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ALCOHOL DELIVERY AND UNDERAGE DRINKING: DATA-DRIVEN LESSONS FROM DIRECT-TO-CONSUMER WINE SHIPPING

By C. Jarrett Dieterle

INTRODUCTION

When it comes to having alcoholic beverages delivered to our doors, America is in a very different place today than it was 24 months ago. As COVID-19 spread across the world, markets were forced to adapt to the delivery economy model that has dominated throughout the pandemic.

Although the sale of most goods could readily be converted from brick-and-mortar purchases to doorstep shipping, alcohol was a notable exception. Many states still prohibited liquor stores, grocery stores and alcohol producers from delivering alcohol locally to consumers' homes, and nearly every state prohibited restaurants and bars from selling alcohol "to-go" or via delivery.[1] And while wineries were able to ship their bottles to customers in most states, distilleries and breweries were largely barred from the direct-to-consumer (DtC) shipping market.[2]

The COVID-19 effect on alcohol delivery and shipping has been both broad and deep. As of last fall, the vast majority of states had passed at least some type of alcohol delivery reform, if not multiple reforms.[3] In fact, many states are still actively considering alcohol delivery legislation or planning to do so in the years ahead.

As alcohol delivery has taken off, pushback has emerged. Although much of the pushback can be attributed to protectionist impulses by industry stakeholders, some of the concern stems from health and safety concerns like underage drinking as well as driving under the influence.[4] As more lawmakers across the country consider the future of alcohol delivery in their states, it is important to understand these concerns and engage in data-driven investigations of their legitimacy.

UNDERAGE SALES

Perhaps more than any other issue, headlines about alcohol shipping are dominated by concerns that increased alcohol delivery will lead to a rise in underage alcohol consumption.[5] At a certain level, the worry that minors will use their parents' information to purchase alcohol and have it delivered to their homes is understandable. A high-profile investigation by the California Department of Alcoholic Beverage Control in May 2020 found an alarmingly high rate of delivery alcohol sales occurring without proper ID checks.[6] The fact that this investigation took place at the beginning of a global pandemic—and involved an on-demand delivery industry that had only just started allowing alcohol delivery—did not temper the outcry.

While the on-demand delivery companies in the investigation reportedly failed to check IDs in 4 out of every 5 alcohol deliveries, similar deliveries from restaurant employees had a failure rate of 1 in 5.[7] This initial disparity may have been because restaurant employees were already trained in ID verification protocols for on-premises alcohol sales and were therefore able to apply this training in the delivery setting. In contrast, many on-demand delivery companies were not engaged in the alcohol delivery business in a widespread way until the onset of COVID-19. Additionally, as alcohol delivery became permitted in more and more jurisdictions as the pandemic continued, on-demand delivery companies responded by onboarding new ID-verification protocols to ensure higher compliance rates.[8]

Meanwhile, as COVID-19 was reshaping the alcohol delivery landscape, the Alcohol and Tobacco Tax and Trade Bureau (TTB)—the federal agency tasked with regulating alcohol at the federal level—was undertaking a comprehensive review of the alcohol industry at large. Based on direction from the Biden administration, the TTB evaluated the alcohol industry to determine whether and how it could be made more competitive.

The TTB culminated its review with a report in February 2022 that made numerous observations and recommendations about the industry.[9] Although much of the TTB's report is beyond the purview of this paper, it did generate headlines with its discussion of DtC shipping from alcohol producers. The agency discussed the discrepancy between most states allowing DtC wine shipments but not allowing DtC shipments of beer and distilled spirits. The TTB also noted that DtC shipping could act as an alternative to the three-tier system of alcohol distribution, which often works to prevent alcohol producers from selling their products directly to consumers by requiring the use of a wholesaler as a middleman in the supply chain.[10]

The agency stopped short of endorsing DtC shipping reforms at the state level, but it did encourage state policymakers to evaluate DtC shipping as a potential reform.[11] The TTB specifically addressed concerns about underage drinking voiced by opponents of enhanced DtC shipping, pointing out that a 2003 Federal Trade Commission (FTC) effort to analyze underage drinking for DtC wine shipments showed "few or no problems" with sales to minors in states that allowed such shipments.[12]

Despite some opponents of alcohol delivery portraying underage sales as an especially prevalent problem in the delivery context, the reality is that any point of sale is a potential opportunity for underage individuals to access alcohol. Many Americans wistfully recall tales of college beer runs to the local gas station where clerks never checked IDs—a phenomenon validated by noncompliance data. Consider recent data from undercover operations in New York, which found failure rates that mirrored the 1 in 5 failure rate in California's study of restaurant employee alcohol deliveries.[13] This underscores the fact that the application and consistent use of proper ID-checking protocols by those who sell alcohol to consumers matters more than the *type* of sale—for example, delivery versus brick-and-mortar.

Unfortunately, the debate of alcohol delivery and underage access has largely been relegated to the land of anecdote. As policymakers continue to grapple with alcohol delivery reforms in the years ahead, more empirical evidence is needed to evaluate underage alcohol access in the delivery context. One overlooked possibility for engaging in such an analysis is the longest-existing form of alcohol delivery in America: DtC wine shipping. The experience of the DtC wine market provides a historical data trail that can inform our country's current debates of alcohol delivery and underage sales.

CASE STUDY: DIRECT-TO-CONSUMER WINE SHIPPING

As mentioned above, in 2003, the FTC published a report on DtC wine shipments.[14] Although the report noted that states allowing DtC wine shipping had reported few or no problems with underage sales, it also stated that it was "aware of no systematic studies assessing whether direct shipping causes an increase in alcohol consumption by minors."[15]

The FTC was correct to focus on attempts to study the link between direct shipping and alcohol consumption, as underage *consumption* is the social harm Americans are trying to prevent by keeping underage drinking laws on the books. Underage *sales*, while potentially informative in helping one understand underage consumption, are ultimately an enforcement issue that can be difficult to track in a comprehensive way. One of the most effective ways to discover underage sales is to run an undercover investigation or decoy operation. While these operations can be important for ensuring compliance with ID-checking laws, they are by nature limited in their scope and breadth. This limitation makes it difficult to study them in an empirical way.

On the other hand, underage alcohol consumption has been tracked and studied for decades. One such tracking tool is the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System (YRBSS) survey. The YRBSS survey is conducted on a biennial basis, with online data going back to 1991.[16] The version of the survey administered to high school students asks various health and behavior questions on topics ranging from driving habits to alcohol and tobacco use.[17] With regard to alcohol use, it asks high school students whether they currently drink alcohol, which is defined as having at least one alcoholic drink during the last 30 days.[18]

This provides a valuable measurement of underage alcohol consumption and a historical dataset that makes it possible to compare underage drinking in states that have allowed DtC wine shipments and those that have not.

Before we look at this data, however, it helps to first understand the DtC wine shipment landscape. In the past four decades, the number of states that allow such shipments has expanded considerably. In 1986, California was the only state that permitted DtC wine shipments.[19] By 2021, 46 states allowed DtC wine shipping.[20] Importantly, data from the Wine Institute provides a convenient midway point, giving a snapshot of which states allowed DtC wine shipments in 2004.[21] This was a pivotal year for DtC wine reform because it was the year the U.S. Supreme Court handed down its opinion in *Granholm v. Heald*, which held that it was unconstitutional for states to prohibit out-of-state DtC wine shipments while allowing in-state DtC wine shipments.[22] This opinion helped accelerate the nationwide movement toward expanded DtC wine shipping.

It is also important to understand how underage drinking rates have changed in America over the past several decades.

Perhaps one of the more under-reported trends in America has been the precipitous multi-decade decline in youth alcohol consumption. In 1991, over 50 percent of American high school students reported current alcohol use. By 2019, underage alcohol use had plummeted to just over 29 percent.[23] Youth binge drinking rates have shown a similar decline in recent years.[24] Researchers have suggested that everything from enhanced ID verification protocols to increased education efforts have led to the decline.[25]

Given the vast decline in underage drinking overall, it is important to analyze the effects of DtC wine shipping on underage drinking rates within that context. Because the YRBSS survey has documented a substantial decline in underage drinking over the past few decades in every state, simply comparing the top-line underage drinking rates of one state to another is of limited utility. Additionally, cultural differences between states further complicate cross-state comparisons of top-line drinking rates. For example, a state like Utah has far lower youth drinking rates—and overall drinking rates—than other states because of the influence of certain religious institutions. Attempting to unpack and control for such cultural and regional variables would not be practical.

Instead, it is most informative to measure the *rate* of the decline in underage drinking in states. In this fashion, we can compare differences among states that allow DtC wine shipping versus ones that do not, and we can also look at changes within states that have liberalized DtC wine shipping rules over time. To this end, we compared reported underage drinking rates in states in 2003 versus the rates from those same states in 2019, the most recent year for which data is available. (For states in which 2003 or 2019 data was not published, we used the next closest year of available data). See Tables 1 and 2 for the comparisons.

TABLE I. RATES OF UNDERAGE DRINKING REPORTED IN THE YRBSS SURVEY, BY STATE

State	2003	2019	Change
Alabama	40.2	22.5	-0.4402985
Alaska	38.7	22.1	-0.4289406
Arizona	51.8	26.6	-0.4864865
Arkansas*	43.1	25.4	-0.4106729
Colorado*	47.4	30.7	-0.3523207
Connecticut*	45.3	25.9	-0.4282561
Delaware**	45.4	28.7	-0.3678414
Florida	42.7	26.1	-0.3887588
Georgia	37.7	17.5	-0.535809
Hawaii*	34.8	20.4	-0.4137931
Idaho	34.8	26.6	-0.2356322
Illinois†	43.7	27.1	-0.3798627
Indiana‡	44.9	30.5	-0.3207127
Iowa*	43.8	25.6	-0.4155251
Kansas*	43.9	32.8	-0.2528474
Louisiana†	45.1	29.5	-0.345898
Maine	42.2	22.7	-0.4620853
Maryland*	39.8	24.1	-0.3944724
Massachusetts	45.7	29.8	-0.3479212
Michigan	44	25.4	-0.4227273
Mississippi	41.8	25.9	-0.3803828
Missouri	49.2	27.9	-0.4329268
Montana	49.5	33.4	-0.3252525
Nebraska	46.5	21	-0.5483871
Nevada	43.4	26.1	-0.3986175
New Hampshire	47.1	26.8	-0.4309979
New Jersey*	46.5	30.3	-0.3483871
New Mexico*	42.3	28.6	-0.3238771
New York	44.2	26.4	-0.4027149
Noth Carolina	39.4	24.2	-0.3857868
North Dakota	54.2	27.6	-0.4907749
Ohio	42.2	25.9	-0.3862559
Oklahoma	47.8	27.2	-0.4309623
PennsylvaniaΔ	42.2	25.9	-0.3862559
Rhode Island	44.5	21.5	-0.5168539
South Carolina**	43.2	23.1	-0.4652778
South Dakota	50.2	26.3	-0.4760956
Tennessee	41.1	21.6	-0.4744526
Texas*	47.3	27.8	-0.4122622
Utah	21.3	10	-0.5305164
Vermont	43.5	30.9	-0.2896552
West Virginia	44.4	30	-0.3243243
Wisconsin	47.3	29.8	-0.3699789
Wyoming‡	49	31	-0.3673469

DtC wine not allowed

DtC wine allowed

DtC allowed if a reciprocal state arrangement existed

Sources: "Direct-to-Consumer Shipping," Wine Institute, last accessed March 15, 2022. https://wineinstitute.org/our-work/policy/state/dtc; "Youth Online," Centers for Disease Control and Prevention, last accessed March 15, 2022. https://nccd.cdc.gov/Youthonline/App/Results.aspx.

* 2003 data not available, using 2005 data.

** 2019 data not available, using 2017 data.

† 2003 and 2005 data not available, using 2007 data.

‡ 2019 and 2017 data not available, using 2015 data.

Δ 2003, 2005 and 2007 data not available, using 2009 data.

Note: The data from the 2019 Youth Behavior Risk Survey was collected from August 2018 to June 2019.

TABLE 2. AVERAGE CALCULATED RATES OF UNDERAGE DRINKING, BY CATEGORY

Category	Average Change	Average Percentage Change
States allowing DtC from 2003 to 2019	-0.4425767	44.3
States that moved from reciprocal to full DtC between 2003 and 2019	-0.36199	36.2
States that moved from no DtC to full DtC between 2003 and 2019	-0.3874078	38.7
States that did not allow DtC at any time between 2003 and 2019	-0.4297598	43

Sources: "Direct-to-Consumer Shipping," Wine Institute, last accessed March 15, 2022. https://wineinstitute.org/our-work/policy/state/dtc; "Youth Online," Centers for Disease Control and Prevention, last accessed March 15, 2022. https://nccd.cdc.gov/Youthonline/App/Results.aspx.

Using the data from Table 1, we grouped the states into the following categories: allowed DtC shipment in 2003 and 2019, did not allow shipment in 2003 or in 2019, did not allow shipment in 2003 but allowed shipment in 2019 and allowed limited shipment in 2003 but allowed full shipment in 2019. We then averaged the rate of reduction in underage drinking in each of these groups (Table 2).

States that allowed DtC wine shipments in 2003 and in 2019 showed an average drop of 44.3 percent in the underage drinking rate. States that did not allow DtC wine shipments in 2003 and still did not in 2019 showed an average drop of 43 percent. In other words, underage drinking rates declined a few percentage points *more* in states that have continuously allowed DtC wine shipments over the past few decades versus ones that have continuously prohibited it. This is not to suggest that DtC wine shipments necessarily *reduce* underage drinking, but, at the very least, it does suggest that DtC wine shipments have not led to an increase in underage drinking rates.

Between 2003 and 2019, numerous states reformed their DtC wine shipment laws: 19 moved from prohibiting DtC wine shipments completely to allowing such shipments, and eight passed more moderate reforms, moving from so-called "reciprocal wine shipping" to full-fledged DtC shipping. (As background, reciprocal DtC laws were a phenomenon in the years before the aforementioned *Granholm* court ruling; such laws provided for a limited form of DtC shipping in that they allowed wine to be shipped from one state to another *only if* both states had reciprocity for such shipments. Therefore, states that moved from reciprocal DtC shipping to full-fledged DtC shipping engaged in a more moderate reform than states that moved from prohibiting DtC wine shipping completely to allowing full-fledged DtC shipping.)

Based on the collected data, states that engaged in more robust reform by moving from no DtC shipping to full-fledged DtC shipping saw an average drop of 38.7 percent in underage drinking rates from 2003 to 2019. States that engaged in the more limited reform of moving from reciprocal to full-fledged DtC shipping saw an average drop of 36.2 percent. In other words, taken as a group, states with more robust DtC reforms actually saw a slightly larger decrease in underage drinking rates than states that engaged in more limited reforms.

In the end, this data demonstrates that there is no discernible connection between DtC wine shipping and enhanced underage drinking rates. States that have continuously allowed DtC wine shipments for the past few decades have seen the largest decline in underage drinking. This suggests that allowing DtC wine shipments has not led to an increase in the consumption of alcohol by minors.

CONCLUSION

The experience of DtC wine shipping and its apparent lack of impact on underage drinking rates has implications for policymakers. As noted, whether alcohol delivery takes the form of a DtC shipment, a shipment from an alcohol retail store or a local delivery via a driver or courier, the basic function of ID verification and training remains the same: any situation in which alcohol is being delivered to a home constitutes a point-of-sale at which ID should be checked and verified to prevent underage purchases. As such, delivery personnel conducting the delivery should use proper ID-checking protocols to verify the age of the purchaser.

As lawmakers weigh the merits of additional alcohol delivery reforms—such as to-go cocktails, DtC shipments for beer and distilled spirits, or local delivery from grocery and liquor stores—they can draw on the experience of the DtC wine shipping movement as evidence that alcohol delivery can be done safely.

ABOUT THE AUTHOR

C. Jarrett Dieterle is a resident senior fellow at the R Street Institute in Washington, D.C., and the author of *Give Me Liberty and Give Me a Drink*.

ENDNOTES

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