

Module9Assignment.R

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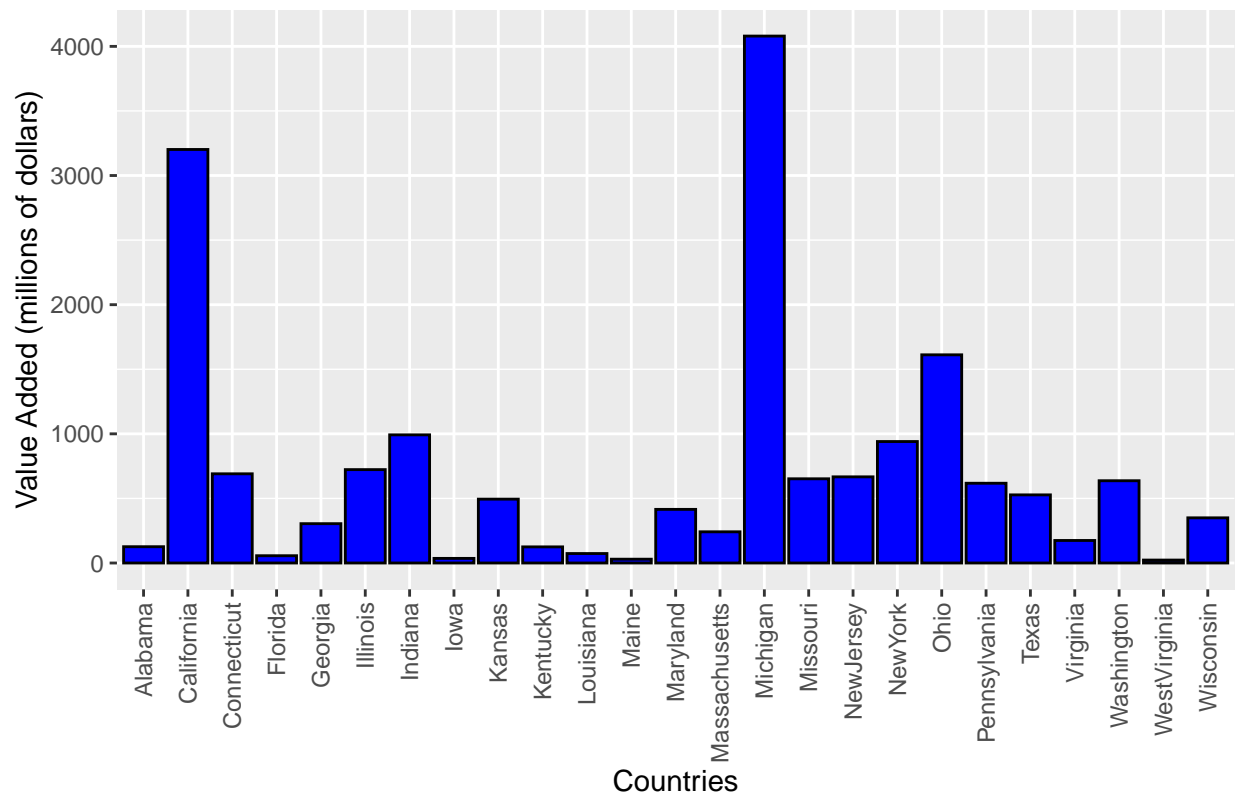
```
# Load library
library(ggplot2)
library(lattice)

# Load dataset
data <- read.csv("/Users/owenkraker/Documents/Intro.Data.Science/Equipment.csv")

# Visualize the data

# ggplot2
ggplot(data, aes(x = rownames, y = valueadded)) +
  geom_bar(stat = "identity", color = "black", fill = "blue") +
  labs(title = "Transportation Equipment Manufacturing Output for 25 States",
       x = "Countries", y = "Value Added (millions of dollars)") +
  theme(axis.text.x = element_text(angle = 90, hjust = 1, vjust = 0.5))
```

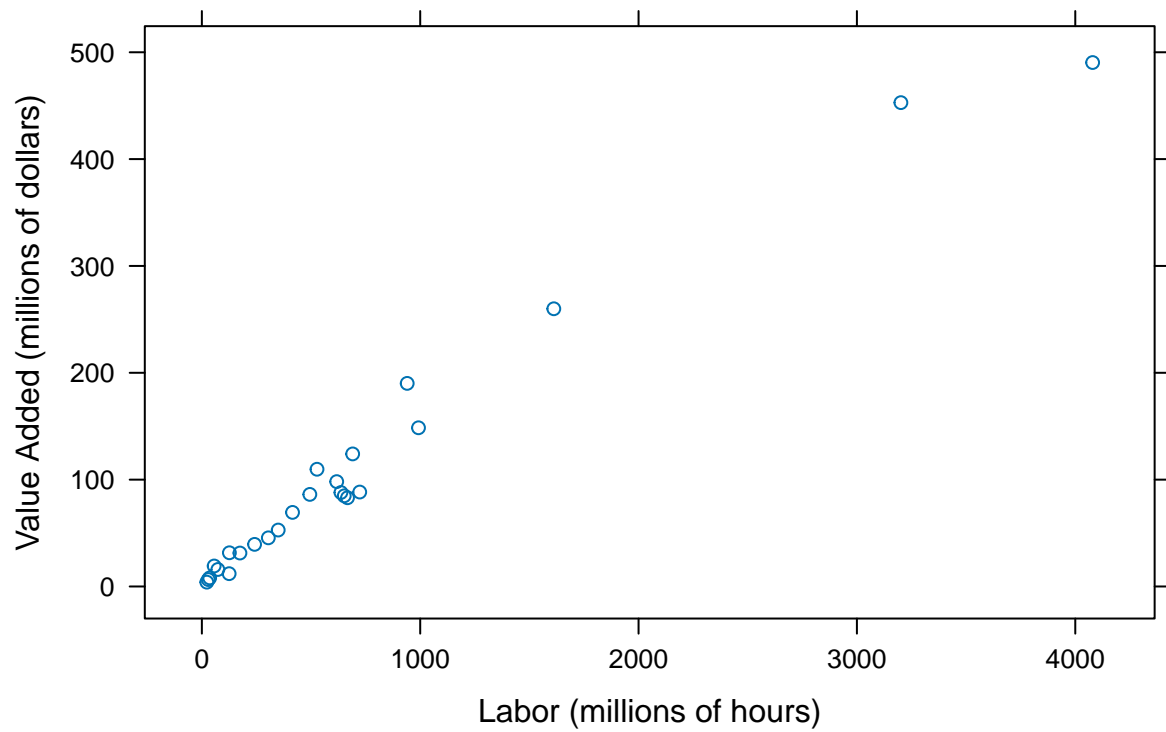
Transportation Equipment Manufacturing Output for 25 States



Based on the visual of the data, Michigan had the highest aggregate output.

```
# Lattice
xyplot(labor ~ valueadded, data = data,
  main = "Scatter Plot of Labor vs. Value Added",
  xlab = "Labor (millions of hours)",
  ylab = "Value Added (millions of dollars)")
```

Scatter Plot of Labor vs. Value Added

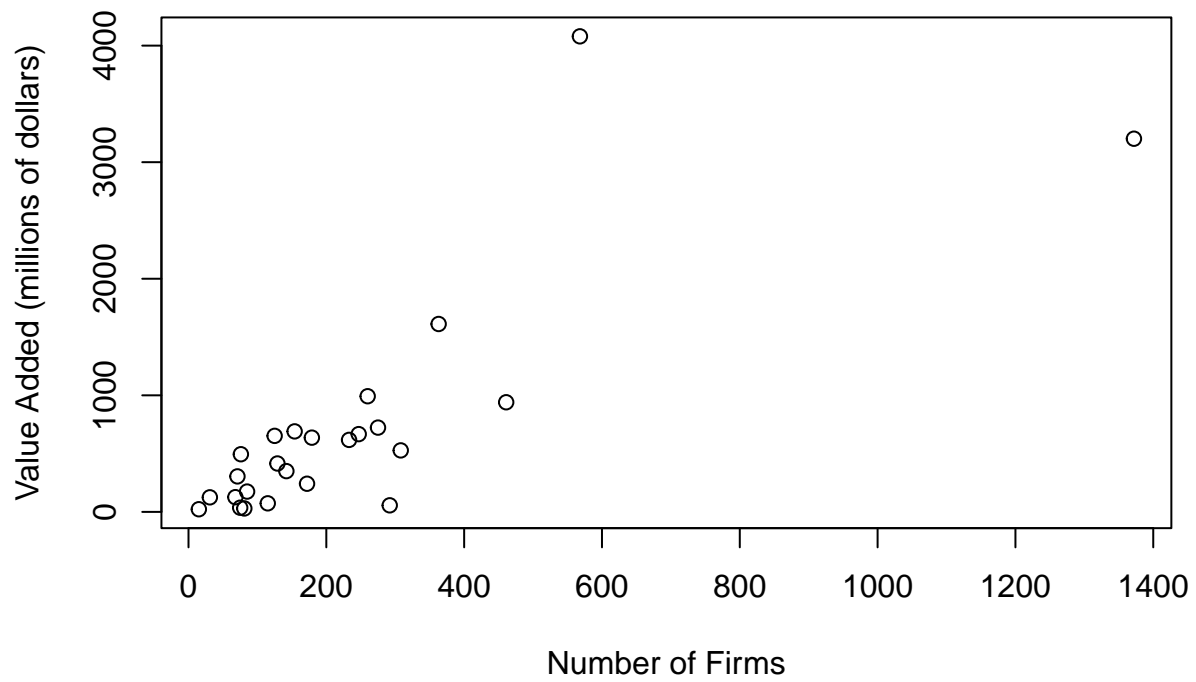


Based on the visual the more labor input the higher the aggregate output of transportation equipment.

Basic Visualization

```
plot(data$firms, data$valueadded,  
      main = "Scatter Plot of Number of Firms vs. Value Added",  
      xlab = "Number of Firms",  
      ylab = "Value Added (millions of dollars)")
```

Scatter Plot of Number of Firms vs. Value Added



The plots are a little more scattered but more firms increase value added.