Title
Cross border trade in alcoholic beverages: Evidence from a natural experiment

I want to submit an abstract for:
Conference Presentation

Corresponding Author
Kyrre Rickertsen

E-Mail Corresponding Author
kyrre.rickertsen@nmbu.no

Affiliation
School of Economics and Business, Norwegian University of Life Sciences (NMBU)

Co-Author/s

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eivind Bjørkås</td>
<td>School of Economics and Business, Norwegian University of Life Sciences (NMBU)</td>
</tr>
</tbody>
</table>

E-Mail/s Co-Author/s

<table>
<thead>
<tr>
<th>E-Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:eivind.bjorkas@nmbu.no">eivind.bjorkas@nmbu.no</a></td>
</tr>
</tbody>
</table>

Keywords
cross border trade, wine, hard liquor, natural experiment

Research Question
Investigate the effects of cross border shopping on sales of alcoholic beverages.

Methods
Econometric analyses of Norwegian sales of alcoholic beverages. Access to cross border shopping is identified by variation in travel distances to foreign alcohol outlets caused by covid-19 travel restrictions.

Results
Reduced access to border trade reduced sales by 7-12 % for wine and 4-9 % for hard liquor. Largest effects in stores near the border.

Abstract
Introduction
Cross border shopping in alcoholic beverages is frequently due to tax differences between countries. This trade causes losses in tax revenues, promotes illegal border trade, and increases alcohol consumption. Hence, cross border trade is an important issue for public policy, and knowledge of its magnitude is crucial for effective public policies towards taxing and regulating the consumption of alcoholic beverages.

Research objectives
The empirical effects of access to cross border shopping on Norwegian sales of wine and hard liquor are investigated. Norway is an interesting case due to large variation in the accessibility to border trade in different parts of the country, substantial price differentials for alcoholic beverages as compared with neighboring countries, and complete transaction data on domestic alcohol sales from the national retail monopoly for wine and hard liquor (Vinmonopolet). Sales of wine and hard liquor in hotels, bars, restaurants, and duty-free shops are not included in our data.

Data
Complete sales records from Vinmonopolet for the period 2019-2022 were used. The data set consists of an unbalanced panel of all stores selling wine and hard liquor for private consumption. Weekly sales in liters of wine and hard liquor for the 344 physical stores that operated in Norway during the period were recoded in the data set.

Methods
For identification of access to cross border trade, the timing of lockdowns during the covid-19 pandemic were used. Just like many other countries, Norway imposed travel quarantines effectively closing borders, hence heavily restricting the access to border trade. The quarantines varied in time and space based on infection rates in eight different border regions in Sweden, Finland, and Russia. This exogenous variation was used to identify effects of border trade accessibility on domestic sales of wine and hard liquor in Norway.

Results
Reduced access to cross border shopping reduced sales of wine and hard liquor by approximately 7-12 % and 4-9 %, respectively. The reduction was stronger in areas close to the border and decreased monotonically with increased travel distance. Statistically significant cross border trade effects were estimated up to 2.5 - 3 hours driving for wine and 2 - 2.5 hours for hard liquor. These results are broadly in line with previous Nordic studies of cross border trade in alcohol (Beatty et. al., 2009; Friberg, et. al., 2022; Asplund, et. al., 2007). Our results indicate that border trade seems more important for wine than for hard liquor.

Discussion
Previous studies have identified border trade responses by utilizing price variation caused by tax rates differentials (Johansson, et al., 2014; Asplund, et al., 2007; Manuszak and Moul, 2009; Chiou and Muehlegger, 2008; Ben Lakhdar, et al., 2016) or exchange rate fluctuations (Friberg et al., 2022; Chandra, et al., 2014). Our study adds to a small literature that utilize the differences in the timing of travel restrictions to identify the magnitude of cross border trade (Freiberg et al., 2024; Kluser, 2023). Friberg et al. (2024) used this variation to study effects in the Norwegian grocery market, and Kluser (2023) used it on the Swiss grocery market.

This study contributes to the literature by studying alcoholic beverages, which are very important in the public policy debate for reasons related to tax avoidance, illegal trade, and health issues. Current estimates of the magnitude of cross border trade are based on a survey performed by Statistics Norway, while this study provides revealed preference estimates.

References


Consent
✔ I agree to the privacy policy.

You find the link to our privacy policy at the bottom of the page. In the privacy policy you find a link for exporting and/or erasing your personal data stored in our database.