Introduction:

In 1980 Henry Hannsman published a seminal paper entitled *The Role of Nonprofit Enterprise.* The paper was powerful in that it drew to the attention of lawyers and economists a very eminent reality. Nonprofit organizations had become an increasingly prevelant part of the modern economy, yet the existing literature at the time had largely overlooked the role of the nonprofit corporation in the modern economy. Out of Hannsman’s work one entity structure drew a heightened amount of focus, higher education institutions.

Higher education institutions operating in a particular market that economists sometimes refer to as “trust markets.” They are described in this way for the asymetic information available to each party entering a transaction. In informational asymmetric markets, buyers are vulnerable to a supplier’s opportunism. The non-profit structure of higher education institutions encourages honest, if not profit-sacrificing, behavior that can create trust with the buyers and become the preferred suppliers in the “trust” market. It is important to note that non-profit does not mean no profit. No matter the market, or market structure, entities operating at a loss will disapper. A non-profit enterprise is differentiated from other entity structures in that it cannot distribute profits to stakeholders. This key legal and economic characteristic is a non-distribution constraint (Hansmann, 1980). However, the non-distribution constraint can be bent to benefit personel within the institution (Winston, 1999). In higher education this may take the form of tutition revenue supporting administrators’ perks. While it seems to be an oversimplification, profit maximization is an umbrella utility function that can be used to describe the behavior of higher education institutions. However, the non-distribution constraint blurs the lines as to the beneficiaries of this behavior. This foundation lays the groundwork for the research presented in this paper.

Student loan debt in the United States has continued to rise, rounding out at $1.56 trillion as of February 2019. Camilo Maldonado, a Forbes writer, reported in July of last year that the price of college is increasing at a rate nearly 8 times that of wages. According to the National Center for Education Statistics, between 1989 and 2016 the cost of a four year degree rose by 2.6% a year. Compared to the Federal Reserve Bank of St. Louis report outlining that wages have only grow 0.3% per year over the same time period. This has implied, that on some level, each successive cohort of college graduates is worse off. Higher costs, coupled with stagnant wages and large debt burdens calls into question the overall structure of higher education and how it operates within the modern economy.

This research paper seeks to understand the data generating process for an indicator of payout to students from higher education institutions. Particularly this paper will investigate general subsidy levels in higher education to understand how the distribution of these subsidy levels is produced. This paper theorizes that increases in background risk will decrease subsidy levels. More specifically, revenue sources that are more volatile will have d To approach this research a Bayesian framework will be used. Bayesian analysis has the advantage over frequentist statistics in being able to more fully understand the data generating process of our outcome variable. In taking this approach we will be able to visualize the entirety of the posterior distribution and more adequately handle the uncertainty that should surround any research question. This paper will focus more particularly on private higher education institutions as their entity structure may have more volatile sources of revenue compared to state institutions.