

```
installOrLoad ggplot2
installOrLoad scales
installOrLoad tidyr
installOrLoad ggrepel
installOrLoad grid
```

```
data.dir <- "${org.campagnelab.metaR.home}/data "
dat <- read.csv(file.path(data.dir, "IR-demo", "EconomistData.csv"))
pc1 <- ggplot(dat, aes(x = CPI, y = HDI, color = Region))
```

Save Session

```
pc2 <-
  pc1 + geom_smooth(aes(group = 1), method = "lm", formula = y ~ log(x), se = FALSE, color = "red") + geom_point()
pc2 <- pc2 + geom_point(shape = 1, size = 4)
pc3 <- pc2 + geom_point(size = 4.5, shape = 1) + geom_point(size = 4, shape = 1) + geom_point(size = 3.5, shape = 1)
pointsToLabel <- c("Russia", "Venezuela", "Iraq", "Myanmar", "Sudan", "Afghanistan", "Congo", "Greece", "Argentina",
  "Brazil", "India", "Italy", "China", "South Africa", "Spaine", "Botswana", "Cape Verde", "Bhutan", "Rwanda",
  "France", "United States", "Germany", "Britain", "Barbados", "Norway", "Japan", "New Zealand", "Singapore")
pc3 <- pc3 + geom_text_repel(aes(label = Country), color = "gray20", data = subset(dat,
  Country %in% pointsToLabel), force = 10)
dat$ Region <- factor(
  dat$ Region, levels = c("EU W. Europe", "Americas", "Asia Pacific", "East EU Cemt Asia", "MENA",
  "SSA"), labels = c("OECD", "Americas", "Asia &\nOceania", "Central &\nEastern Europe ",
  "Middle East &\nnorth Africa ", "Sub-Saharan\nAfrica "))
```

```
pc3$ data <- dat
```

Save Session

```
pc4 <-
  pc3 + scale_x_continuous(name = "Corruption Perceptions Index, 2011 (10=least corrupt) ", limits = c(0.9,
  10.5), breaks = 1 : 10) + scale_y_continuous(name = "Human Development Index, 2011 (1=Best) ", limits = c(0.2,
  1.0), breaks = seq(0.2, 1.0, by = 0.1)) + scale_color_manual(name = "d", values = c("#24576D", "#099DD7",
  "#28AADa", "#248E84", "#F2583F", "#96503F")) + ggtitle("Corruption and Human development ")
pc5 <-
  pc4 + theme_minimal() + theme(text = element_text(color = "gray20"), legend.position = c(
  "top"), legend.direction = "horizontal", legend.justification = 0.1, legend.text = element_text(
  size = 11, color = "gray10"), axis.text = element_text(face = "italic"), axis.title.x = element_text(
  vjust = - 1), axis.title.y = element_text(vjust = 2), axis.ticks.y = element_blank(), axis.line = element_line(
  color = "gray40", size = 0.511111), axis.line.y = element_blank(), panel.grid.major = element_line(
  color = "gray50", size = 0.5), panel.grid.major.x = element_blank())
mR2 <- summary(lm(HDI ~ log(CPI), data = dat))$ r.squared
```

```
export plot -> Output {
  print(pc5)
  grid.text(
    "Sources: Transparency International; UN Human Development Report ", x = 0.02, y = 0.09, just = "left",
    draw = TRUE)
  grid.segments(x0 = 0.81, x1 = 0.825, y0 = 0.90, y1 = 0.90, gp = gpar(col = "red"), draw = TRUE)
  grid.text(paste0("R² = ",
    as.integer(mR2 * 100), "%"), x = 0.835, y = 0.90, gp = gpar(col = "gray20"), draw = TRUE, just = "left")
  grid.text(paste0("Some Text"), x = "0.5", y = "0.8", gp = gpar(col = "black"), draw = "TRUE", just = "left")
}
```

multiplot -> Multiplot [1 cols x 1 rows]

Preview

[Output]