

Effect of policies in South Korea



After this presentation you will know:

Why eating kimchi might be the best way to stop covid cases?

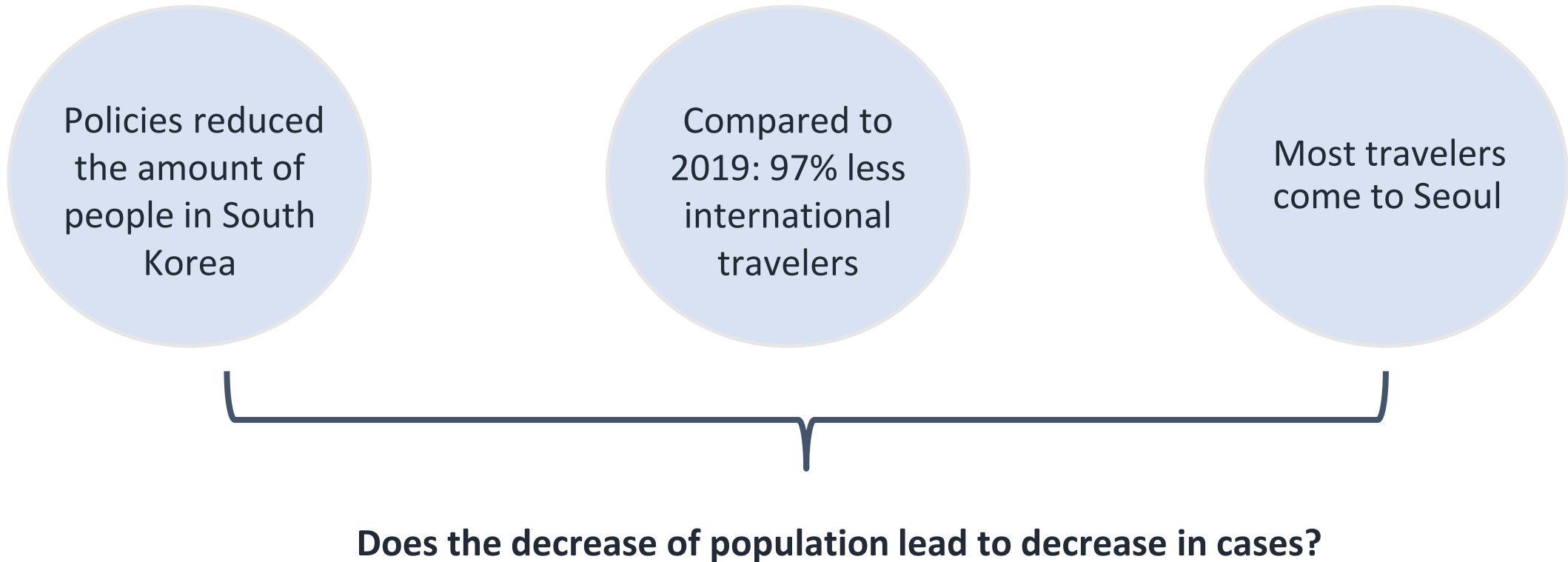
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After this presentation you will know:

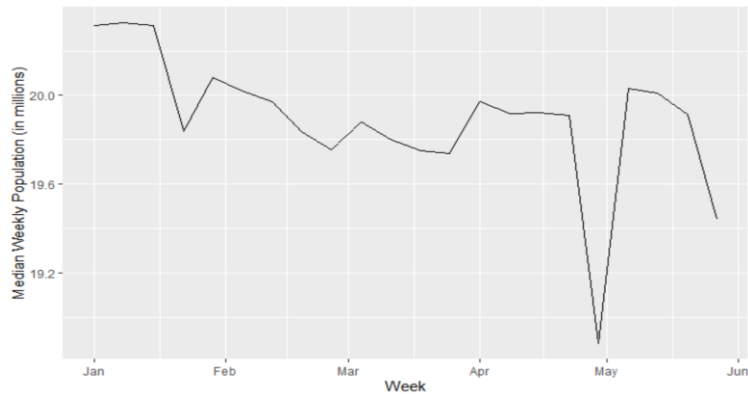
- 1) How decrease in the amount of people affected covid cases
- 2) How immigration policies affected overseas cases
- 3) Whether policies could stop the spread of covid cases between the regions

1. How decrease in the amount of people affected covid cases

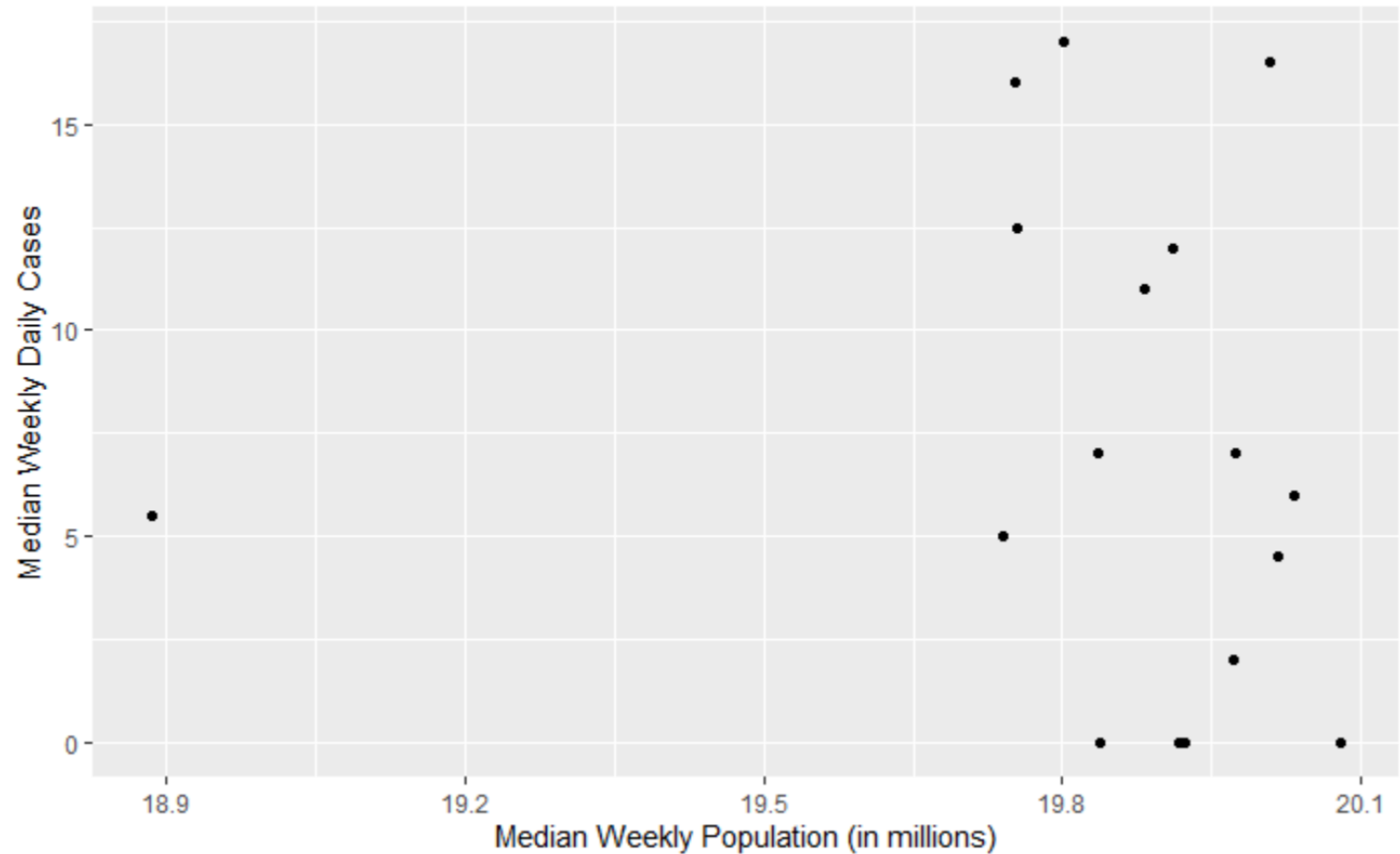
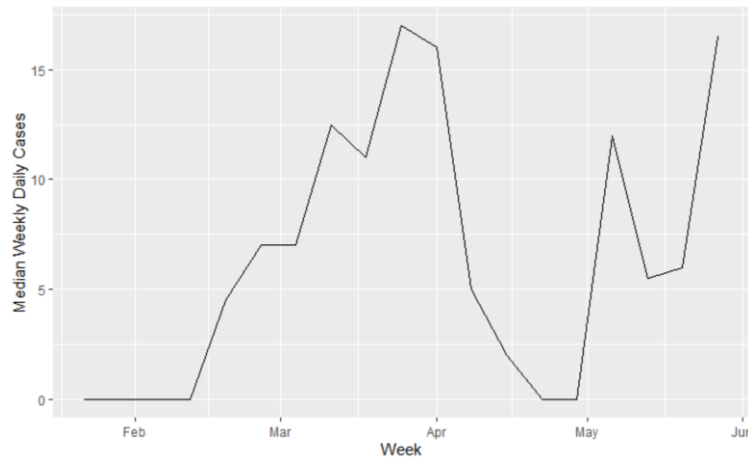


1. How decrease in the amount of people affected covid cases

Median Weekly Population (in millions)



Median Weekly Daily Cases



Spearman Correlation : -0.31

P-Value: 0.225

2. How immigration policies affected overseas cases

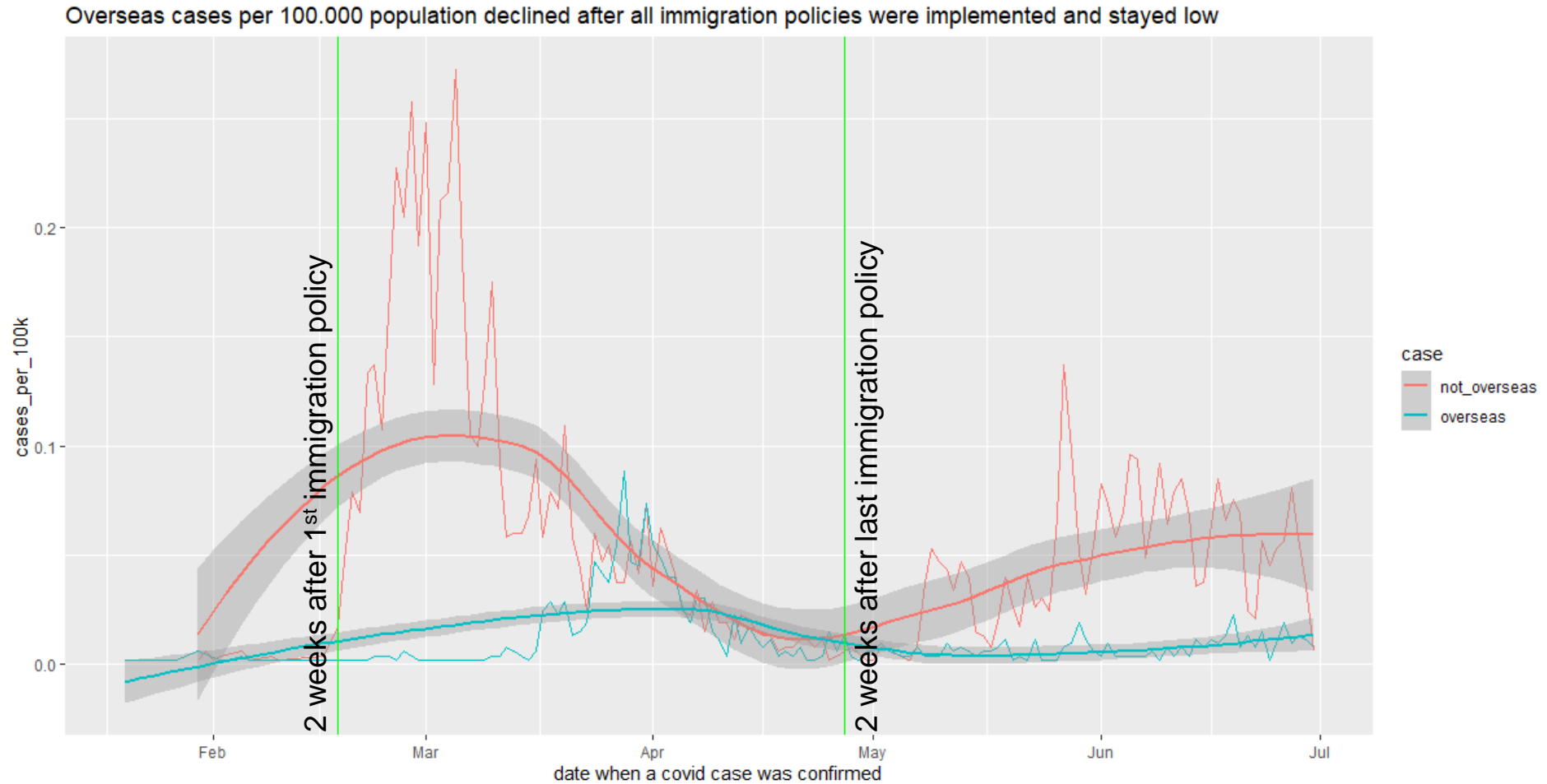
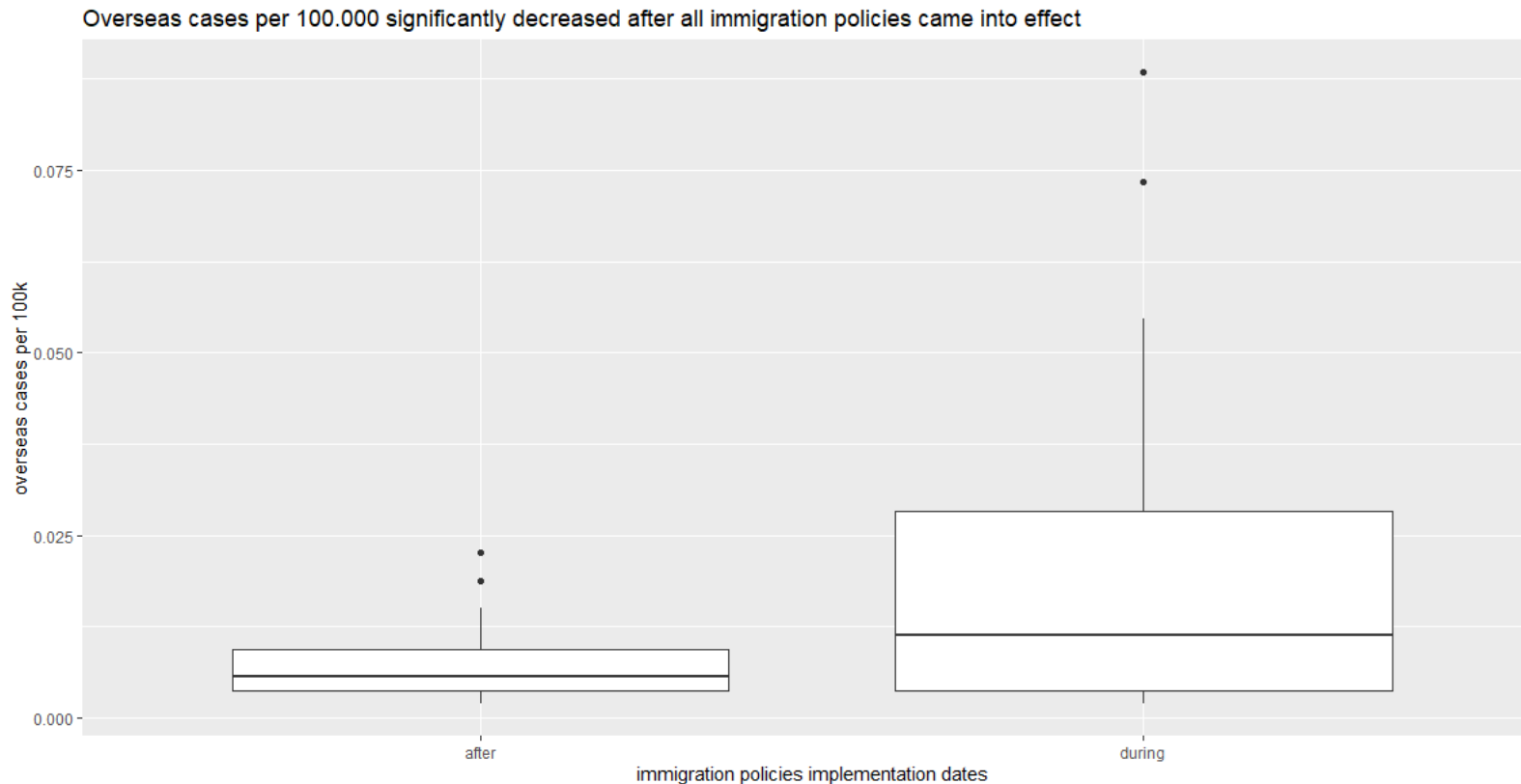


Figure 4

2. How immigration policies affected overseas cases



```
wilcox.test(cases_per_100k ~ imm_policy, data=d4[case == "overseas"], alternative = "less")  
wilcoxon rank sum test with continuity correction
```

```
data: cases_per_100k by imm_policy  
W = 1395.5, p-value = 0.005882  
alternative hypothesis: true location shift is less than 0
```

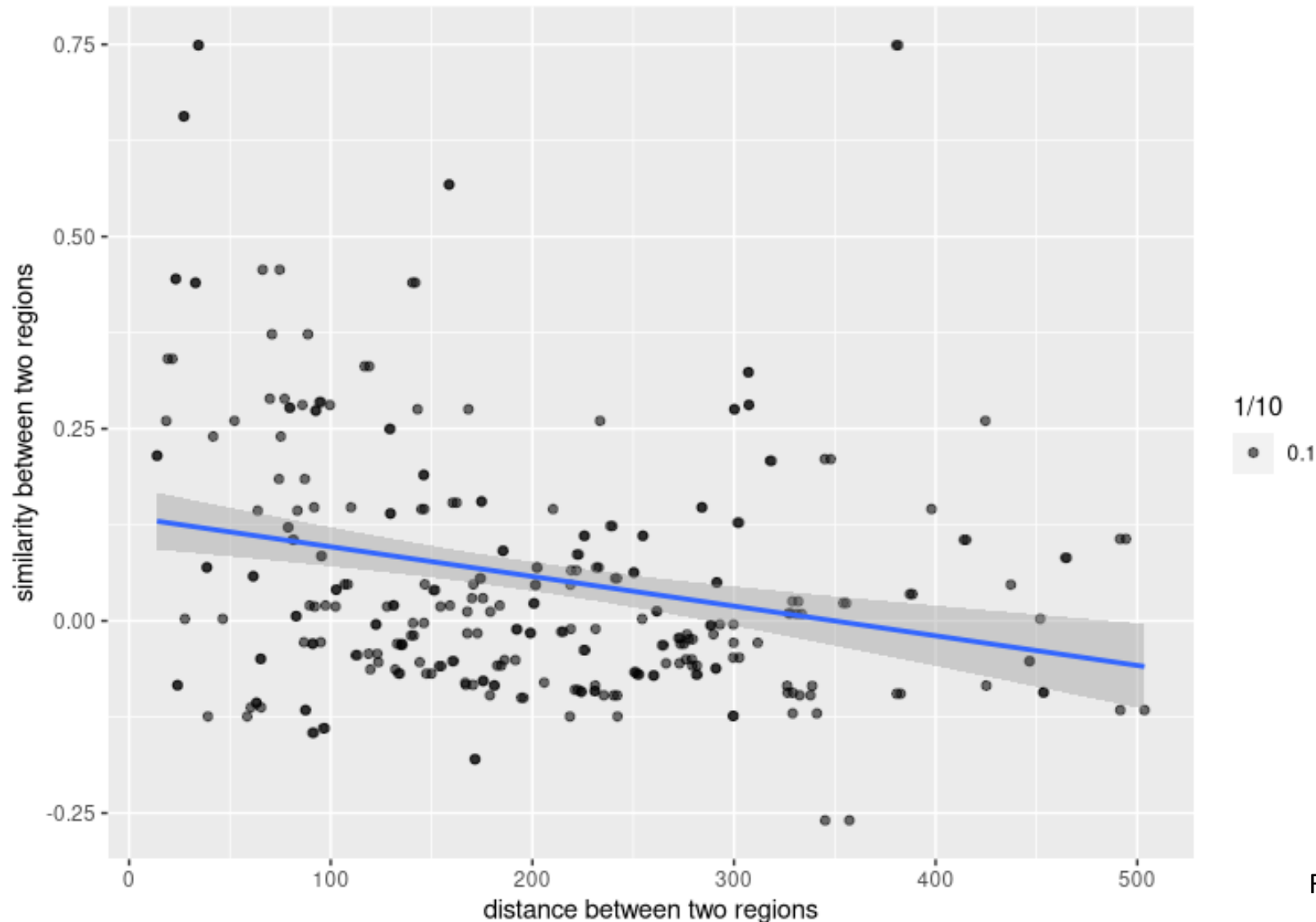
Takeaway:

1) Immigration policies were **effective at lowering covid cases from overseas**: decline of overseas cases after all immigration policies were implemented

2) Immigration policies **were not that effective at stopping overseas cases from spreading**: sharp increase of non-overseas cases

Figure 5

3. Closer regions have more similar covid case spread pattern



Time period:
2020-04-27 - 2020-07-01

Correlation: ~ -0.25

P-Value: ~ 0.00001

External sources:

Mapping Region to Capital:

https://en.wikipedia.org/wiki/List_of_capitals_in_South_Korea

Distances between cities of South Korea: <https://www.mileage-charts.com/chart.php?p=index&a=AS&b=KR>

Figure 6

Effect of policies in South Korea: in a nutshell



Now (hopefully) you know:

1) How decrease in the amount of people affected covid cases

It is not related to covid cases

2) How immigration policies affected overseas cases

Immigration policies decreased overseas cases

3) Whether policies could stop the spread of covid cases between the regions

No, they did not: the cases spread from regions to neighboring regions

Effect of policies in South Korea: in a nutshell



But eating more kimchi might have
been a better policy ;)