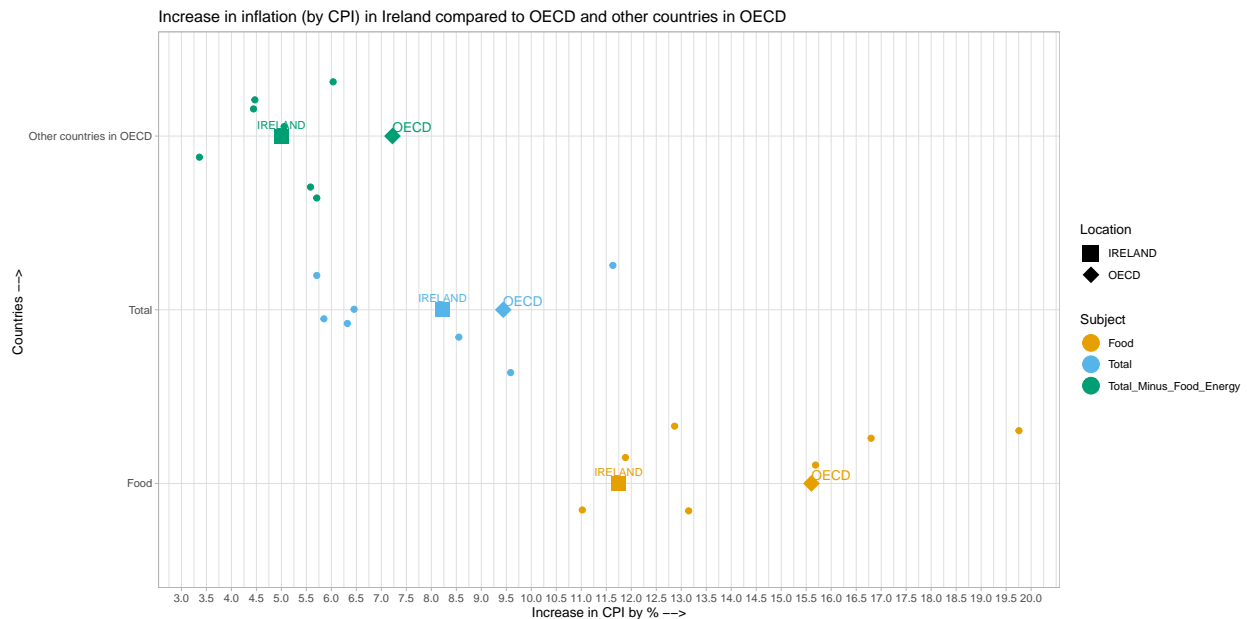
sav %>%
ggplot(aes(x = Subject, y = Percentage, color = Subject)) +
geom_point(data = filter(sav, Location == "IRELAND"), aes(shape = Location), size = 5) +
geom_text(data = filter(sav, Location == "IRELAND"),
          label = "IRELAND", vjust = -2, nudge_x = -0.05, size = 3)+
geom_point(data = filter(sav, Location == "OECD"), aes(shape = Location), size = 6) +
geom_text(data = filter(sav, Location == "OECD"), label = "OECD", hjust = 0, nudge_x = 0.05)+
geom_point(data = filter(sav, !Location %in% c("OECD", "IRELAND")), shape = "circle",
          size = 2, position = "jitter") +
scale_y_continuous(breaks = round(seq(0, 20, by = 0.5),1))+
coord_flip() +
xlab("Countries --> ") +
ylab("Increase in CPI by % -->") +

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scale_color_manual(values=c(unname(colorblind_colors[2]),
                             unname(colorblind_colors[3]),
                             unname(colorblind_colors[4])),
                  guide = guide_legend(override.aes = list(label = ""))) +
scale_shape_manual(values = c("square", "diamond")) +
scale_x_discrete(labels = c("Food", "Total", "Other countries in OECD")) +
ggtitle(label = "Increase in inflation (by CPI) in Ireland compared to OECD and other countries in OECD") +
theme(legend.position = "top", axis.text.x = element_text(angle = -45, vjust = 0.5, hjust=1)) +
theme_light()

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

order <- replace(order, c(1, 8), order[c(8, 1)])

sav %>%
  ggplot(aes(x = factor(Location, order), y = Percentage, color = Subject))+
  geom_point(data = filter(sav, Location != "IRELAND"),
            size = 4, position = position_dodge(0.5))+
  geom_point(data = filter(sav, Location == "IRELAND"),
            size = 6, position = position_dodge(1))+
  geom_linerange(data = filter(sav, Location == "IRELAND"),
                aes(ymin = 0, ymax = Percentage),
                position = position_dodge(1),
                linetype = "dashed") +
  geom_linerange(data = filter(sav, Location != "IRELAND"),
                aes(ymin = 0, ymax = Percentage),
                position = position_dodge(0.5), linetype = "dashed") +
  scale_color_manual(values=c(unname(colorblind_colors[2]),

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        unname(colorblind_colors[3]),
        unname(colorblind_colors[4])))+
coord_flip()+
ggtitle(label = "Increase in inflation (by CPI) in Ireland compared to OECD and other countries in OECD")
scale_y_continuous(breaks = round(seq(0, 20, by = 1),1))+
theme(panel.grid.major.x = element_line(linewidth = .01, color="black"),
      panel.grid.major.y = element_blank(),
      legend.position = "top"
)

```

