Reason Theme/Graphics

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## R Markdown

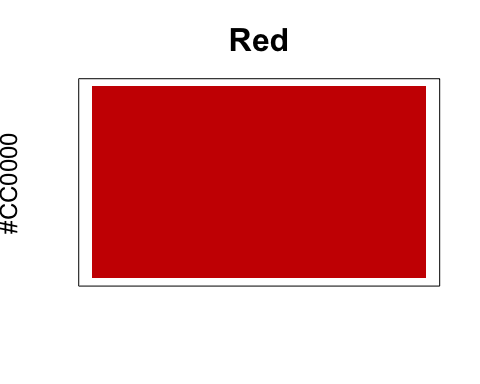
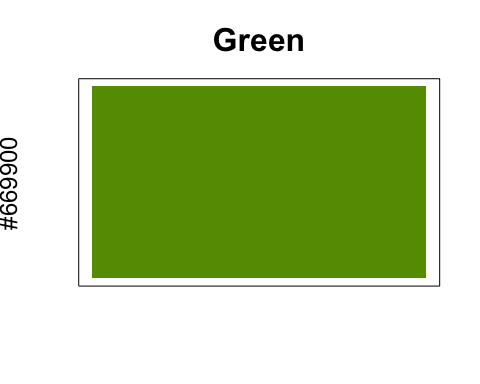
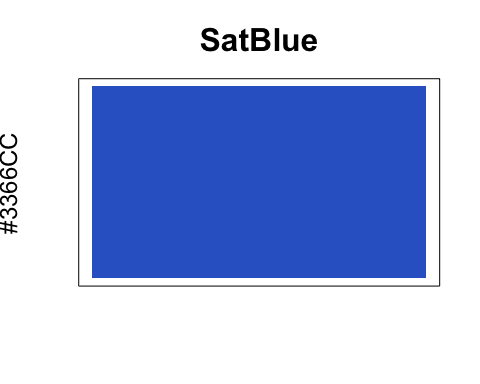
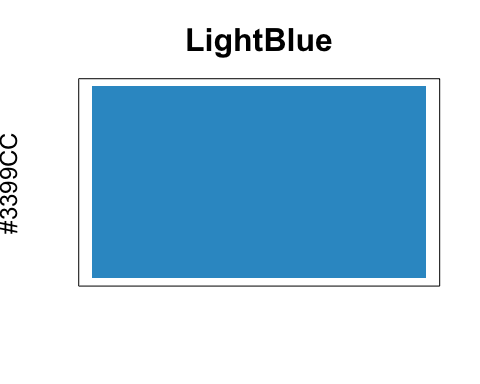
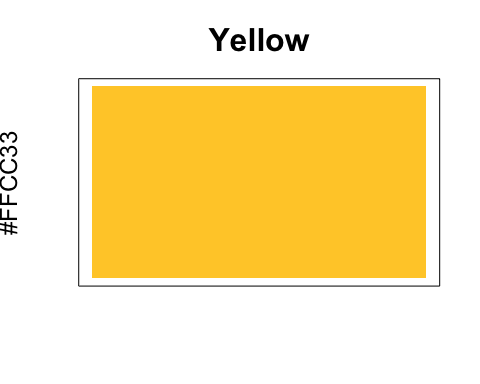
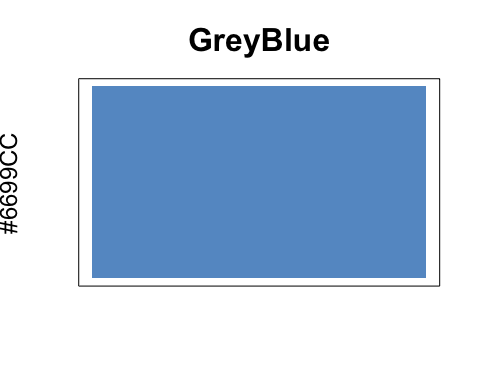
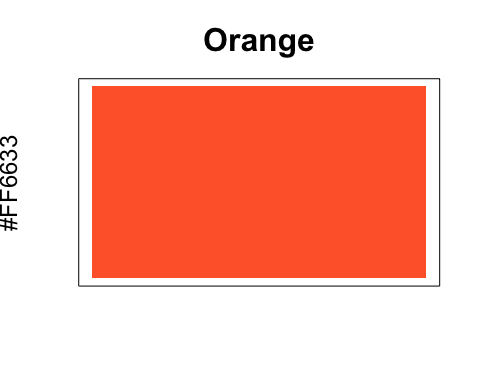
This is an R Markdown document that describes Reason graphics style in R.

* Colors
* ggplot() themes, labels, and margins

# All images should use web safe colors — this gives us a range of orange and blue  
# colors that fit with Reason’s branding, as well as reds and greens that we can use to  
# indicate positive or negative data patterns. The following colors are most suitable:  
  
colors <- as.matrix(c("#FF6633", "#333333", "#6699CC", "#FFCC33", "#3399CC", "#3366CC", "#669900", "#CC0000"))  
labels <- c("Orange", "DarkGrey", "GreyBlue", "Yellow", "LightBlue", "SatBlue", "Green", "Red")  
rownames(colors) <- c(labels)  
colnames(colors) <- c("color\_code")  
colors

## color\_code  
## Orange "#FF6633"   
## DarkGrey "#333333"   
## GreyBlue "#6699CC"   
## Yellow "#FFCC33"   
## LightBlue "#3399CC"   
## SatBlue "#3366CC"   
## Green "#669900"   
## Red "#CC0000"

##Convert color code to RedGreenBlue palette (with rgb())  
#rgb1 <- col2rgb(colors$SatBlue, alpha = FALSE)/255  
#rownames(rgb1) <- c("red", "green", "blue")  
#ColorName <- rgb(rgb1[1],rgb1[2],rgb1[3])  
#######  
for (i in (1:8)){  
x <- plot(c(5, 10), c(15, 30), type= "n", main=c(labels[i]), xlab = "", ylab = c(colors[i]), xaxt="n", yaxt="n",cex.lab=1.5, cex.main=2)  
rect(5, 15, 10, 30, col = colors[i], border = "transparent")  
## Standard Colors for graphics in R  
}



## Including Plots

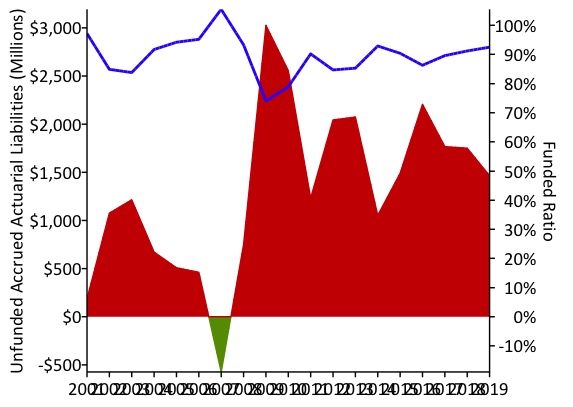
## Standardized Font: “Calibri”

## Standardized graphics: ggpot()

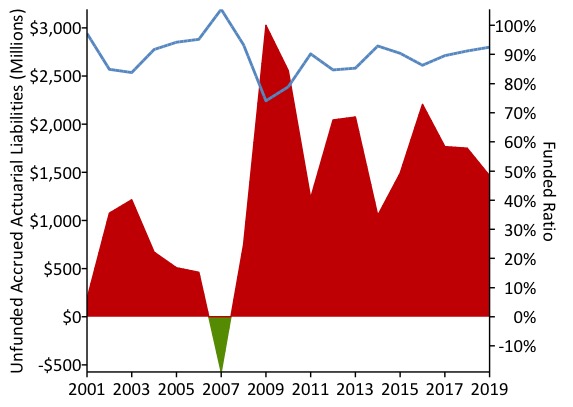
## Standardized Theme: reasonTheme (

##Main elements: line/rectangle/text  
 line = ggplot2::element\_line(  
 rect = ggplot2::element\_rect(  
 text = ggplot2::element\_text(  
   
 ##Plot elements: title/subtitle/caption/background/margin  
 plot.title = ggplot2::element\_text(  
 plot.subtitle = ggplot2::element\_text(  
 plot.caption = ggplot2::element\_text(  
 plot.background =   
 plot.margin =   
 ###Adjustable: text(size, angle,face(bold), margin)

## Original Mountain of Debt Plot using deptPlot() from pensionviewr



Original Debt Plot - PERSI

##Latest Mountain of Debt Plot using deptPlot() ## Modified colors & year labels 

Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.