

# R Plots

```
In [1]: # Import required packages
library('magrittr')
library("ggplot2")
library("dplyr")
```

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':

filter, lag

The following objects are masked from 'package:base':

intersect, setdiff, setequal, union

```
In [2]: file = paste(getwd(), '/expenditures.txt', sep = '')
df1 = read.table(file, header = TRUE, sep = '\t', dec = '.', fill = TRUE)
```

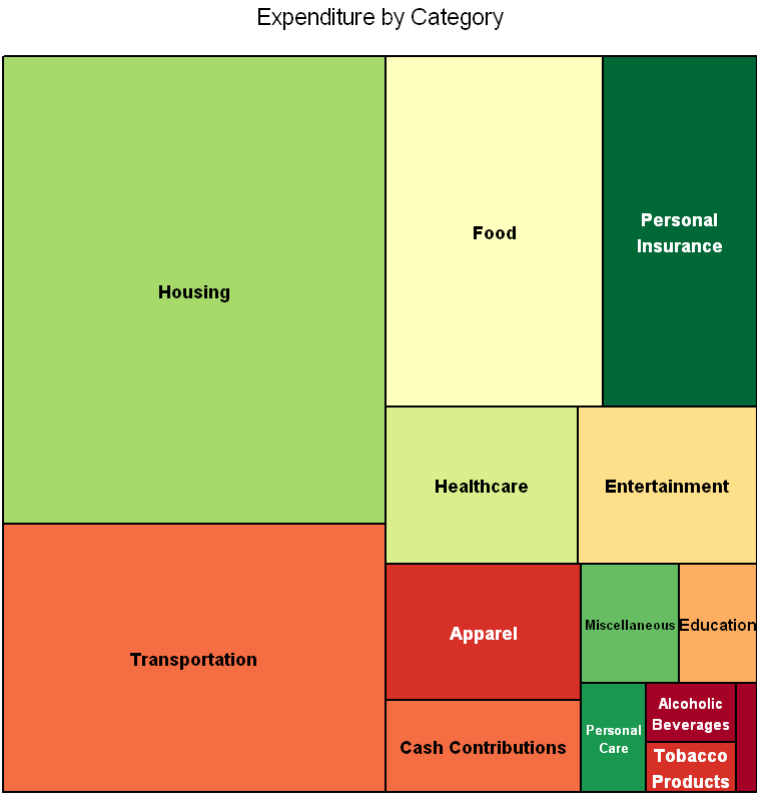
```
In [3]: df = read.csv("unemployment-rate-1948-2010.csv", sep=',', stringsAsFactors = FALSE) %>%
  dplyr::mutate(Value = as.numeric(Value)) %>%
  as.data.frame()
```

```
In [4]: print(head(df))
```

	Series.id	Year	Period	Value
1	LNS14000000	1948	M01	3.4
2	LNS14000000	1948	M02	3.8
3	LNS14000000	1948	M03	4.0
4	LNS14000000	1948	M04	3.9
5	LNS14000000	1948	M05	3.5
6	LNS14000000	1948	M06	3.6

## R-Tree Map

```
In [5]: treemap::treemap(df1, index = c('category'),
  vSize = 'expenditure',
  title = 'Expenditure by Category',
  palette = 'RdYlGn')
```



## R - Area Plot

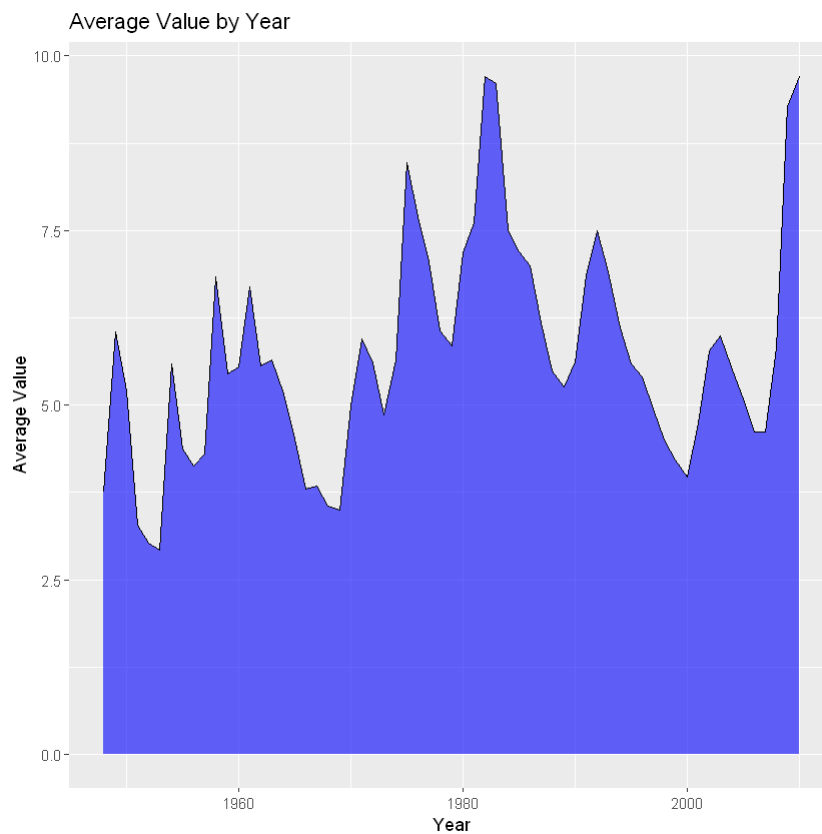
```
In [6]: avg_unemployment = df %>%
  dplyr::group_by(Year) %>%
  dplyr::summarize('Average Value' = mean(Value))

head(avg_unemployment)
```

A tibble: 6 × 2

Year	Average Value
<int>	<dbl>
1948	3.750000
1949	6.050000
1950	5.208333
1951	3.283333
1952	3.025000
1953	2.925000

```
In [7]: ggplot2::ggplot(avg_unemployment, ggplot2::aes(x=Year , y=`Average Value`)) +
  ggplot2::geom_area( fill='blue', alpha=.6) +
  ggplot2::geom_line() +
  ggplot2::ggtitle('Average Value by Year')
```



## R- Stacked Area Plot

```
In [8]: ggplot2::ggplot(df1, ggplot2::aes(x=year, y=expenditure, fill=category)) +
  ggplot2::geom_area()
```

