

Introducción a la Microeconometría

Sesión 1

Irvin Rojas

Centro de Investigación y Docencia Económicas

18 de agosto de 2020

1 Pop Songs and Political Science

2 Example R code

Section 1

Pop Songs and Political Science

Sheena Easton and Game Theory

Sheena Easton describes the following scenario for her baby:

- 1 Takes the morning train
- 2 Works from nine 'til five
- 3 Takes another train home again
- 4 Finds Sheena Easton waiting for him

Sheena Easton and her baby are playing a **zero-sum (total conflict) game**.

- Akin to Holmes-Moriarty game (see: von Neumann and Morgenstern)
- Solution: **mixed strategy**

Rick Astley's Re-election Platform

Rick Astley's campaign promises:

- Never gonna give you up.
- Never gonna let you down.
- Never gonna run around and desert you.
- Never gonna make you cry.
- Never gonna say goodbye.
- Never gonna tell a lie and hurt you.

Whereas these pledges conform to the preferences of the **median voter**, we expect Congressman Astley to secure re-election.

Caribbean Queen and Operation Urgent Fury

Billy Ocean released “Caribbean Queen” in 1984.

- Emphasized sharing the same dream
- Hearts beating as one

“Caribbean Queen” is about the poor execution of Operation Urgent Fury.

- Echoed JCS chairman David Jones’ frustrations with military establishment.

Billy Ocean is advocating for what became the Goldwater-Nichols Act.

- Wanted to take advantage of **economies of scale**, resolve **coordination problems** in U.S. military.

The Good Day Hypothesis

We know the following about Ice Cube's day.

- 1 The Lakers beat the Supersonics.
- 2 No helicopter looked for a murder.
- 3 Consumed Fatburger at 2 a.m.
- 4 Goodyear blimp: "Ice Cube's a pimp."

This leads to two different hypotheses:

- H_0 : Ice Cube's day is statistically indistinguishable from a typical day.
- H_1 : Ice Cube is having a good (i.e. greater than average) day.

These hypotheses are tested using archival data of Ice Cube's life.

Section 2

Example R code

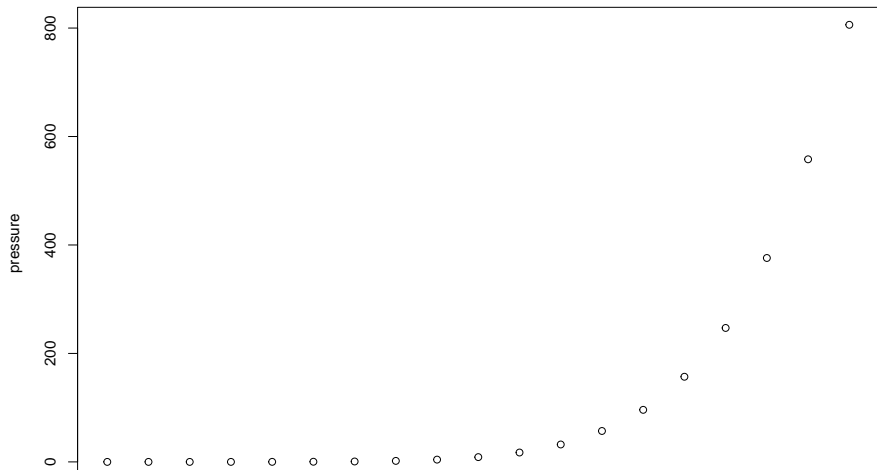
Example R stuff

```
summary(cars)
```

##	speed	dist
##	Min. : 4.0	Min. : 2.00
##	1st Qu.:12.0	1st Qu.: 26.00
##	Median :15.0	Median : 36.00
##	Mean :15.4	Mean : 42.98
##	3rd Qu.:19.0	3rd Qu.: 56.00
##	Max. :25.0	Max. :120.00

Slide with Plot

```
plot(pressure)
```



ggplot code

```
df <- data.frame(x = rnorm(1000))  
x <- df$x  
base <- ggplot(df, aes(x)) + geom_density() + scale_x_continuous(lim = c(-3, 3))  
base + stat_function(fun = dnorm, colour = "red")
```

Another Plot

