**Universidade de São Paulo**

**Faculdade de Filosofia, Letras e Ciências Humanas**

**Departamento de Ciência Política**

**FLS-6183 & FLP-468**

**Métodos Quantitativos de Pesquisa II**

**2º semestre / 2019**

**Lorena G. Barberia**

**Lab Class 2**

**Review of Hypothesis Tests**

**Difference of means test vs. coefficient test in a bivariate regression model**

**Part I. Univariate Hypothesis Test Review**

1. Please summarize the hypothesis test (univariate) on y as described in the lab? After running the hypothesis test, what can we conclude?

**Part II. Bivariate Hypothesis Test Review**

1. First, let’s carry out a hypothesis test where the dependent variable, y, is a continuous variable (y) which differs between two groups with a difference of means test. Please summarize the result of the difference of means hypothesis test on y? After running the hypothesis test, is there a difference in the mean conditional on x?
2. Next, let’s carry out the same test using a bivariate regression model. Please summarize the result of the bivariate regression model? After running the hypothesis test, is there a difference in the mean conditional on x?
3. Do you think there is a preferred method in this particular case for these type of data (y= continuous and x=dummy)?
4. How is uncertainty captured by both methods?

1. Are there any advantages of using a regression in this case? Please explain.