### Comment to: *Applying for a liquor license reduces police stops of innocent people?*

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#### Abstract

In this document we review the issues raised in the paper *Applying for a liquor license reduces police stops of innocent people?*. Namely, we address each one of the points analyzed in that article:

- 1. Assess the suitability of the data used to measure the independent variable
- 2. Assess the suitability of the data used to measure the dependent variable
- 3. Discuss the implications of excluding these data for the studys implied null hypothesis
- 4. Recommend a re-review of the study and a retraction if necessary
- 5. Make a case for closer collaboration between economic researchers and the practitioners who create and manage administrative datasets of interest

**Keywords:** Sex crimes, rape, adult entertainment establishments, substitute services **JEL codes:** I18, J16, J47, K14, K42

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### 1 Introduction

In this article we review the issued raised in *Applying for a liquor license reduces police stops of innocent people?*. The authors of the aforementioned document highlighted different points that might affect the credibility of the results of our article Ciacci and Sviatschi (2022). These authors rely on different potential issues, in this document we analyze each one of the points raised by such authors using both qualitative external sources and quantitative econometric analysis to justify our answers.

### 2 The limits of replication

In this section the authors claim that our study cannot be replicated because, in their own words, "Given limitations that went unacknowledged in the study, a replication will exclude all the data used for its independent variable, and approximately 95% of the data used for the dependent variable". Later in the study it is unclear why all the observations used for the independent variable would not work, since the authors raise issue on the registration to the business records of Department of State of New York, but our paper draws information also from the registration dates of the establishments to Yellowpages and Superpages. The authors do not criticize in any way these two sources of information, so it is unclear to us why they would like to discard all the data used as independent variable. Moreover, they say that roughly 95% of the data used as dependent variable should be discarded too. However, it is not clarified later in the paper on what such a statistic is based.

Namely, we address each one of the points analyzed by the authors of *Applying for a liquor license reduces police stops of innocent people*?:

- 1. Assess the suitability of the data used to measure the independent variable
- 2. Assess the suitability of the data used to measure the dependent variable
- 3. Discuss the implications of excluding these data for the studys implied null hypothesis
- 4. Recommend a re-review of the study and a retraction if necessary
- 5. Make a case for closer collaboration between economic researchers and the practitioners who create and manage administrative datasets of interest

### 3 Reply to each comment

# 3.1 Assess the suitability of the data used to measure the independent variable

The concerns of the authors of *Applying for a liquor license reduces police stops of innocent people?* refer to the date of registration of business of the NY State Department of State. In our paper we make use of businesses records such as the Yellow Pages, Superpages and the NY State Department of State records to match almost every establishment with a registration date to proxy the effective opening date of each establishment. Insofar as we use three different sources of information, if the authors of the afore-mentioned study have concerns on the registration dates coming from the NY State Department of State, then data from this database should be the only one they would discard.

To the best of our knowledge, registration to liquor licenses differ from registration to opening a business. As it can be evidenced from visiting the webpage to obtain a liquor license https://sla.ny.gov and the webpage to register your business in NY state https://www.nyc.gov/html/sbs/nycbiz/downloads/pdf/educational/legal/registering.pdf. Moreover, one might retrieve information on liquor licenses and registration to the NY State Department of State records respectively using the following webpages: https://data.ny.gov/Economic-Development/Liquor-Authority-Current-List-of-Active-Licenses/hrvs-fxs2/data and https://apps.dos.ny.gov/publicInquiry/EntityDisplay. Below we present information for the a grocery shop in Queens to show that:

- 1. The two dates do not need to coincide. Thus, it is difficult to argue that our dates are capturing the effects of applying for liquor licenses as the authors suggest.
- 2. There is not a lag of at least 24 weeks as claimed by the authors of *Applying for a liquor license reduces police stops of innocent people?* "The licensing process, which includes an evaluation by the relevant community board, took a minimum of 24 to 26 weeks during the study period."

Last but not least, below we provide solid evidence that an adult entertainment establishment that want to open in the state of New York does not need to get a liquor license but needs to register to the NY State Department of State. Put it differently, adult entertainment establishment might open their doors without selling liquors and so they do not need to register to liquor authorities.

As Figures 1 shows the date of initial DOS filing is the 28th of August of 2007 while as Figure 2 indicates the original date of Liquor license is the 14th of November of 2002.

Hence, a liquor license might be issued before the registration date. Maybe the authors of *Applying for a liquor license reduces police stops of innocent people?* thought we were using liquor licenses yet this is not the case. The data displayed below on the business named "La Gran Uruguaya Bakery Inc" might be retrieved from the two webpages quoted above.

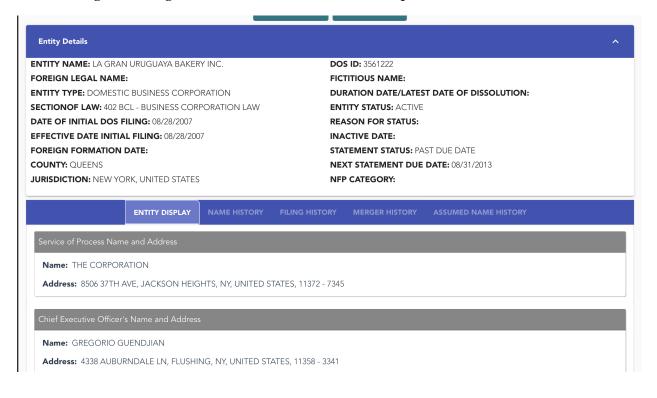


Figure 1: Registration date to the NY State Department of State records

Figure 2: Registration date to the Liquor licenses

In addition, it is important to mention that many of the adult entertainment businesses in our dataset, such as escort girls services do not sell alcohol and, as a result, do not need to apply for a liquor license. Plainly speaking, many strip clubs do not have a liquor license since they do not serve alcoholic beverages. As a matter of fact, in 2017 the New York State Senate issued bill S5654 to regulate this sort of businesses that already existed in the state of New York. Here we present an excerpt of the above-mentioned bill *This provision creates a new Class B Cabaret license. Such establishments that do not serve alcoholic beverages, but provide entertainment or amusement that is lewd or indecent in nature or which permits the exposure for view any private parts of the human body must obtain a Class B cabaret license. Currently these establishments that are not licensed by the State Liquor Authority and*  *cannot be supervised by the City of New York.*<sup>1</sup>. This implies that until 2017, when the Class B cabaret lincense was created, it was better to proxy the opening date of the establishments via the registration to the NY State Department of State business records than through the State Liquor Authority, since they did not have a license in this last institution. Furthermore, usually adult entertainment establishment that allow full nudity might be banned from selling alcoholic beverages.<sup>2</sup>

Yet, to check whether liquor licenses drive our findings we collected data on all the liquor licenses issued in each precinct in New York City during our sample period (i.e. 1st of January 2004 to 30th of June 2012). We gathered information on these licenses exactly as we did with our treatment variable: at day-precinct level, cumulating each license. Then, we re-estimated our main regression controlling for this variable. If this variable is driving our results, in other words, if our main treatment pins down a certain estimate due to be correlated with liquor licenses in that same precinct, consequently, controlling for this variable should affect our findings. Econometrically speaking, if our results are due to liquor license, controlling for them should alter the point estimate of the estimated coefficient since our main estimates would be biased by omitting liquor licenses.

With this aim in mind, we present Figure 3. On the left hand side we present our main estimated coefficient with its corresponding confidence interval. In the center, we present our main estimated coefficient when we control for liquor licenses. As it can be seen from this figure: results do not change. Actually the coefficient has the sime size in point estimate and even in the length of the standard error. Hence, both size and statistical significance do not change. Beyond what we might believe introspectively, these results highlight that liquor licenses do not cause the findings of our paper.

<sup>&</sup>lt;sup>1</sup>Source: https://www.nysenate.gov/legislation/bills/2017/S5654 As a matter of fact, the town of Guilderland (NY) defines Adult entertainment cabaret establishments as *A public or private establishment which may or may not be licensed to serve food and/or alcoholic beverages, which involves the viewing or touching of specified anatomical areas, the viewing of specified sexual activities or other similar entertainment.* Source: https://ecode360.com/10981966

<sup>&</sup>lt;sup>2</sup>Alcohol Local ordinances often regulate whether alcohol may be served at a strip club in accordance to how much nudity is allowed. Clubs that allow full nudity sometimes are prohibited from selling alcohol, while clubs requiring dancers to cover their genitals often may serve alcohol (and usually are restricted to those 21 and older). Source: https://www.findlaw.com/smallbusiness/business-laws-and-regulations/adult-entertainment-law-zoning-and-other-regulations.html

### 3.2 Assessing data for the dependent variable: sex crimes in New York City

## 3.2.1 Exclusion of reports of encounters with innocent people (94% of the analytic sample)

On this regard the authors mention an alleged 94% of data not being connected to any criminal activity. However, it is not clear to what crime it is referred to and whether it might be applied to sex crimes. As the authors admit in a footnote "we presume the percentages and trends discussed closely match the subcategory of sex crimes defined by the study". There are many hypotheses while they might not match. Indeed, sex crimes are essentially different from other sorts of crime in several dimensions, e.g., the aggressor does not need to carry a weapon to lead to an arrest. Hence, a priori, it seems reasonable to believe this percentage would differ for this offense.

Moreover, it is not clear if the arrest rates are the best metric to measure sex crimes since they depend on many different instances. Arrests are a highly selected process that mostly depend on victims willingness to report the crime. For example, in many cases an arrest for a sex crime may depend on the victims' availability to collaborate with the investigation. To this extent, it is well known in the literature and even in the media with the #MeToo movement, that many victims are afraid of reporting the crime and/or collaborating the the investigation. Reasons are multiple and range from social stigma to reluctancy to carry out medical, psychological exams or interrogations by the police. What is more, in many cases victims even distrust the police on these issues. Recent evidence from the UK indeed shows that very few cases of gender based violence result in arrest and in general arrest is correlated to the underlying risk of repeat violence (Amaral et al. 2022). Therefore, the fact that a sex crime does not lead to arrest does not necessarily mean that the crime did not happen.

Nevertheless, since we know that no measure of sex crime is perfect, in the paper we also validate our results using complaints and results do not change.

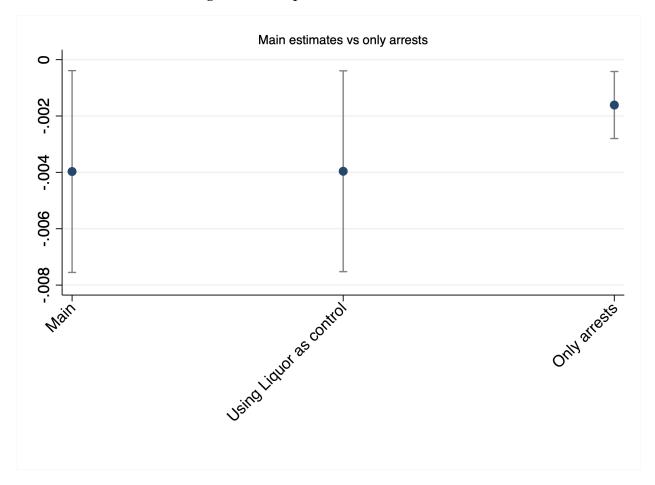
## **3.2.2** Exclusion of arrests for other than sex crimes and for unknown charges from the remaining sample

In this section the authors claim that 20% of the stops for sex crimes ended up in an unknown cause of arrest. Namely, they claim: "In approximately 20% of the records where an arrest was made in the sample years we analyzed, no charge is listed, and an analyst would not be able to determine why a person was arrested at all. If the sample

is to contain only records where a stop resulted in an arrest for a sex crime, and not just any arrest for any charge, the study would have to exclude more than 20% of the remaining sample." Related to the previous comment, their 20% statistic as far as we know is based on the whole sample so it is not clear why it would be the same for sex crimes. Furthermore, assuming this information is true and given our empirical strategy, it would be an issue in our setting only if we believe they correlate with the time of registration of adult entertainment establishments. In other words, our estimates would be biased only if we believe that the proneness to report a sex crime in a certain precinct correlates with the opening of an adult entertainment establishment in that same precinct. Otherwise they would be captured by our rich set of fixed effects and thus, not affect our computations. Indeed, in the paper we show evidence supporting the notion that enforcement by police officers did not change due to the opening of adult entertainment establishments.

Nevertheless, to address these issues we compared our main estimates to the estimate if we only restrict to the sample of arrests made where the cause is a sex crime. A priori, we would expect to find a lower estimate in absolute value since we are restricting to a much more specific crime: a sex crime perpetrated against a victim who does not fear reporting. Insofar, as aggressors choose their victims we might believe they have incentives to select those who they consider will not sue them. Hence, sex crimes that end up in an arrest are not representative of the general sex crime.

To address this point empirically we restrict our sample to arrests made and where the cause is sex crime and re-estimate our main specification using that as the dependent variable. We present this coefficient in the right hand side Figure 3. Ad it might be evinced from this chart, the point estimate of the estimated coefficient is relatively lower in absolute value with rerspect to our main estimate. Still, the two estimates are statistically equal since the confidence intervals overlap. Hence, our results are not affected by keeping only the sample where an arrest was made. Likewise, this analysis might be extended to the coefficient taking into account liquor licenses: results do not change.



#### Figure 3: Comparison across estimates

#### 3.2.3 Data used for the robustness check contains the most probative SQF data

In this scetion the authors assert: "The NYPDs criminal complaint report data (CRD) used for a robustness check of the SQF analysis contains complaints that document arrests made at the conclusion of an SQF incident, after investigation, and for which an SQF report exists." This is not true, our complaint dataset comes from New York Police Department (NYPD, henceforth) and it is unrelated to the Stop and Frisk data. To this extent we attach a NYPD report clearly stating that the two datasets are different. Precisely, this report claims "Crime Complaint Reports contain information on the crime victims race and ethnicity as recorded by the officers or precinct clerical staff interviewing the victim or complainant." and then "Stop Question and Frisk data and Violent Crime Suspect information are taken from the New York City Police Departments Stop, Question and Frisk Database which is also the source of the quarterly report on Stop Question and Frisk Activity supplied to the New York City Council for all 4 quarters 2020".

## 3.2.4 The baseline data about strip clubs and gentlemans clubs contains substantial missing data

This section is based on anecdotal information that any econometrician would understand that, even if true, would not have any impact on our estimates. We acknowledge that our database makes us of Reference USA establishments and then we could match 90% of those with a registration/opening date. Hence, there might be (we are unaware whether this is the case or not for the establishments they mention) establishments that do not appear in this dataset. This might happen for different reasons:

-The establishment is not registered as adult entertainment establishment even if it works as such

-The establishment is not registered in the Reference USA database

-We couldn't find an opening date for the establishment (only 10% of our data)

In Social Sciences studies theses issues often happen since scholars have to make use of incomplete databases. In addition, it seems plausible to believe this measurement error would be random (i.e. there is no reason or source to believe it correlates to the identifying variation). Therefore, this would merely imply that our estimates are biased towards zero, in other words, the claim implies that the population function estimate might be even larger in absolute value (i.e. the decay in sex crimes caused by adult entertainment establishments might be larger).

### 4 Conclusion

This document reviews the issued raised in *Applying for a liquor license reduces police stops of innocent people*?. The authors of the aforementioned document highlighted different concerns that might affect the credibility of the results of Ciacci and Sviatschi (2022).

Following a thorough explanation about how to measure openings of adult entertainment establishments we find that we could not rely on liquor licenses since many of the adult entertainment establishments considered do not even sell alcholic beverages. In addition, if liquor licenses were driving the effect of our paper, data for all establishments having such a license in each precint should affect our results. We collected those data and find that this is not case.

Next, we address issues on the dependent variable. We find that our main results are statistically equal to those restricting the sample only to arrests. Then, we present information from a NYPD report clarifying the difference between Stop and Frisk and complaint data. Finally, we address some anecdotal information given by the authors of *Applying for a liquor license reduces police stops of innocent people?*. All in all, we find our results are not sensitive to any of these concerns.

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