# Stellenbosch 2023 Abstract Submission

## Title
The Impact of Repealing Sunday Blue Laws on Alcohol Sales and Retail Competition

## I want to submit an abstract for:
Conference Presentation

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## Keywords
Wine Economics; Alcohol regulation; Competition; Blue Laws

## Research Question
What are the effects of repealing Blue S First, we investigate and measure the effects that repealing Blue Sunday laws have on alcohol sales?

## Methods
To assess the potential for dynamic treatment effects of ending Blue Sunday laws on business activities, we adopt a non-linear panel regression model for count data with dynamic treatment effects

## Results
Our paper’s primary contribution is its timely assessment of the impact of changing alcohol laws and the broader impacts of changing societal configurations throughout U.S. society
**Abstract**
Blue laws, which, among other things, restrict the sale of alcohol to certain days and times, differ across the United States and often within states. These varying regulations effectively restrict access to alcohol and often align with public moral codes predating the formation of the United States (Diloff, 1980; Teupe, 2019). Through the 1980s and 1990s, Blue laws were loosened by local and state governments, potentially contributing to behavioral change throughout the U.S. (Giles et al., 2023). More recently, two states changed their Sunday Sales laws. In 2011, Georgia allowed counties to vote to allow alcohol sales on Sunday, leading to sub-state variation in the policy. The following year, Connecticut repealed its Sunday Sales law, which impacted beer in grocery stores and all alcohol in liquor stores. While research on alcohol accessibility suggests consumers may drink more alcohol when it can be sold in grocery stores (Smart, 1986; Adrian et al., 1995; Wagenaar and Langley, 1995; Rickard, 2012), there is less clarity on the impact of repealing Sunday Sales laws (Popova et al., 2009; Meany et al., 2017). The objectives of this paper are twofold. First, we investigate and measure the effects that repealing Blue Sunday laws have on alcohol sales, business survival, and employment. Second, we investigate and measure whether changes to Blue Sunday laws in one county affect sales, business survivability, and employment in neighboring counties, within and across states.

To answer those research questions, we compiled a comprehensive dataset from two sources. First, we use the National Establishment Time Series (NETS) database, which covers all U.S. businesses at the establishment level from 2004 to 2021 (Walls & Associates, 2023). Each establishment includes information on employment count, gross sales, business location, headquarters linkages, and years of activity. Second, we use NielsenIQ retail scanner data, which contains weekly sales data at the UPC level for establishments across the U.S. from 2004 to 2021. Both sources provide the North American Industry Classification System (NAICS) codes for each establishment. We use NAICS codes 445310 (Beer, Wine, and Liquor Stores) and 445110 (Supermarkets and Other Grocery (except Convenience Stores) for the analysis. We match the two datasets by focusing on the period from 2004 to 2019, thus also excluding the potential effects of the COVID-19 pandemic.

Our empirical analysis has two objectives. First, to analyze the sales effects, we use a sharp research design with weekly retail data to assess the short-run response. Specifically, the change in alcohol purchases at grocery stores is assessed using retail scanner data, with some ability to compare with liquor stores. NielsenIQ includes store location and UPC-level weekly sales, allowing for total sales of different types of alcohol to be aggregated at the county level. Treatment and non-treatment counties are matched based on alcohol consumption similarity indices, liquor policies, and demographics to develop a control group. The similarity index replicates the Hart and Alston (2019) index at the county level. Second, the long-run effects on store employment, revenue, and survival for liquor and grocery stores are assessed using NETS data and census-tract level matching. To assess the potential for dynamic treatment effects of ending Blue Sunday laws on business activities, we adopt a non-linear panel regression model for count data with dynamic treatment effects (Freyaldenhoven et al., 2021).

The dependent variable, $y_{it}$, maps into three specifications: business survival, sales, and employment. We control for unobserved factors through establishment $(a, j)$ and time $(a, t)$ fixed effects and market attractiveness through linear market trends $(\alpha (m, t))$ and census tract demographics $(X_{it})$ (population, income, racial composition, etc.).

We center the event study according to the year when the Blue Laws were repealed and use an event window of six years before and after the policy shift to assess the treatment dynamics. Our empirical results speak to the disparate impact of weakening Blue Laws on liquor vs. grocery stores, the overall impact on sales and employment, and the geographical effects of these laws across neighboring counties.

Our paper’s primary contribution is its timely assessment of the impact of changing alcohol laws and the broader impacts of changing societal configurations throughout U.S. society. For example, as localities loosened alcohol regulations during the COVID-19 pandemic, discussions are ongoing on whether to allow these new policies to remain in place. Our results can inform this policy discussion in two ways. First, we can provide insight on not just whether total alcohol consumption changed but also any substitution between types of alcohol. Second, we can assess any disparate impact between grocery and liquor stores; the perceived inability of liquor stores to remain competitive after a policy change is often cited during discussions about loosening alcohol regulations.

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The Impact of Repealing Sunday Blue Laws on Alcohol Sales and Retail Competition

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\[ y_{it} = \exp \left( \alpha_i + \alpha_t + \alpha_{m,t} + \sum_{k=-6}^{6} \delta_k BL_{i,t-k} + X_{it}y_x \right) \eta_{it} \]

The dependent variable, \( y_{it} \), maps into three specifications: business survival, sales, and employment. We control for unobserved factors through establishment (\( \alpha_i \)) and time (\( \alpha_t \)) fixed effects and market attractiveness through linear market trends (\( \alpha_{m,t} \)) and census tract demographics (\( X_{it} \)) (population, income, racial composition, etc.). We center the event study according to the year when the Blue Laws were repealed and use an event window of six years before and after the policy shift to assess the treatment dynamics. Our empirical results speak to the disparate impact of weakening Blue Laws on liquor vs. grocery stores, the overall impact on sales and employment, and the geographical effects of these laws across neighboring counties.

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**AAEA Subject Code:** Food & Agricultural Marketing

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References


