Math 4330 Activity 2

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Introduction

Ian Greene and Paul Shaffer conducted a study titled "Leave to Appeal and Leave to Commence Judicial Review in Canada's Refugee-Determination System: Is the Process Fair." This study was done to examine whether the process for people claiming refugee status in Canada in the year 1990 was efficient. We studied the data that Greene and Shaffer gathered for their study and sought to answer two questions that we found to be of interest. We were curious to know whether applicants from one nation was prefered to another. We were not able to decisively answer this question but were able to give some insight as to which nation had the highest percentage of applicants that were successful in obtaining leave to file for appeal. The process to claim refugee status in Canada employed the use of independent individuals to determine whether a case "some merit" or "no merit". If both independent raters arrived at the same conclusion, then that conclusion is treated as the decision. If however, they arrive at a different decisions then the applicant has the option of appealing to the Federal Court of appeal for leave to file an appeal. We wanted to know how effective these independent raters were given that they were not trained in law. We obtained information on the rate of overturned decisions but were not able to answer our question as we would have needed a benchmark rate to compare with. To answer the questions we posed, we would require more data and subsequently more information. Nevertheless, we sought to explore our questions with the available data. Our findings are as follows:

Data Biography

The data is a random sample of applications for an appeal to leave filled in 1990. It was collected by researchers using a systematic random sample form files stored in a chronological order at the federal law of appeal office in Ottawa Canada. The systematic random sampling was carried out by selecting every third file from the approximately two thousand files. The sampling frame is the application filled in 1990. While the sampled population consisted of two categories of applications, those that are denied at stage 1 and those denied at stage 2. No sampling weight were required in both cases. The sample can be considered an effective one and representative of the large population due to the sampling method used.

Data Directory

Title: Greene's Data on Refugee Appeals

Data File: http://socserv.socsci.mcmaster.ca/jfox/Books/Applied-Regression-3E/datasets/Greene.txt

Source: Personal communication from Ian Greene, Department of Political Science, York University.

Variables:

Name of judge hearing case: Desjardins, Heald, Hugessen, Iacobucci, MacGuigan, Mahoney, Marceau, Pratte, Stone, Urie.

Nation of origin of claimant: Argentina, Bulgaria, China, Czechoslovakia, El.Salvador, Fiji, Ghana, Guatemala, India, Iran, Lebanon, Nicaragua, Nigeria, Pakistan, Poland, Somalia, Sri.Lanka.

Judgment of independent rater: no, case has no merit; yes, case has some merit (leave to appeal should be granted).

Judge's decision: no, leave to appeal not granted; yes, leave to appeal granted.

Language of case: English, French.

Location of original refugee claim: Montreal, other, Toronto.

Logit of success rate, for all cases from the applicant's nation.

Interesting Questions

1. Are applicants from any nation more favoured in granting leave for appeal?

2. Given that the independent judges were not lawyers or individuals trained in law, were they efficient in their application of the law to their cases and thus their judgement?

[handwritten annotations: "Good - but this doesn't address fairness."; "clarify"; "because different conditions in different countries would result in conditions to satify refugee status being different."]

Graphical Visualizations

```
tab_(Greene, ~nation + decision, pct=1) %>%
  barchart(ylab='Percentage' , ylim=c(0,100), horizontal=FALSE,
           auto.key=list(space='right',title='Decision', reverse.rows = T),
           scales = list(x=list(rot=60)))
```
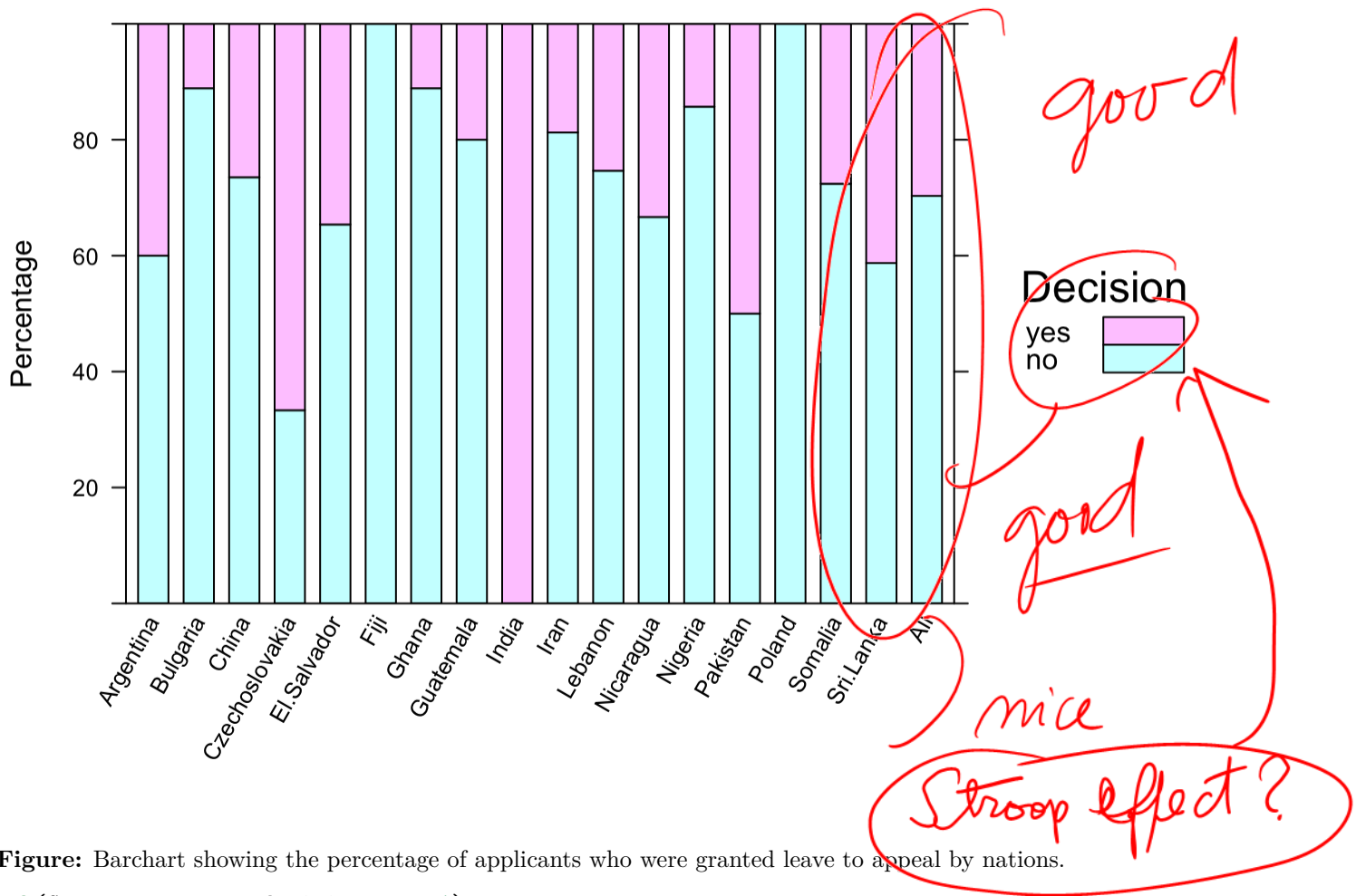
Figure: Barchart showing the percentage of applicants who were granted leave to appeal by nations.

```
tab(Greene, ~rater + decision, pct=1)

      decision
rater        no        yes      Total
  no   79.13386   20.86614  100.00000
  yes  53.07692   46.92308  100.00000
  All  70.31250   29.68750  100.00000

tab_(Greene, ~rater + decision, pct=0)%>%
  barchart(ylab='Percentage',ylim=c(0,100),xlab='Rater Decision', layout=c(1,2),horizontal = FALSE,
           auto.key=list(title='Judge Decision'))
```
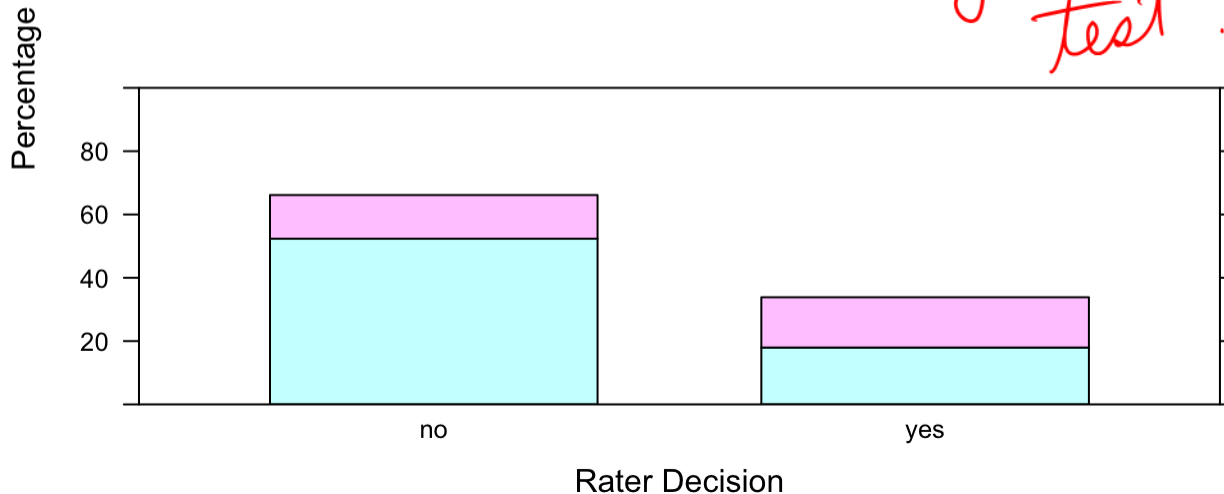
Figure: Barchart showing the percentage of cases that were determined to have "some merit" (yes) and "no merit" (no) by the independent raters and the percentage of those decisions that were later agreed or disagreed with by the Judges.

Conclusions

The data has some limitations which prevents us from providing a solution or an answer to the two questions posed. For the first question, we cannot determine whether applicants from one nation were prefered to another. While we were able to compare the successful applicants who were granted leave by nations, it doesn't inform us as to whether one nation is preferred to another. Applicants from Sri Lanka were most successful at obtaining leave to appeal, but this doesn't mean that they were favoured or preferred. Information on the requisite law that the judges considered would be instrumental in helping to answer this question. If the law could be divided into categories and judges rate each applicant per category then this data could inform on whether Sri Lankans were more successful because they outperformed in more categories or categories with higher weights. That Sri Lankans were the most successful applicants could inform that their case had the most 'truth' in it, ie. they were truly more refugees from Sri Lanka. To provide an answer for question two, we would need to know what is an acceptable rate for decisions by independent personnel(raters) that were later overturned by judges. We see that 20.86% of cases that were deemed to have 'no merit' by independent personnel were found to "have some merit" by judges. Is 20.86% an acceptable level given that independent personnel were used in an effort to expedite the process? Only when this figure is compared against an acceptable rate decided upon by relevant authorities can we pronounce on if the independent raters are efficient. Another question arising from the efficiency of raters is if they are rating cases with 'no merit' as cases 'with merit' and thereby allowing applicants that are not truly refugees to claim refugee status. While we were not able to decisively answer either of our two questions, we were able to obtain an idea from the graphs produced which provided some insight on the questions and allowed for us to conceptualise what additional information is required to answer the questions.

Questions for further study

Which variable has the most significant influence on the result of appeal?