**Econ 340: Research Project Submission 1 Example**

**Student Name 1 and Student Name 2**

1. Clearly specify what your research question is.
   * *Does the student-teacher ratio affect elementary school education?*
2. Why do you think this question is interesting or important?

* *This is an important question as it informs policymakers of the value of mandating maximum class sizes. Increasing the student-teacher ratio across schools is a costly affair. Being able to quantify its benefits can help policymakers make more informed decisions.*

1. Fill in the following table. Use the names of the variables in the dataset.

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Name of your dataset | *caschools.csv* | *Data on school characteristics and test performance for 420 school districts in California from 1998-99.* |
| Dependent variable | *testscr* | *Average reading and writing score* |
| Main Independent variable | *str* | *Student-teacher ratio* |
| First additional control variable | *high\_comp\_stu\** | *Binary variable that takes value 1 if computers per student are above the median, and 0 otherwise* |
| Second additional control variable | *meal\_pct* | *Percent qualifying for reduced-price lunch* |

\* We will create this variable using *comp\_stu (computers per student).*

1. How do you think the primary independent variable correlates with the dependent variable? Explain the reasoning behind your thinking.

* *We think that there should be a negative correlation between test scores and the student-teacher ratio. That is, a higher student-teacher ratio should lead to worse student performance as each student is not getting much individual attention in the class.*

1. Fill the following table with the *expected* sign of the correlation between different variables.

|  |  |  |
| --- | --- | --- |
|  | *Computers per student>median* | *Reduced-price lunch* |
| *Test score* | + | - |
| *Student-teacher ratio* | - | + |