

#### **Economic and Alcohol Industry Review**

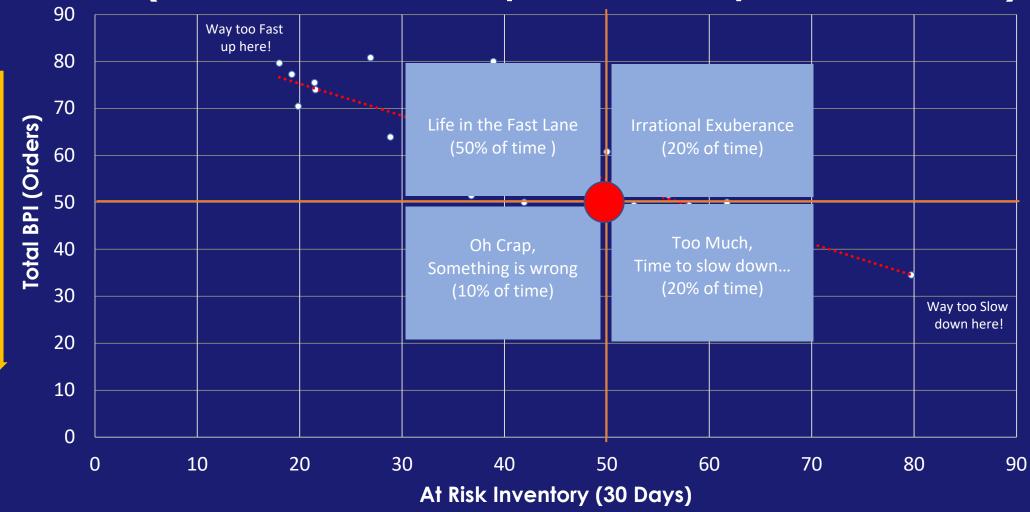
Lester Jones, Chief Economist/VP Analytics
NBWA

ljones@nbwa.org

Twitter @joneslester

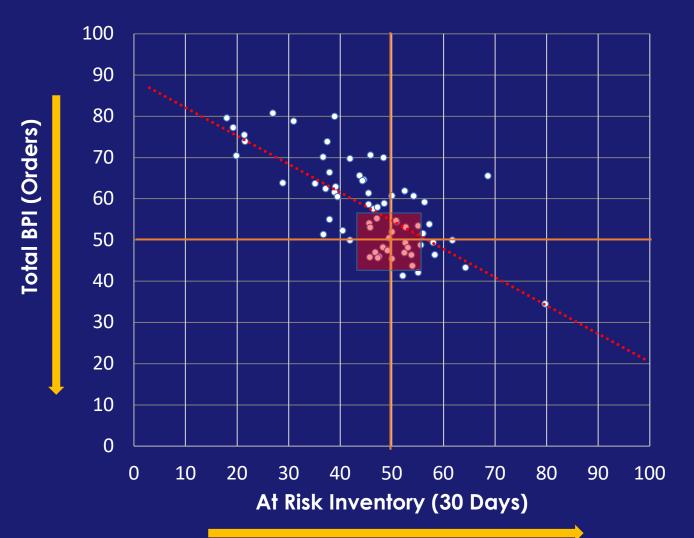
#### Total BPI vs. Total At-Risk Inventory (ARI)

Four Zones of Operations in Beer Distribution (% distribution of responses over past 72 months)





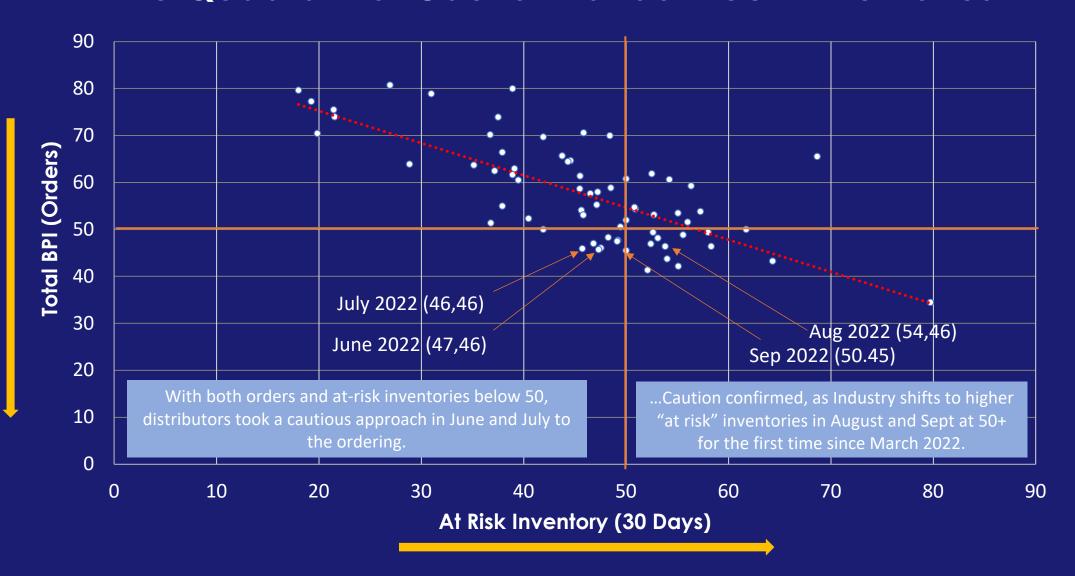
# Total BPI vs. Total At-Risk Inventory (ARI) 1/3 months in the Bulls Eye Region, "Boring but Predictable"



- 72 observations over six years
- 1/3 observations fall in the "boring but predictable zone" - it's the right amount of beer.
- On either end of the spectrum:
  - 100/20 = distributors will always order something
  - 00/90 = but never 100% all in even with perfect inventory
     In the center, its not 50/50... (50/55 vs. 55/50)

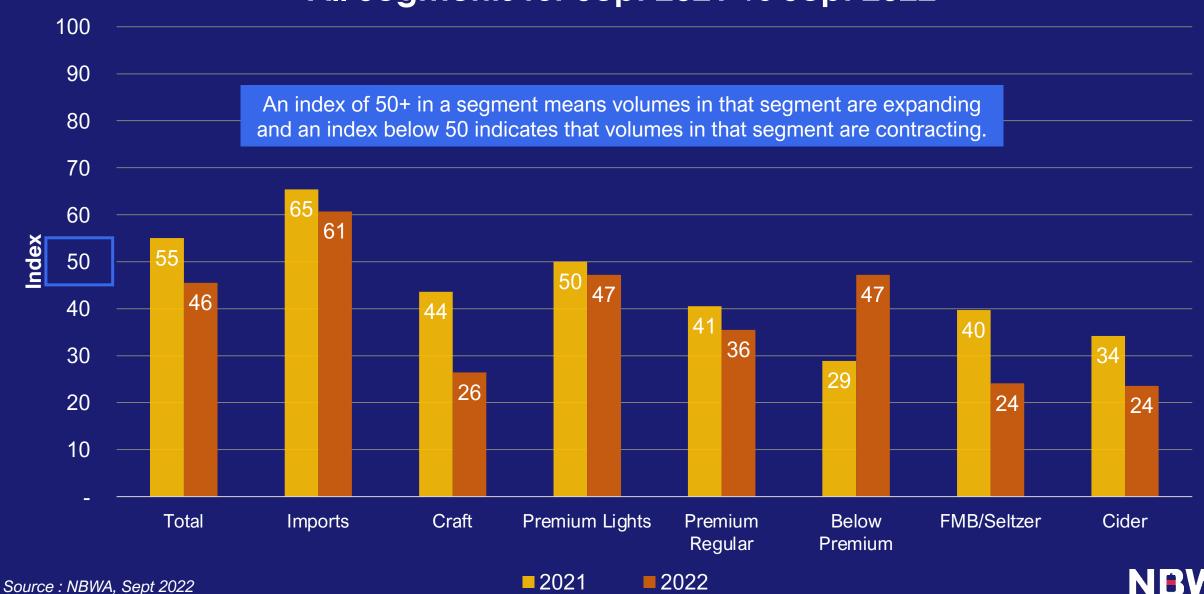


# Total BPI vs. Total At-Risk Inventory (ARI) The Quadrant of Caution vs Too Much Inventories

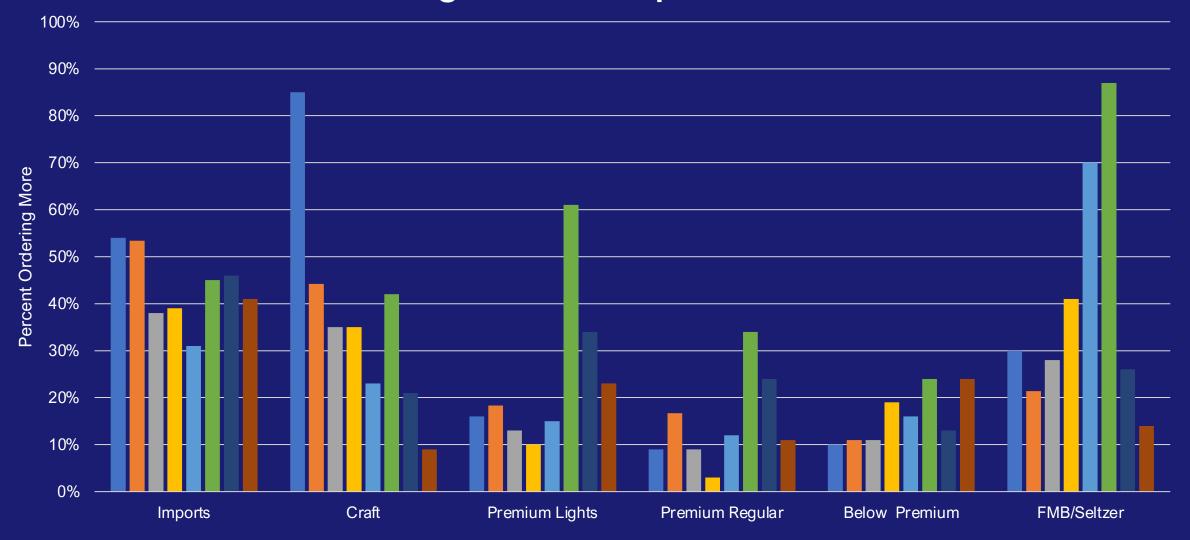




#### NBWA Beer Purchasers' Index All Segments for Sept 2021 vs Sept 2022



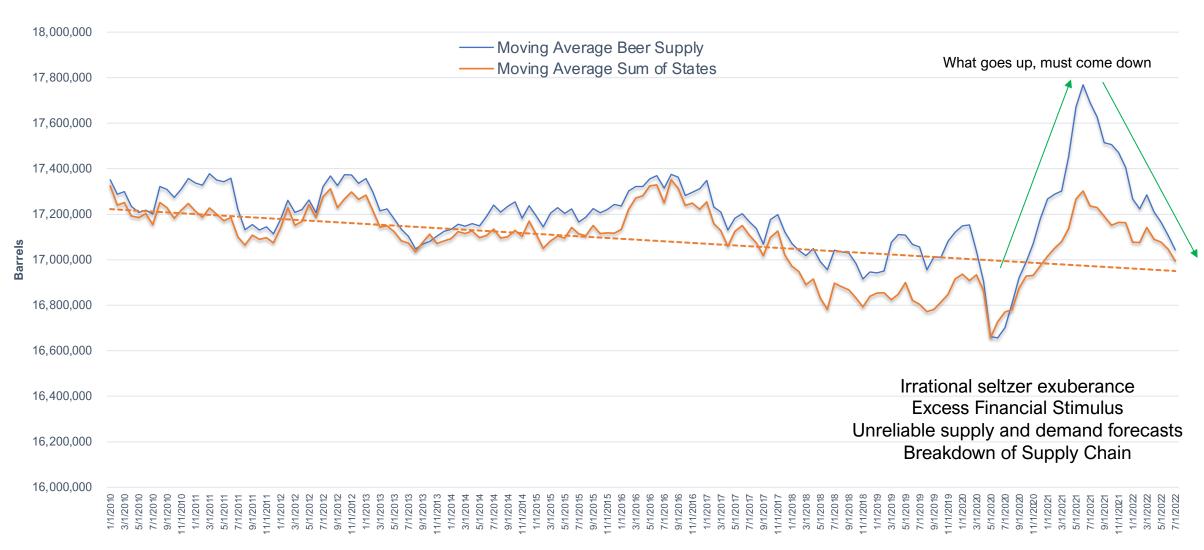
# NBWA Beer Purchasers' Index – "Percent Ordering More" All Segments for Sept 2015 - 2022





Source: NBWA, Sept 2022

#### Total Beer Industry Supply (Domestic + Imports) vs. Beer Institute's STWs 12 Month Moving Average Jan 2010 to July 2022





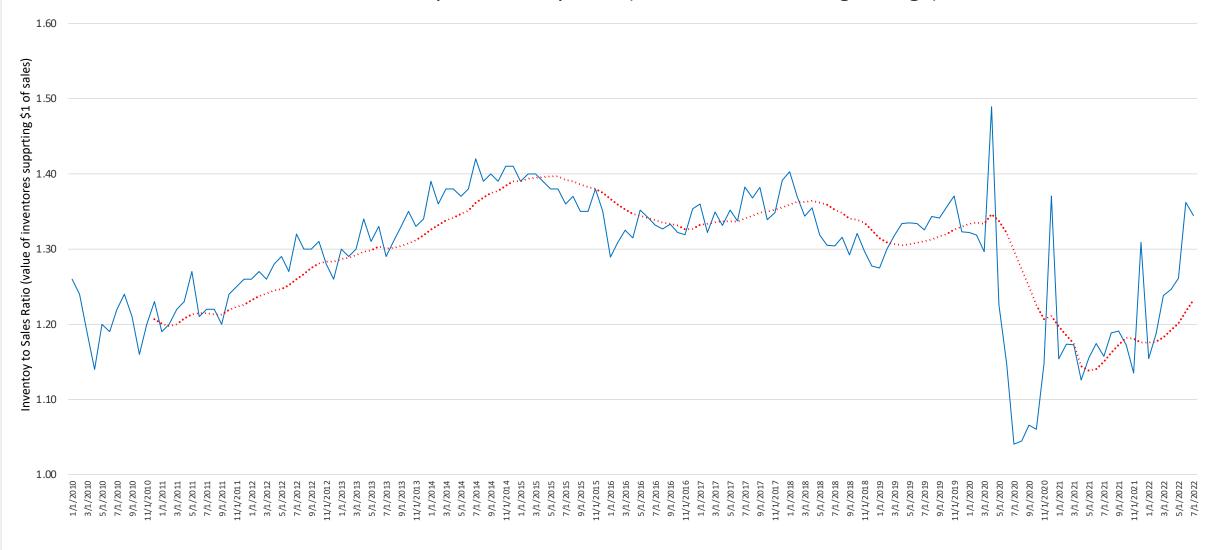
# Fintech (EFT) Supplier Shares 2019 to YTD 2022

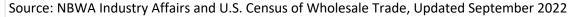
Supplier Name	2019	2020	2021	2022 (YTD)
ANHEUSER-BUSCH INBEV	42.7%	41.9%	40.4%	40.7%
MOLSONCOORS BREWING	24.8%	23.0%	22.0%	21.5%
CONSTELLATION BRANDS	9.8%	10.5%	11.7%	13.2%
MARK ANTHONY BRANDS INC	2.8%	4.5%	4.5%	4.3%
BOSTON BEER CO	2.8%	3.6%	4.2%	4.0%
HEINEKEN USA INC	3.6%	3.3%	3.5%	3.3%
D G YUENGLING & SON INC	1.7%	1.5%	1.6%	1.5%
PABST BREWING CO	1.6%	1.5%	1.4%	1.4%
DIAGEO USA	1.1%	1.2%	1.1%	1.0%
NEW BELGIUM BREWING COMPANY	0.5%	0.5%	0.6%	0.6%
OTHERS	8.5%	8.4%	9.1%	8.5%





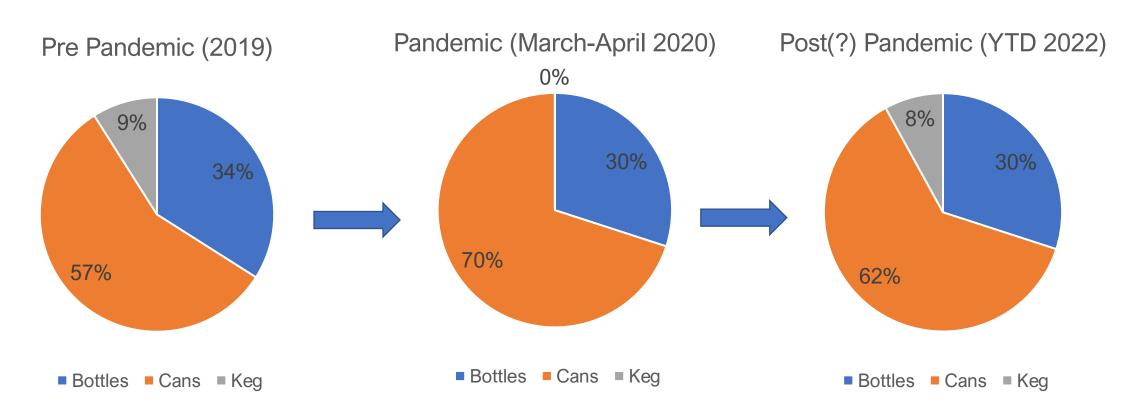
# U.S. Census of Wholesale Trade - Total Alcohol Beverage Distributors Alcohol Beverage Inventory/Sales Ratio January 2010 to July 2022 (red=12 month moving average)







#### Extreme Swings in Package Mix



With relatively the same level of demand, aluminum cans have given up share to steel kegs in 2022. Can crisis will settle down as can production ramps up and demand for cans goes down with more steel in the marketplace.

1 share of draft recovered takes 443 million 12-ounce units out of packaged beer.





In 2019, Friday was the big day. Stocking up day ahead of weekend.

COVID changed how we deliver beer.
Retailers are more cautious and holding less inventory.

Beer Distributors Busiest Days of the Week Percent of Total Beer Volumes in 2019 sold by Day of the Week

24.70% 2019	20.97% 2019	16.09% 2019	
Friday	Thursday	Wednesday	
Stocking up for weekend			
23.30% 2019 Tuesday			
Replenishment from Weekend	12.67% 2019 Monday		2.26% 2019





Almost 50% of beer is delivered to retailers on Tuesday and Friday.

In 2022, Tuesday is the "big" day.

Retailer replenishment day following weekend sales.

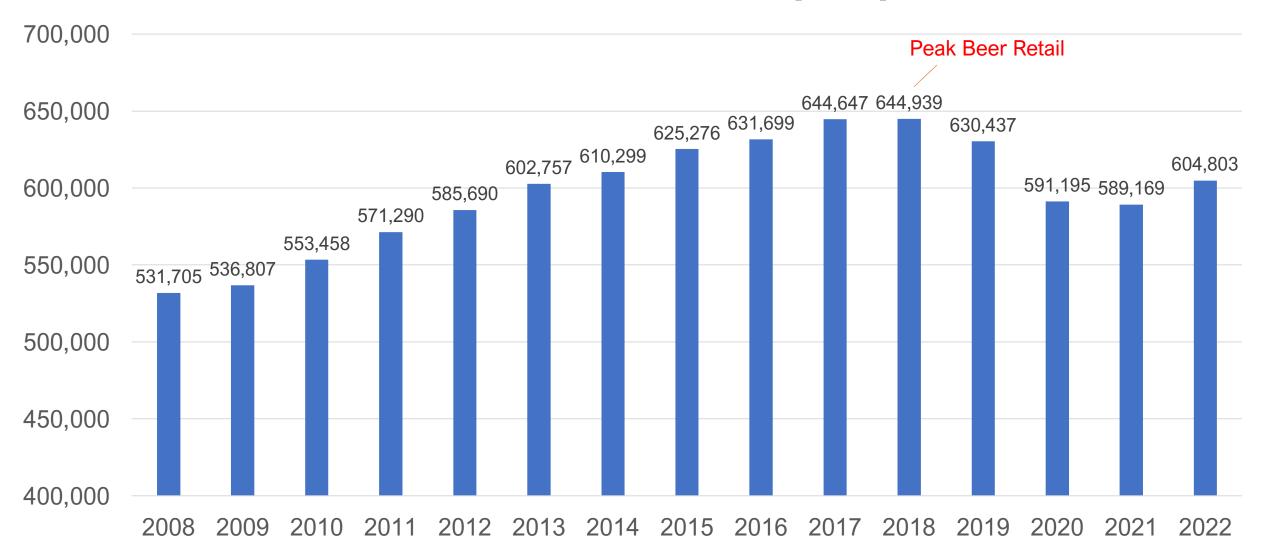
Beer Distributors Busiest Days of the Week
Percent of Total Beer Volumes in 2022 sold by Day of the Week







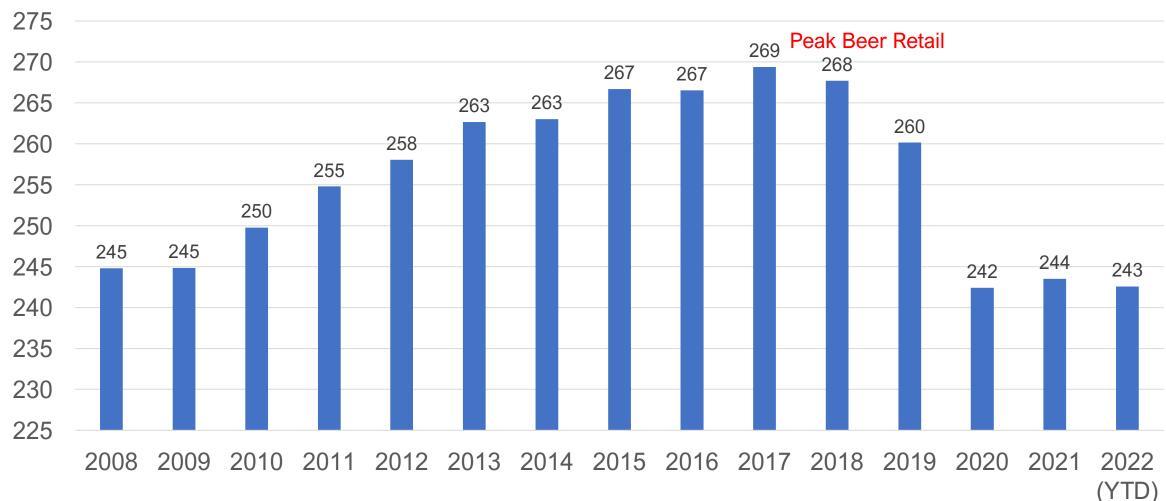
# Total U.S. Retail Establishments Selling Beer Yearly 2008 to 2022 YTD (Sept)







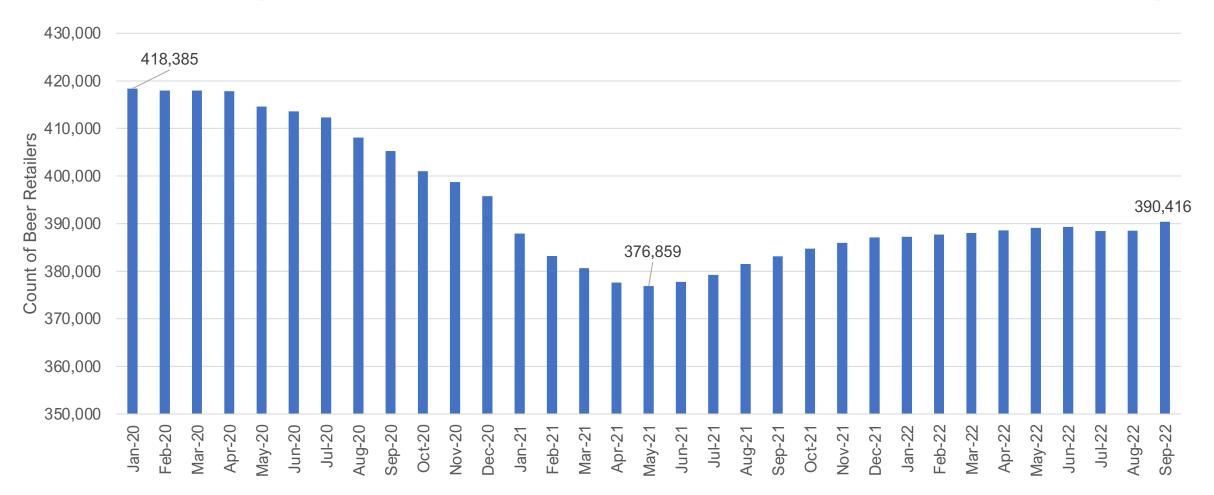
### Total U.S. Retail Establishments Selling Beer per 100,000 LDA Consumers Yearly 2008 to 2022 (Sept)





**NBWA** 

# The Fall and Rise of Independence Fewer Independent Beer Retailers in Post Covid Economy







#### U.S. Tax and Trade Bureau Brewery Count 13,804 Total Brewers YTD June 2022

State	Count	State	Count	State	Count
Alabama	80	Kentucky	131	North Dakota	34
Alaska	75	Louisiana	72	Ohio	552
Arizona	180	Maine	222	Oklahoma	97
Arkansas	80	Maryland	191	Oregon	446
California	1,549	Massachusetts	332	Pennsylvania	743
Colorado	604	Michigan	650	Rhode Island	52
Connecticut	173	Minnesota	308	South Carolina	158
Delaware	54	Mississippi	33	South Dakota	63
DC	19	Missouri	242	Tennessee	211
Florida	552	Montana	140	Texas	604
Georgia	224	Nebraska	80	Utah	61
Hawaii	52	Nevada	73	Vermont	113
Idaho	125	New Hampshire	151	Virginia	463
Illinois	431	New Jersey	206	Washington	680
Indiana	293	New Mexico	159	West Virginia	38
Iowa	162	New York	746	Wisconsin	386
Kansas	91	North Carolina	566	Wyoming	57



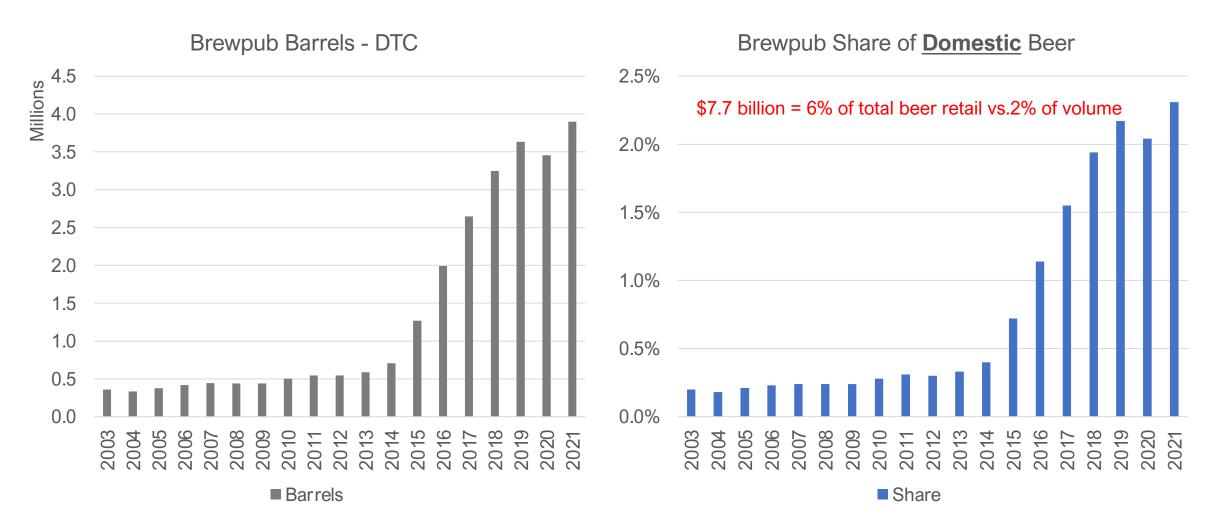
#### U.S. Tax and Trade Bureau Brewery Count 424 New Brewers YTD June 2022

State	Count	State	Count	State	Count
Alabama	3	Kentucky	3	North Dakota	0
Alaska	3	Louisiana	3	Ohio	27
Arizona	1	Maine	10	Oklahoma	2
Arkansas	4	Maryland	3	Oregon	5
California	25	Massachusetts	11	Pennsylvania	31
Colorado	18	Michigan	14	Rhode Island	0
Connecticut	1	Minnesota	7	South Carolina	9
Delaware	3	Mississippi	1	South Dakota	0
DC	0	Missouri	12	Tennessee	6
Florida	21	Montana	3	Texas	23
Georgia	16	Nebraska	2	Utah	6
Hawaii	2	Nevada	0	Vermont	2
Idaho	5	New Hampshire	11	Virginia	16
Illinois	13	New Jersey	8	Washington	13
Indiana	5	New Mexico	4	West Virginia	0
lowa	8	New York	26	Wisconsin	12
Kansas	3	North Carolina	22	Wyoming	1

#### Permits Per Capita (100,000 residents) U.S = 5.6 YTD June 2022 (2022 Estimated Population)

State	Count	State	Count	State	Count
Alabama	2.1	Kentucky	3.9	North Dakota	6.1
Alaska	14.2	Louisiana	2.1	Ohio	6.3
Arizona	3.3	Maine	20.5	Oklahoma	3.4
Arkansas	3.6	Maryland	4.1	Oregon	13.7
California	5.4	Massachusetts	6.2	Pennsylvania	7.5
Colorado	13.8	Michigan	8.6	Rhode Island	6.1
Connecticut	6.3	Minnesota	7.3	South Carolina	4.1
Delaware	7.0	Mississippi	1.6	South Dakota	9.8
DC	3.8	Missouri	5.3	Tennessee	4.0
Florida	3.3	Montana	16.6	Texas	2.9
Georgia	2.8	Nebraska	5.7	Utah	2.7
Hawaii	4.7	Nevada	3.1	Vermont	22.3
Idaho	8.9	New Hampshire	13.8	Virginia	7.2
Illinois	4.6	New Jersey	2.9	Washington	11.6
Indiana	5.9	New Mexico	10.1	West Virginia	2.8
Iowa	7.0	New York	4.9	Wisconsin	8.7
Kansas	4.3	North Carolina	7.2	Wyoming	13.4

# Tax Determined Beer (DTC Brewpubs) Record Year in 2021 (volume and share)





## Working More, Doing Less

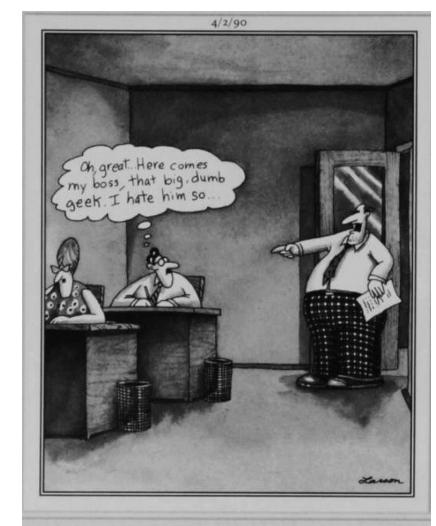
U.S. Bureau of Labor Statistics
<a href="Labor Productivity">Labor Productivity</a>

- Nonfarm business sector labor productivity <u>decreased 7.3 percent</u> in the first quarter of 2022!
- Business output decreased 2.3 percent and hours worked increased 5.4 percent.
- This is the <u>largest decline in</u> <u>quarterly productivity since the</u> <u>third quarter of 1947</u>, when the measure decreased 11.7 percent.



# Economy is at an inflection point

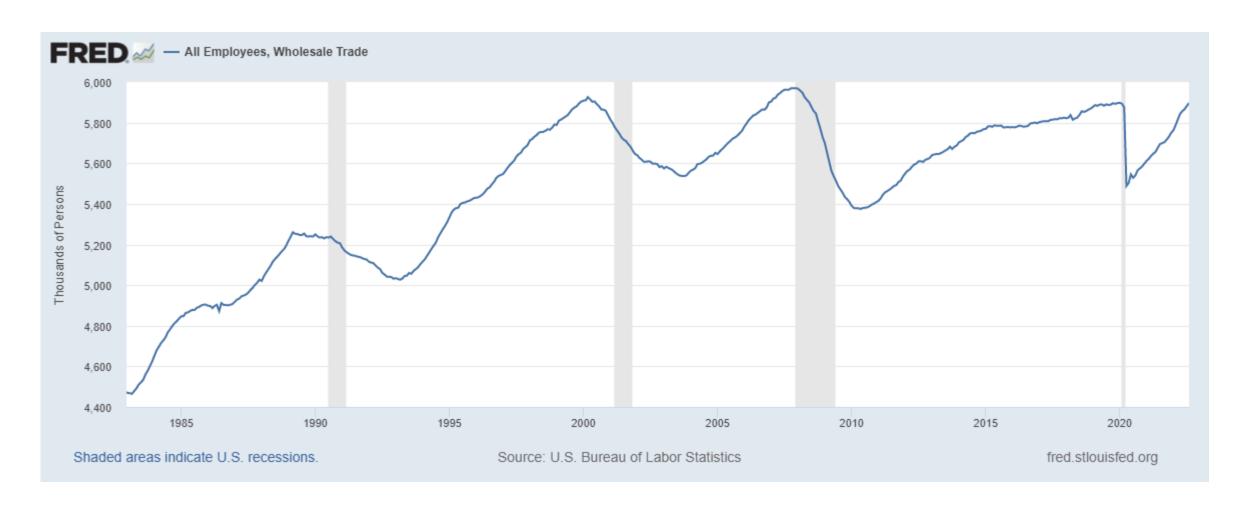
- Tesla laying off 10% of its workforce
- Netflix eliminated 150 positions
- Peloton Interactive let go roughly 2,800 worldwide positions
- Carvana lay off 2,500 employees, or about 12% of its staff
- Coinbase to Lay Off 18% of Staff Amid Crypto Meltdown
- Gopuff laying off 1,500 employees globally, about 10% of its workforce and closing 76 warehouses across the US
- Amazon, Ford, Loan Depot, Twilio ...
- August jobs report added 315,000 (slowing down, but not much)
- July Job Openings (JOLTs) holding steady /unchanged
- Unemployment at 3.7%
- Inflation seems like its peaking but not tamed yet
- Economy continues shifting back to services from goods



"Oh, yeah? Lewis, you're fired! You apparently forgot this is a cartoon, and I can read every word you think!"



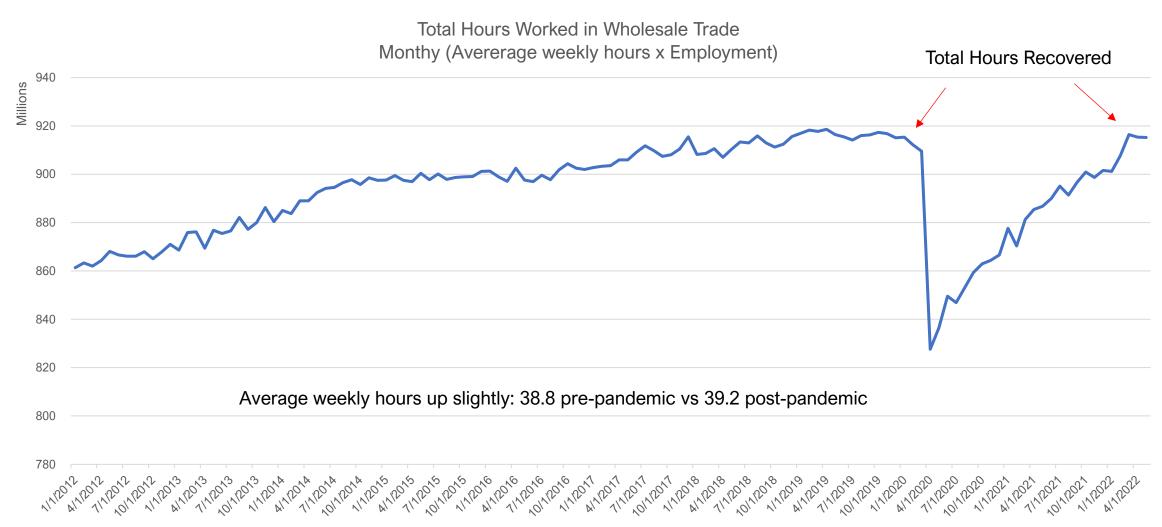
#### Wholesale Trade Employment Recovered





# Wholesale Trade Recovered Total 900 Million Hours Worked

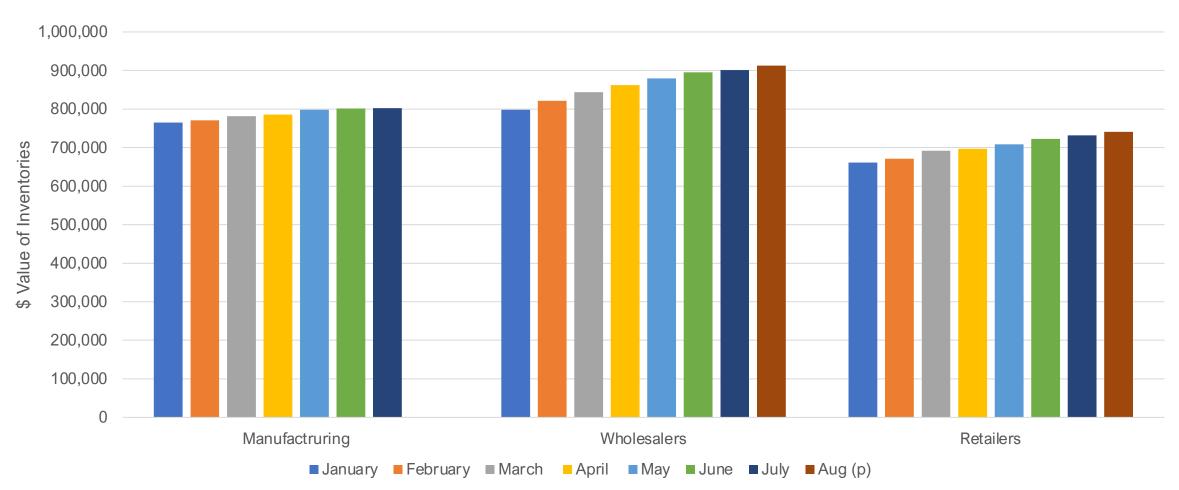
(All Wholesale Food, Beverages, Medical, Auto Parts, Furniture, etc.)





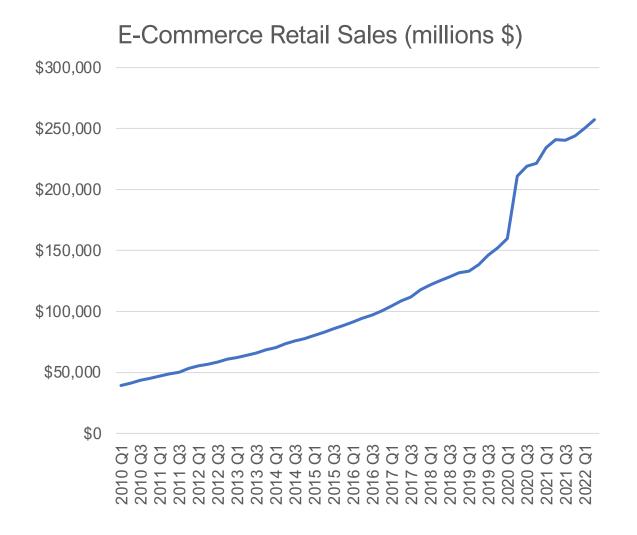
# Inventories Continue to Pile Up Across the Entire Economy

Monthly Inventory Values 2022 (seasonally Adjusted)

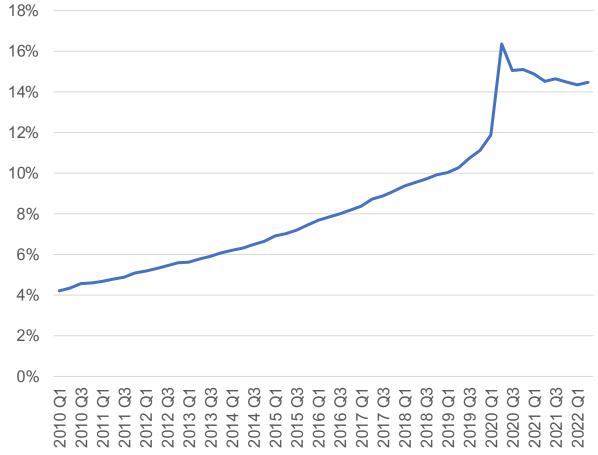




#### E-Commerce Sales and Share of Total Retail

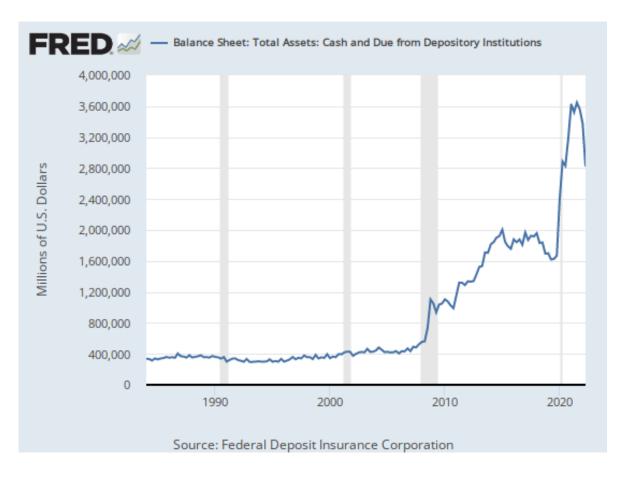


#### E-Commerce Share of Retail Sales





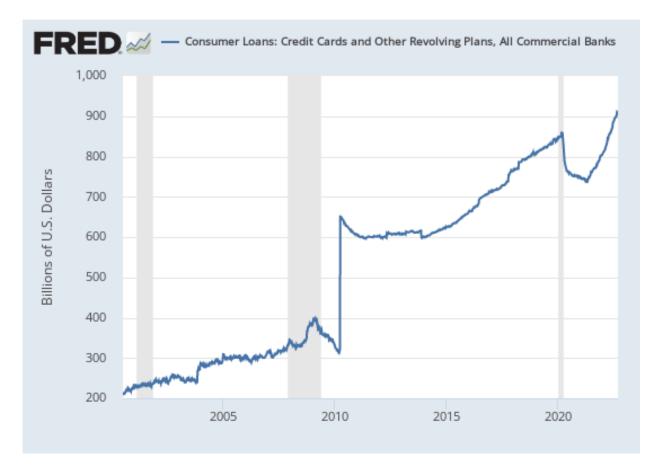
# Can the Fed Make a Soft Landing? Consumers are still well funded...

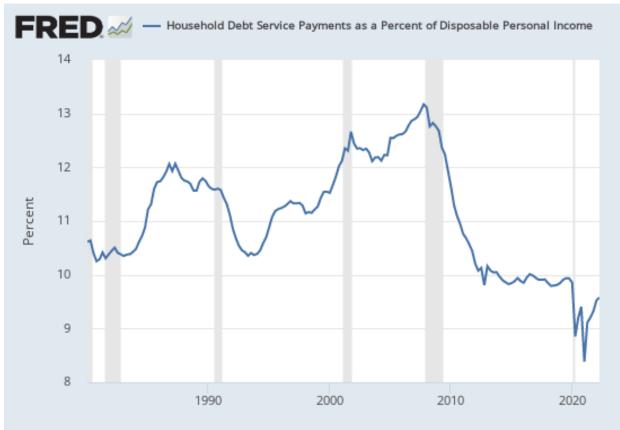






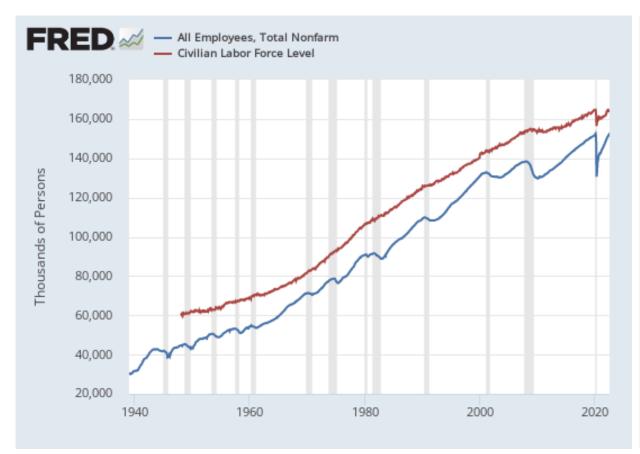
# Can the Fed Make a Soft Landing? Debt and debt service are manageable...

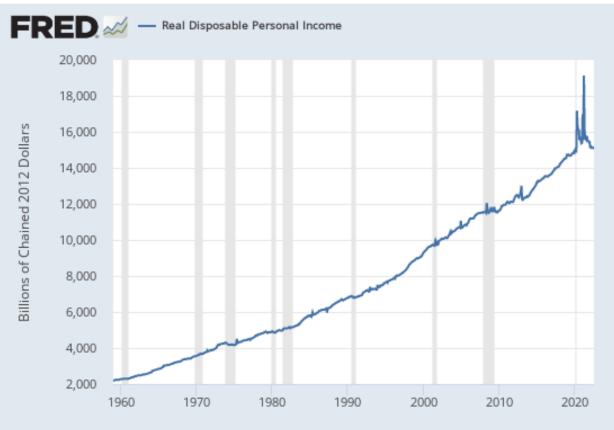






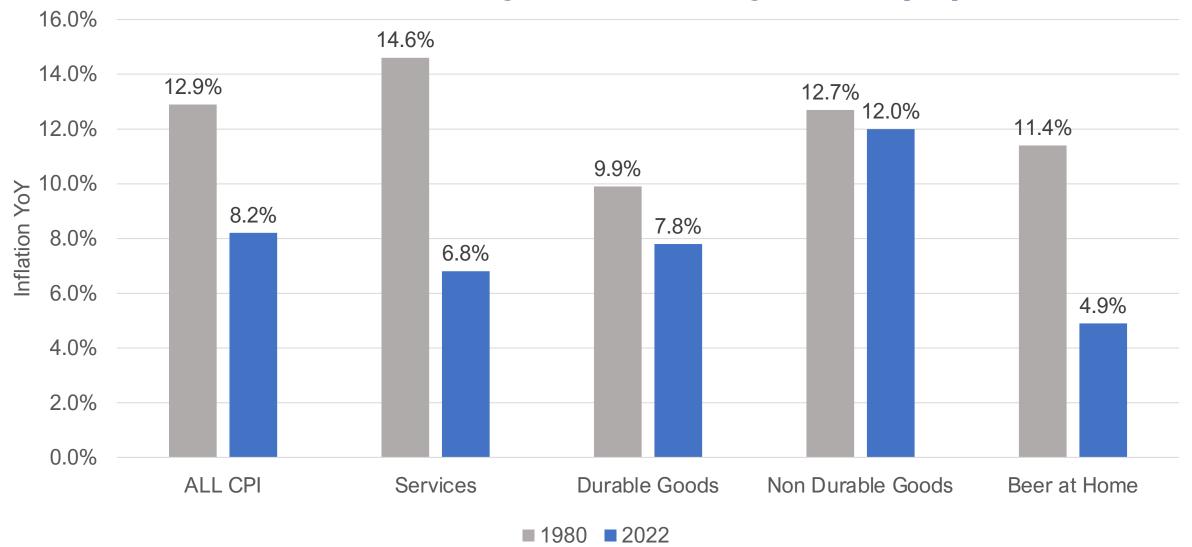
# Can the Fed Make a Soft Landing? Labor Market remains strong...







#### Non-Durable Goods Leading Inflation in 2022 YoY Inflation August 1980 vs. August 2022 (SA)

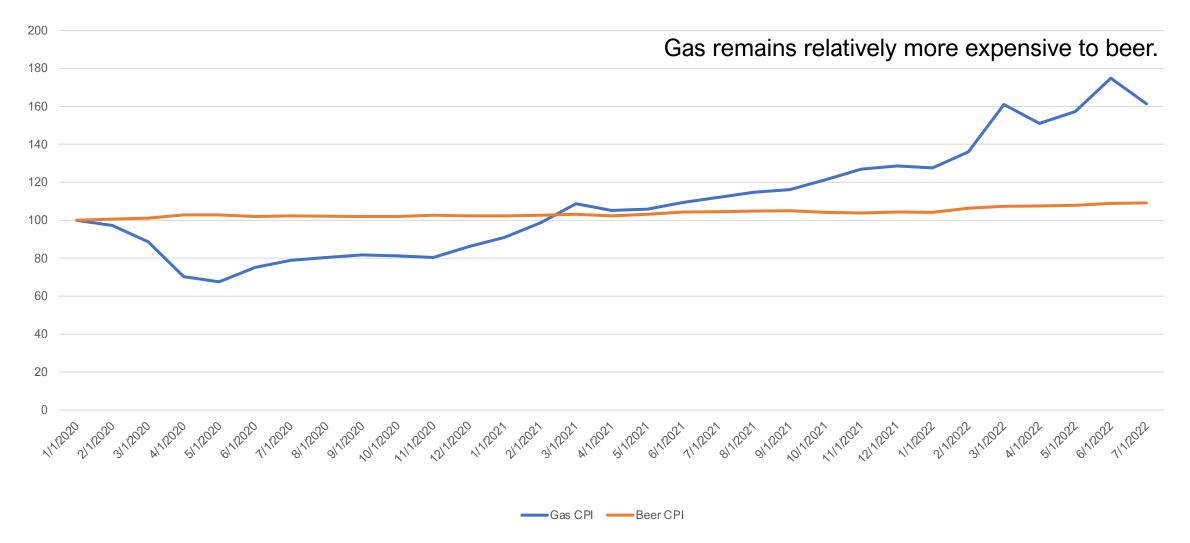




Chymoic Tavern & BAR

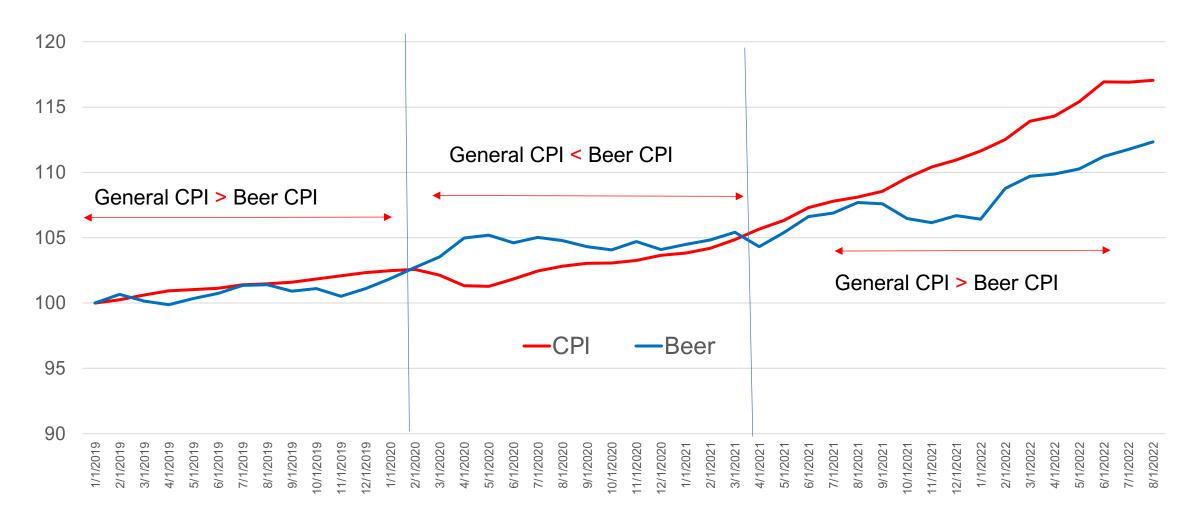
# BEER IS NOW CHEAPER THAN GAS DRINK. DONT DRIVE

# Gas vs Beer Prices BLS-CPI January 2020 to August 2022



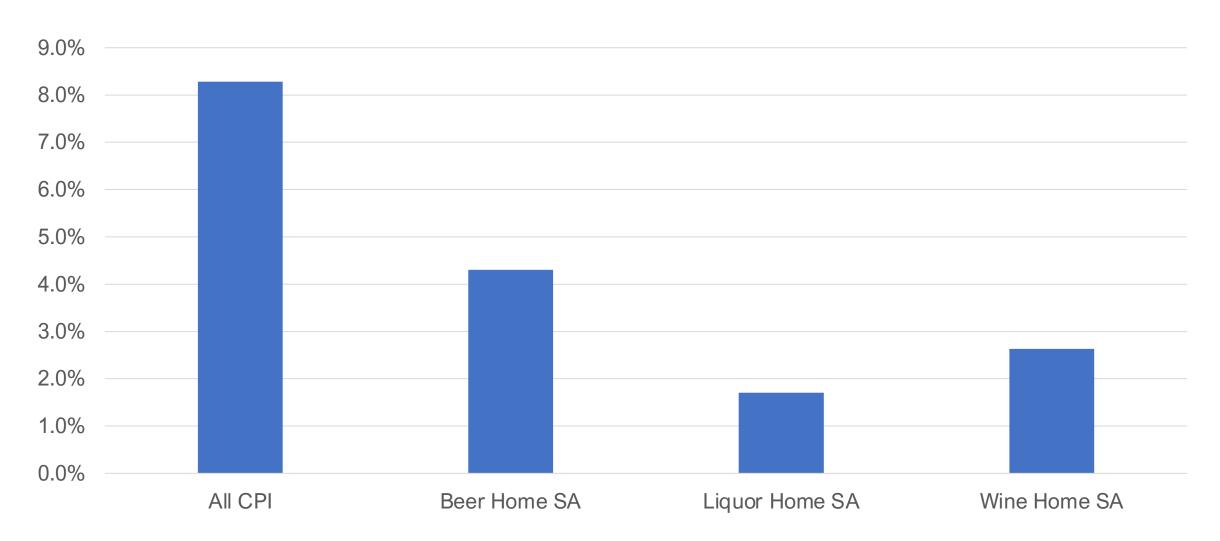


#### Beer CPI vs. General Price Level (CPI) Jan 2019 to August 2022



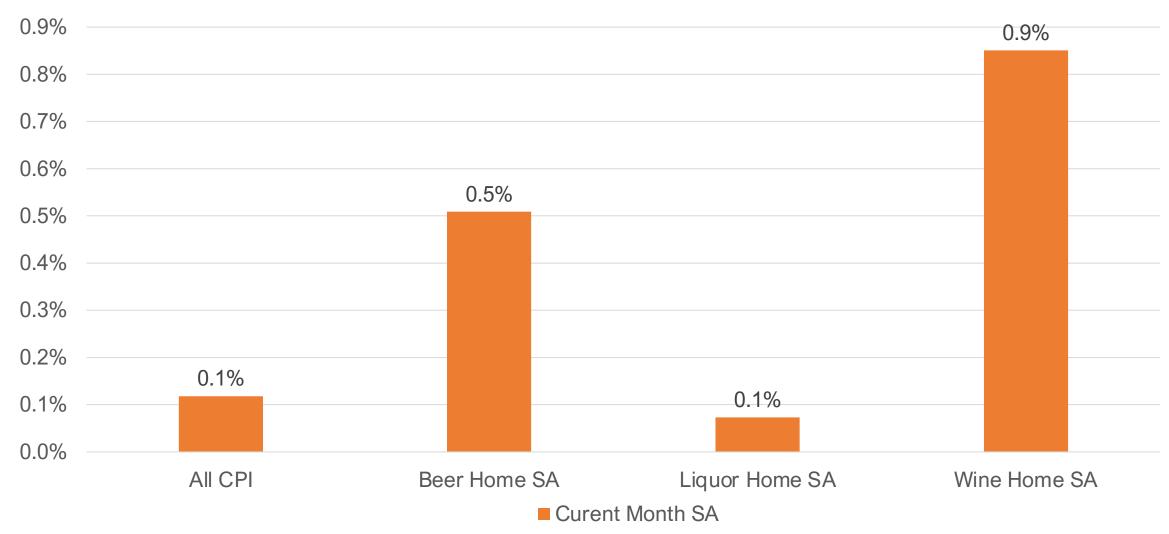


# Consumer Price Index Alcohol Beverages 12 Month Change August 2021 to August 2022



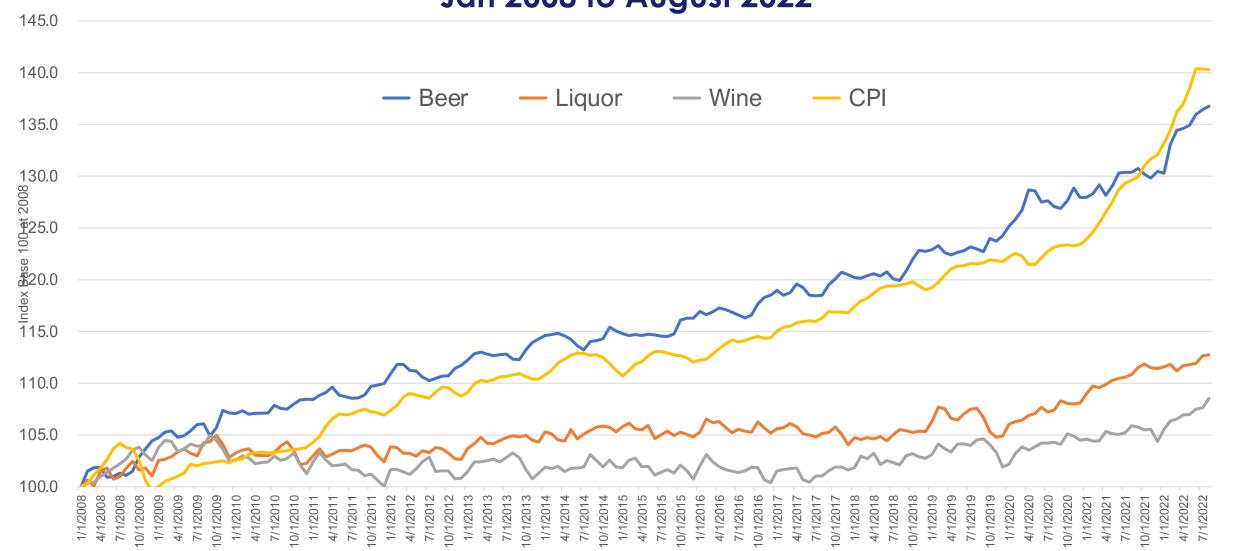


# CPI for All Items and Alcohol Beverages July 2022 to August 2022

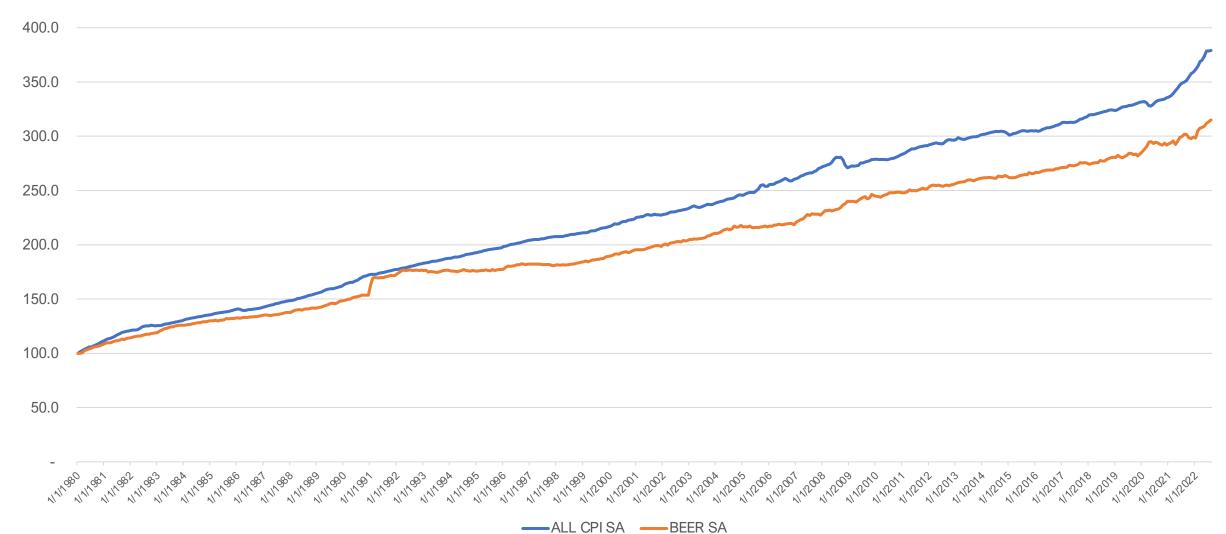




# Alcohol Beverage Inflation BLS at Home (Off Premise) Consumer Price Index Jan 2008 to August 2022

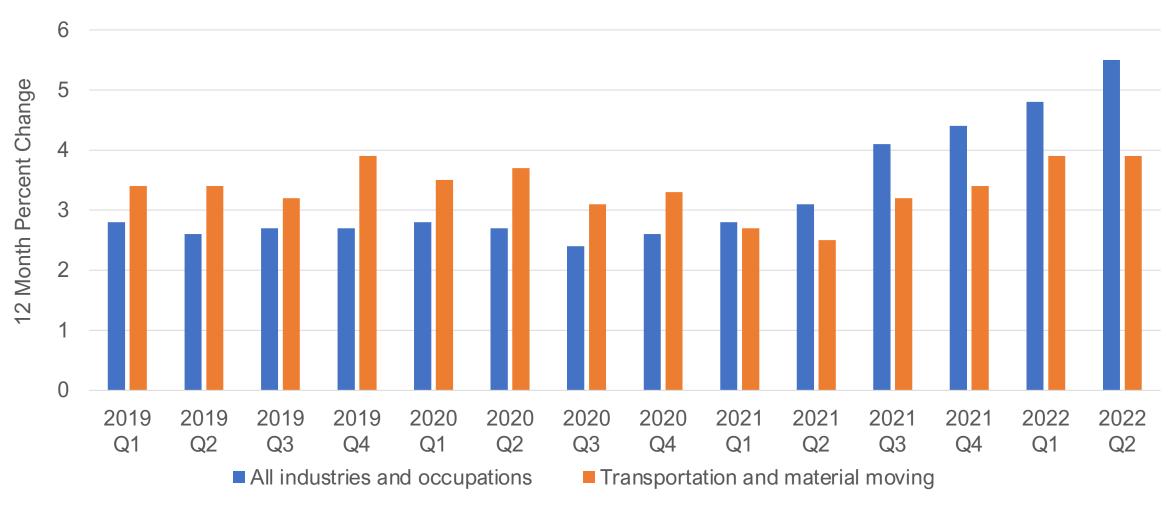


#### All CPI vs Beer CPI 1980 to Present



### **Employment Cost Rising**

Total Compensation for Private Industry Workers





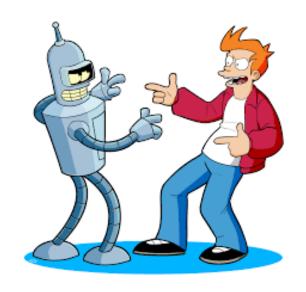
### Markets can find substitutes...

# Robot Sales in US, North America Continue Record Surge into 2022

POSTED 06/06/2022

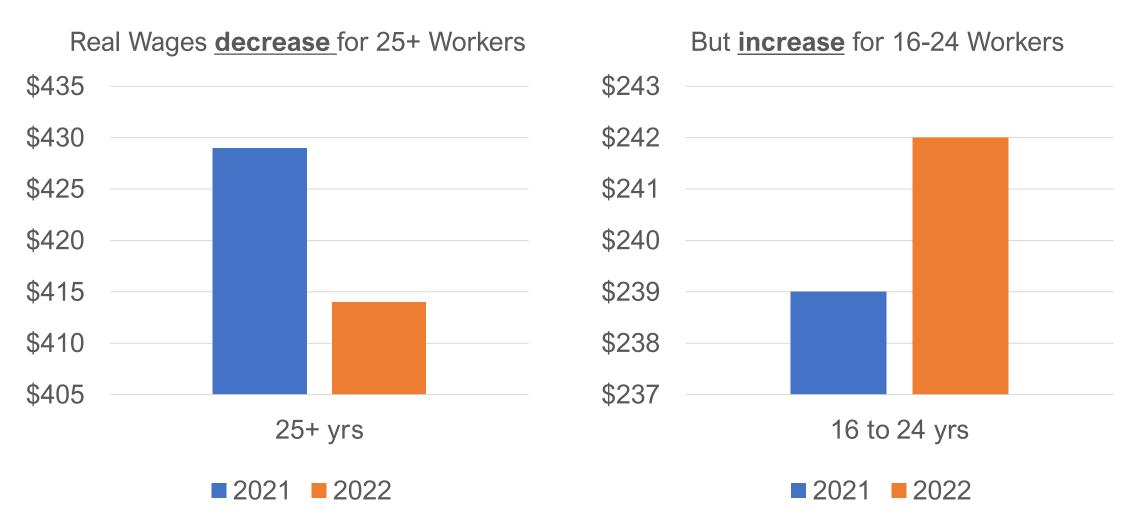
**ANN ARBOR, Michigan** – North American companies started the year by purchasing the most robots ever in a single quarter, with 11,595 robots sold at a value of \$646 million. According to the <u>Association for Advancing Automation</u>, these Q1 numbers represent growth of 28% and 43% respectively over the first quarter of 2021 and 7% and 25% respectively over the previous best quarter, Q4 of 2021. Each industry segment experienced double-digit growth over the same quarter of 2021.

"Every industry, including agriculture, construction, retail and hospitality, is now looking at how they can take advantage of robotics to make their companies more successful," said Alex Shikany, A3's vice president of membership and business intelligence, who will talk in



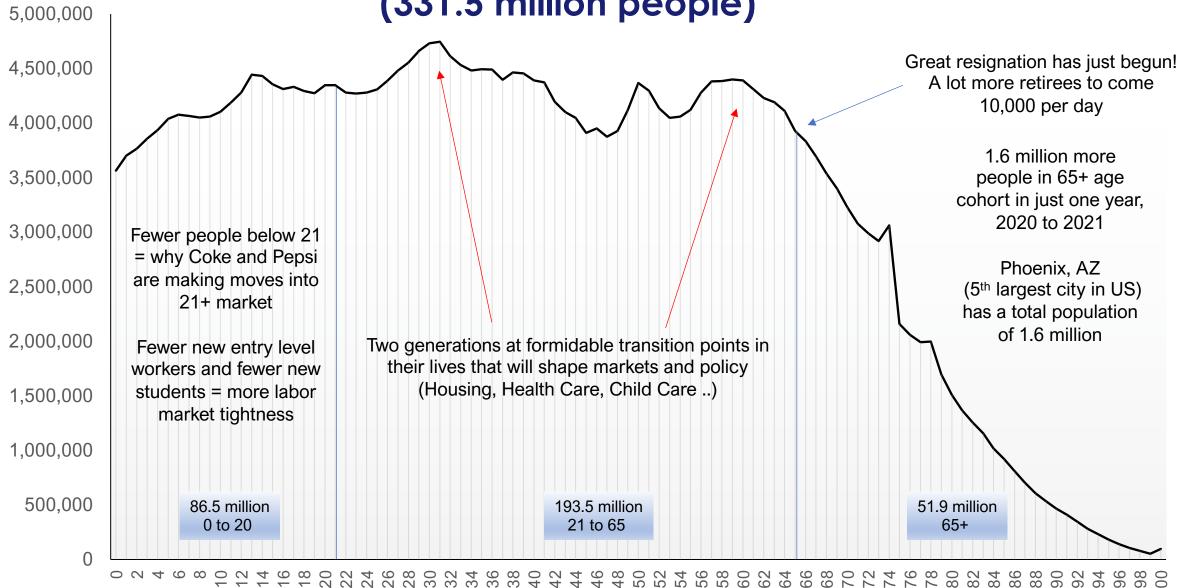


# Inflation creates winners and losers 2021 Q2 vs 2022 Q2 (Constant \$'s)

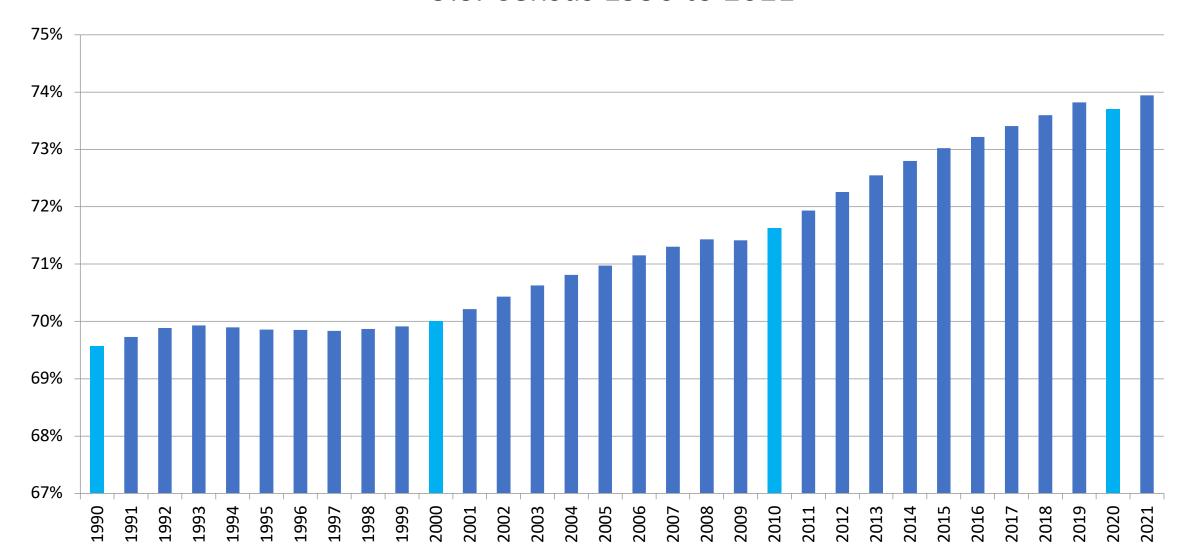




# U.S. Population by Age CY 2021 (331.5 million people)

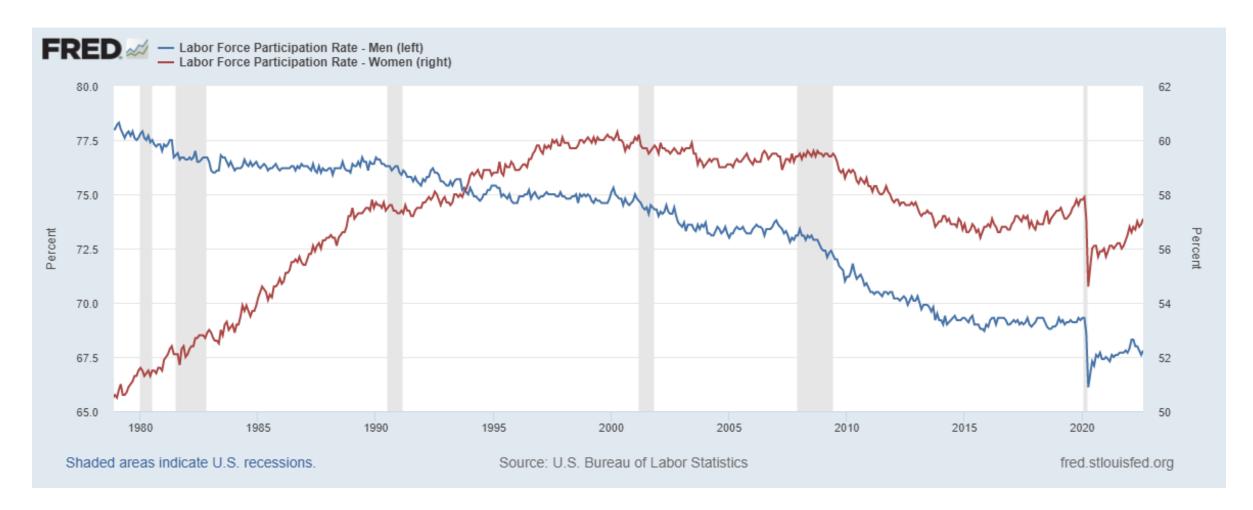


### Legal Drink Age Share of Total Resident Population U.S. Census 1990 to 2021





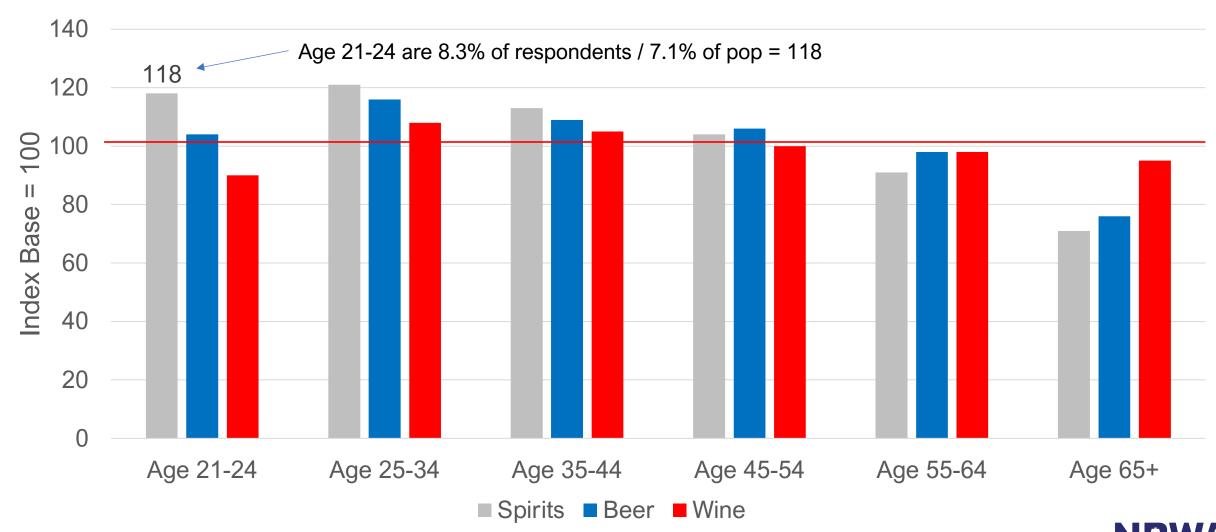
# Labor Force Participation Will Challenge and Change the Alcohol Beverage Industry





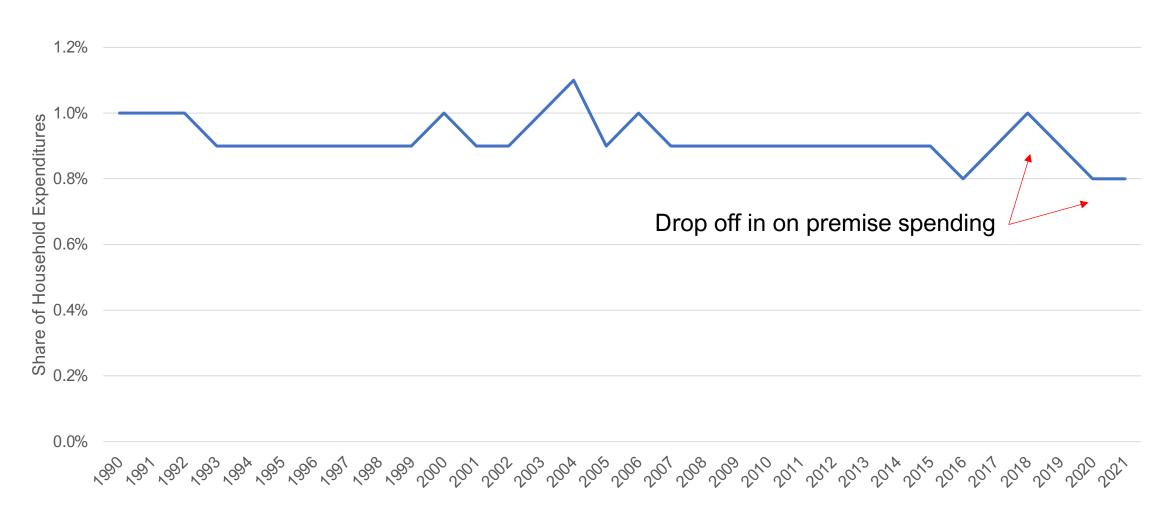
### Differences Across Age Groups

Alcohol Beverage Segments Past 30 Days "Drink/Purchase any \_\_\_\_?"



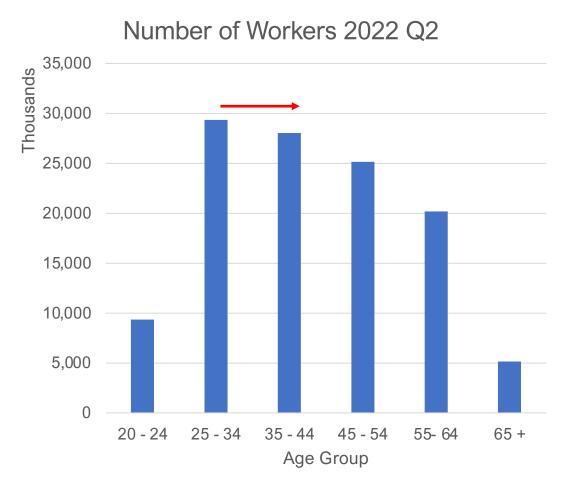


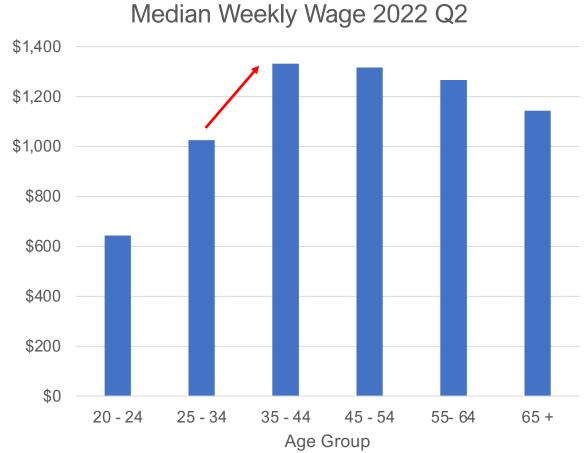
# Alcohol Spending Share of Total Consumer Expenditures 1990 to 2021





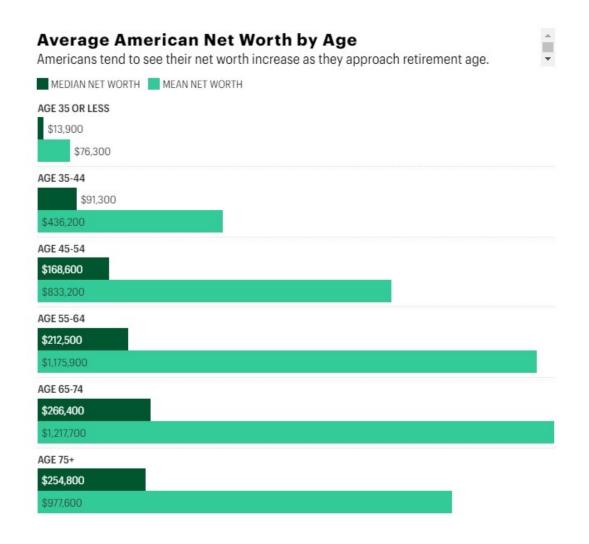
### 28 million workers (25-34) will get a 20% raise as they mature in the Labor Force They consistently spend about 1% of income on alcohol







### U.S. Total Wealth Tops \$150 Trillion in 2021

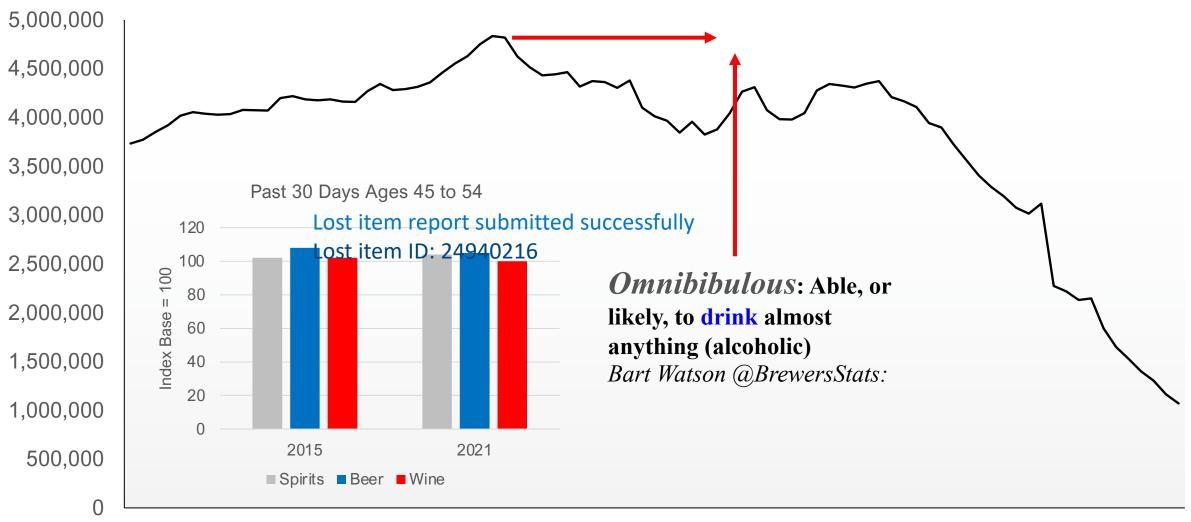


Millennials are banking on the Great Wealth Transfer. The Silent Generation and the Baby Boomers, upon their death, will transfer an estimated \$30 to \$68 trillion to adult children.

The story goes that the transfer will transform young consumers into alpha buyers of real estate, other big-ticket items.



# Where is Consumption Headed? U.S. Population by Age in 2022 and beyond



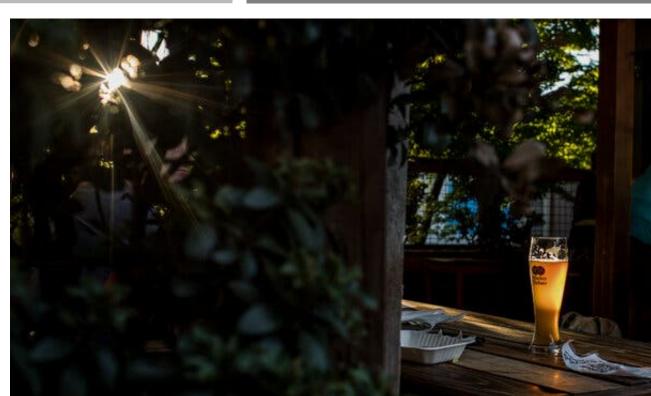
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84

#### The New York Times

### Rise in Deaths Spurs Effort to Raise Alcohol Taxes

Alcohol taxes have been stagnant for years. But after the pandemic sent alcohol-related deaths soaring, activists in Oregon

said higher taxes could save lives.



### Media and Public love "outrageous" alcohol news story

#### Does Dry January Dry Up Bar Sales?

The alcohol-abstaining month is over, but bars are still feeling the effects on their bottom lines

by Jaya Saxena | Feb 14, 2020, 11:30am EST

f 💆 🕝 SHARE



MOTHERS WITH YOUNG KIDS
CONSUMED 300% MORE ALCOHOL
DURING PANDEMIC, STUDY REVEALS

'Policymakers should be prepared to respond to the public health consequences of such a sudden, sustained increase in alcohol consumption,' health economist says

Americans Are Drinking 14% More Often During Pandemic, Study Finds

October 5, 2020 - 4:49 PM E1



U.S. Alcohol Consumption on Low End of Recent Readings

"Sixty percent of U.S. adults currently report drinking alcoholic beverages such as liquor, wine or beer, marking a decrease from 65% in 2019 when the measure was last tracked."

### Alcohol Use Among Older Adults

Poll finds risky drinking patterns in older adults during the COVID-19 pandemic

During the COVID-19 pandemic, 27% of older adults reported a decrease in their alcohol use, 14% an increase, and 59% had no change in their alcohol use."



# More News Keeps Coming

By Ben Turner published March 10, 2022

Just one pint of beer a day can make the brain look two years older.





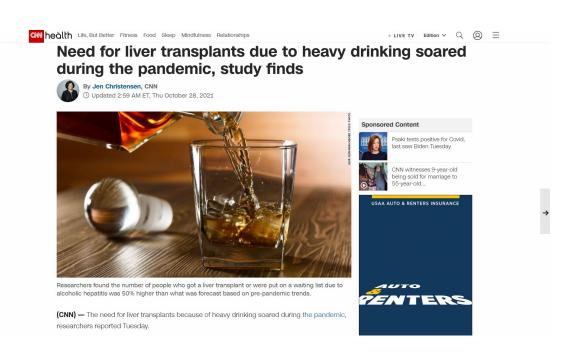






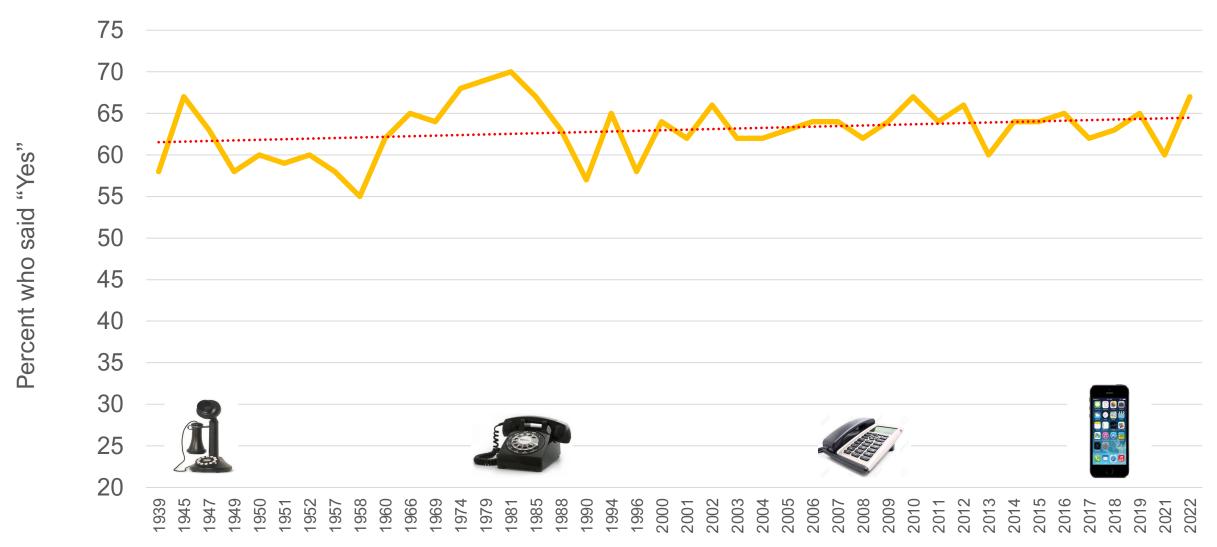


Just two units of alcohol a day are enough to make brains appear two years older. (Image credit: Shutterstock)





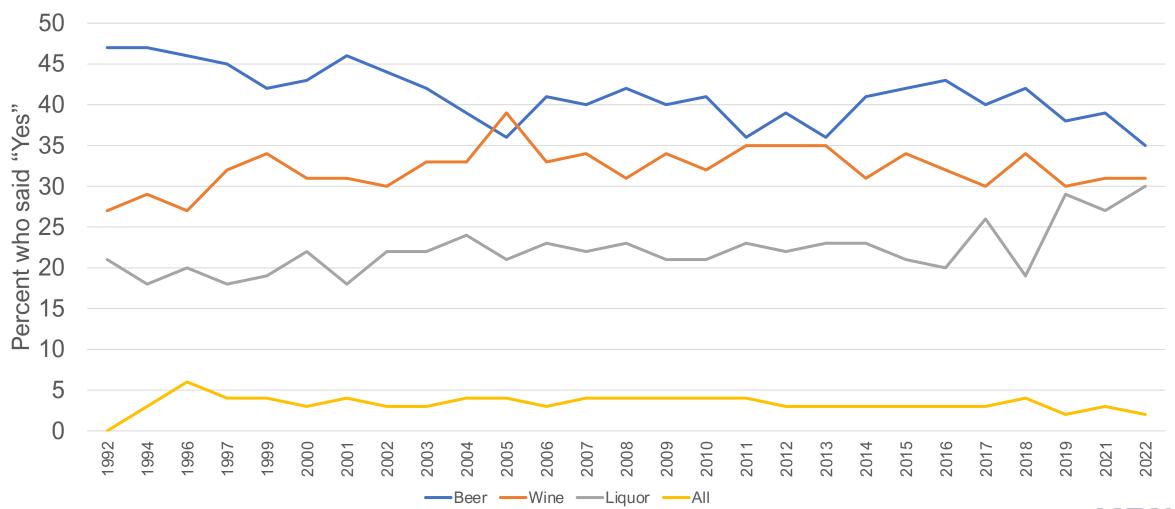
### Alcohol Is Consumption Is Consistent Over Time "Do You Have Occasion to Drink Alcohol?"





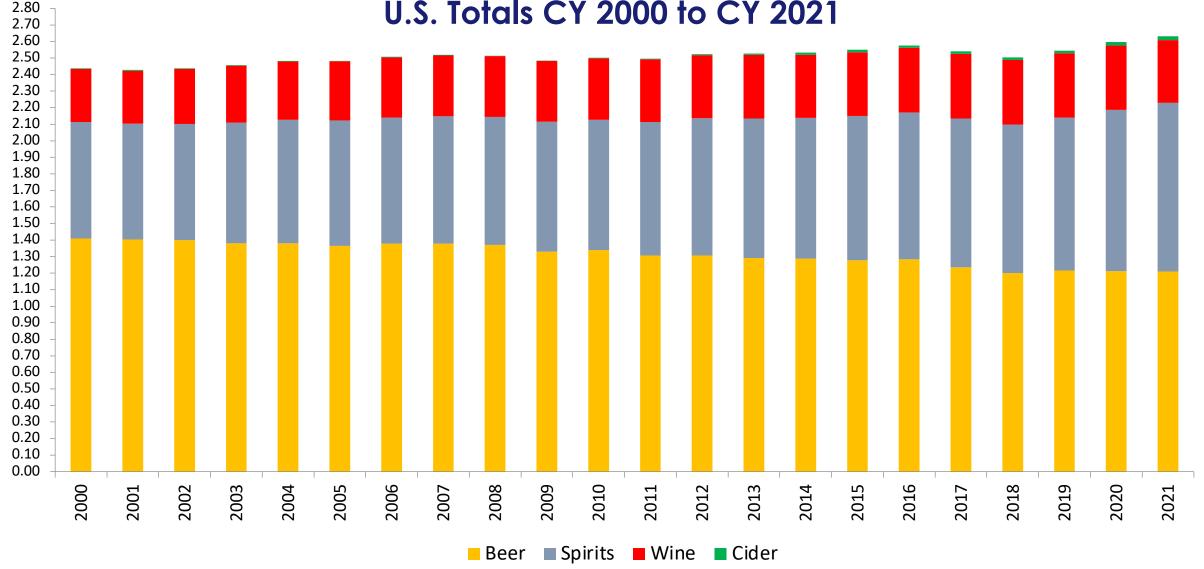
### Beer is the Preferred Beverage of Consumers, but lines are blurring 1992 to 2022

Beer continues to be preferred beverage of choice for US consumers of legal drinking age. (4 pts +/- margin of error)



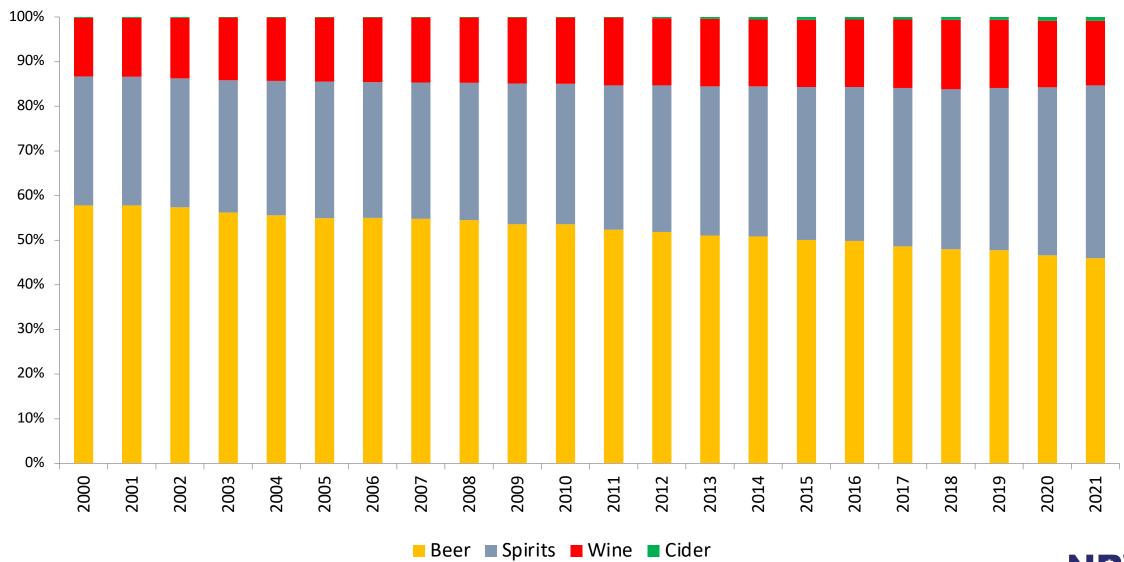


### Gallons of Ethanol Supplied Per Capita 21+ U.S. Totals CY 2000 to CY 2021





### Share of Gallons of Ethanol Supplied Per Capita 21+ U.S. Totals CY 2000 to CY 2021





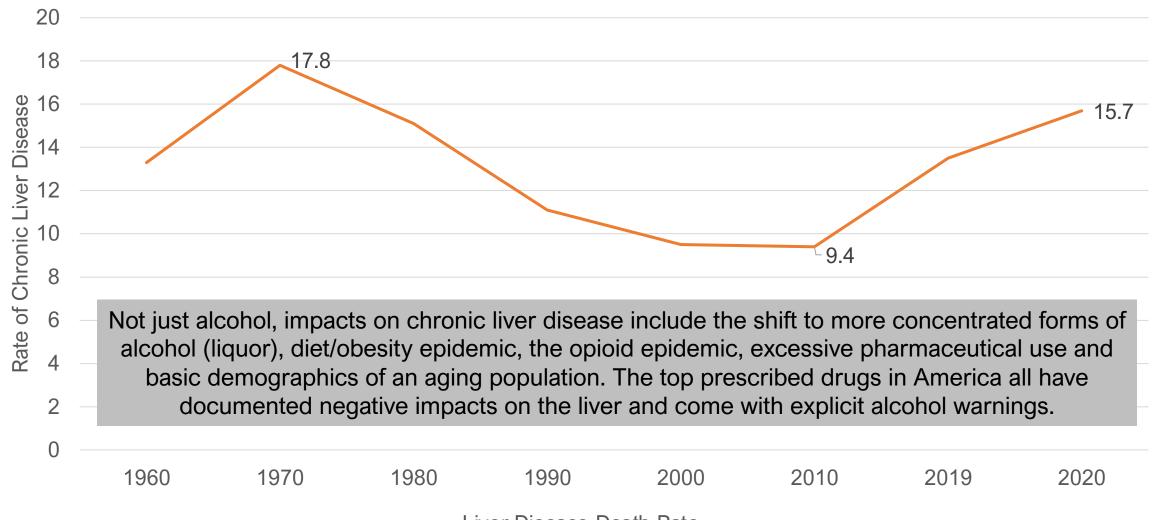
# The Public's Perception of Alcohol

### Gallup Poll July 2022

#### Perceived Effect of Alcohol Use, by Subgroup What effect do you think the use of alcohol has on [society/most people who drink]? % Very positive % Somewhat positive % Somewhat negative % Very negative Effect of alcohol on society U.S. adults 20 Non-drinkers 48 37 Drinkers Effect of alcohol on most people who drink U.S. adults 19 Non-drinkers 38 Drinkers Those with no opinion are not shown.



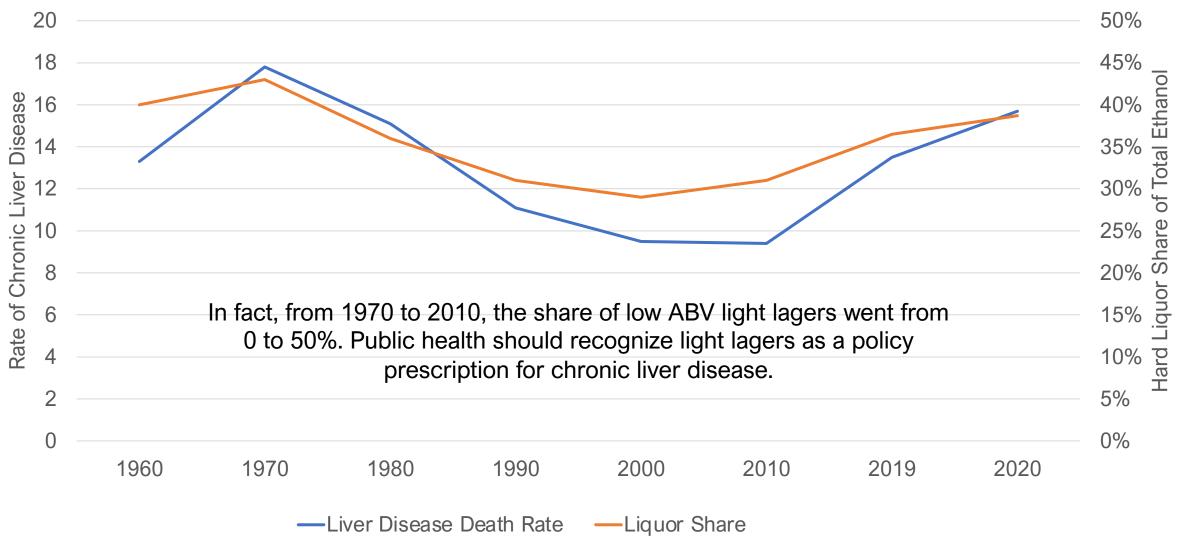
### U.S. Rate of Chronic Liver Disease 1960 – 2020



-Liver Disease Death Rate

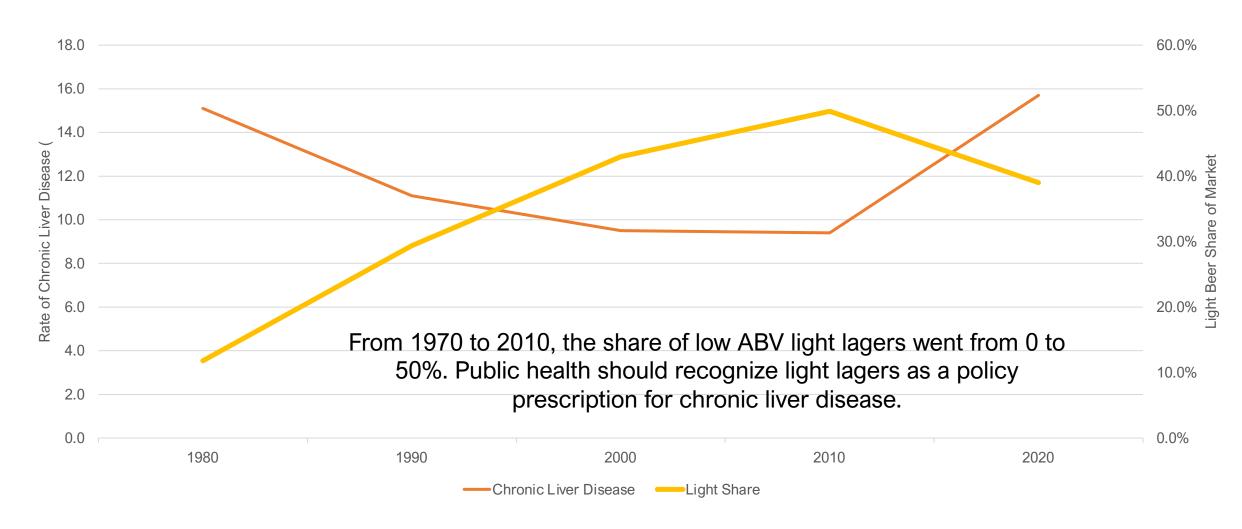


### U.S. Rate of Chronic Liver Disease vs Hard Liquor Share of Total Ethanol 1960 – 2020

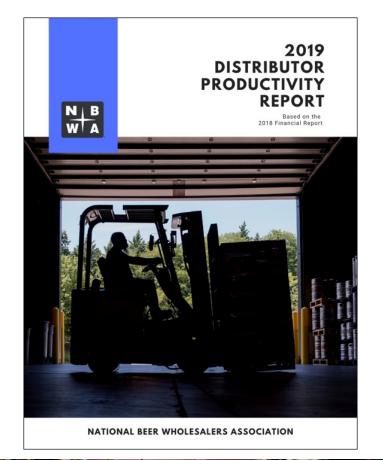




### U.S. Light Beer Share of Market vs Rate of Chronic Liver Disease 1980 to 2020



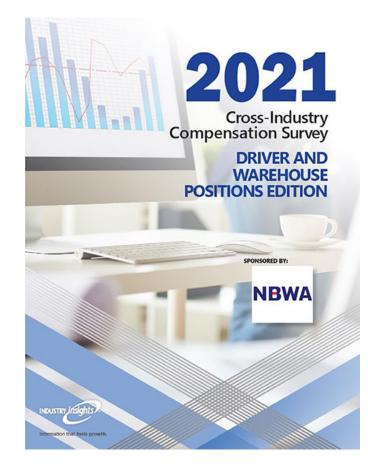




















### Thank You

Lester Jones, Chief Economist, NBWA

<u>ljones@nbwa.org</u>

Twitter @joneslester