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# Report for Alcohol Consumption

# Through 1997- 2016 yrs. In the USA

(Sample)

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# INTRODUCTION

This document is an interpretation of the *„Alcohol in the US" PowerBi* report based on a mentioned database. It covers the issue of consumption few distilled alcohol types such as: wine, liquor and beer measured in galoons per capita in the chosen states of the USA from 1997 to 2016.

Unfortunately, the dataset doesn't contain any age or gender variables, which would be a terrific addition to further explore this subject.

Additionally this report describes the proper way to use and interpret the PowerBi's report elements such as graphs etc.

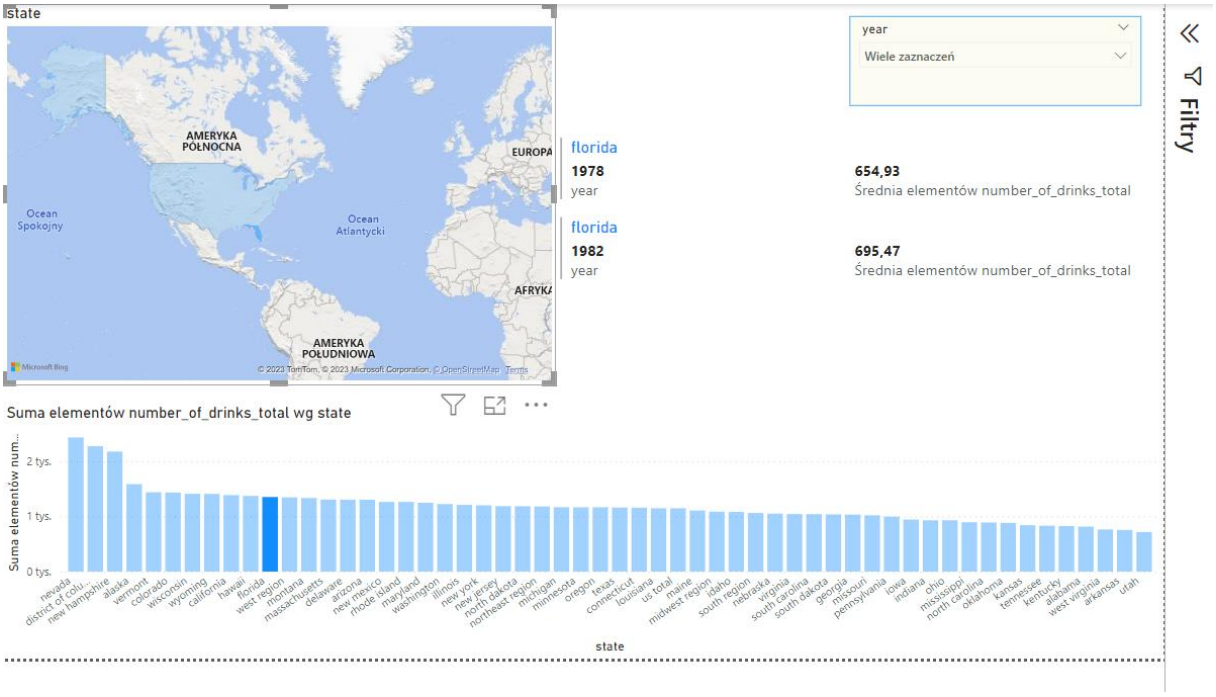
Following a non-academical character of both documents, they should be treated with a pinch of salt. These report were created mainly for excersise (and fun) purposes, thus they should be considered as such. If there are any questions about this miniproject, I recommend to contact me!

# POWERBI DOCUMENT UTILISATION IN PRACTCIE

As mentioned before the report consists of two documents:  PDF file, and PowerBi file. This instruction is only a addition for a user to know how to read and modify specific parameters od the data to meet their needs.

## Page „alcohol total”

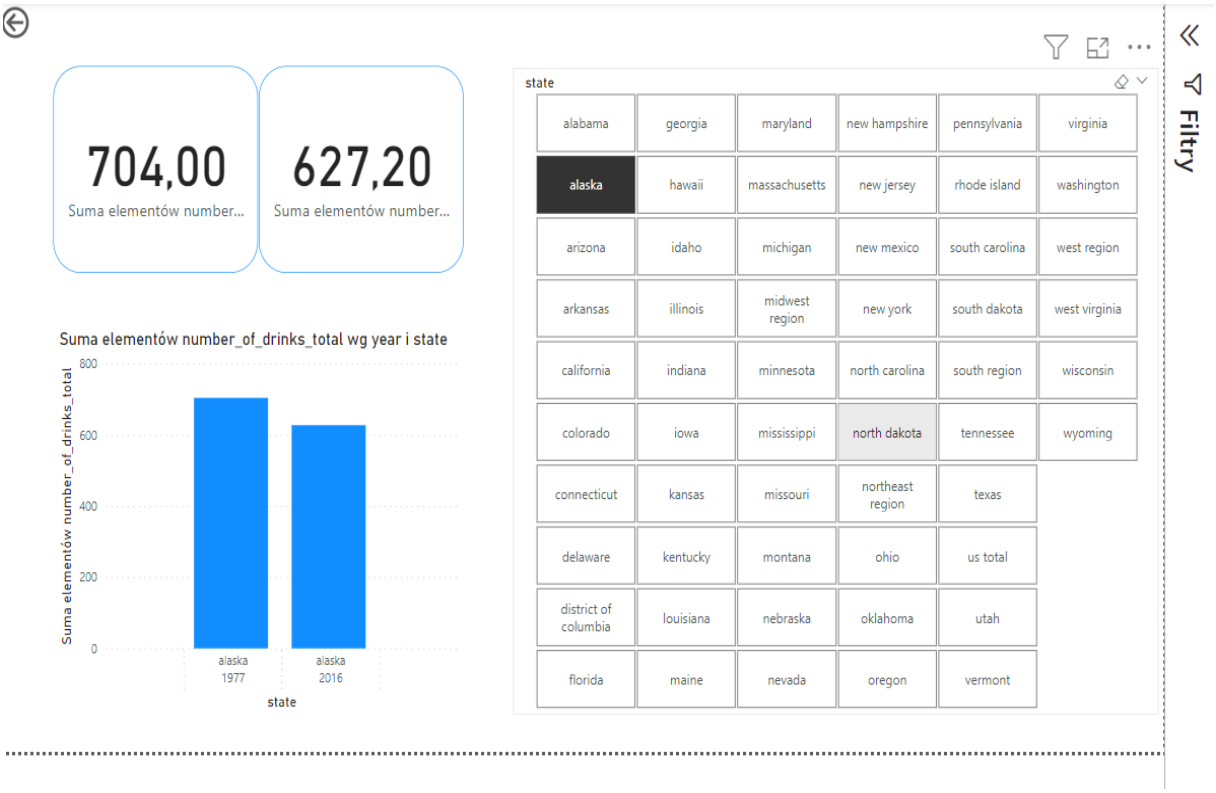
The very first page consists of data for total consumption of drinks (wine, beer and liquor summed) in different US states. On this panel user can choose a specific year (or years) to display a mean of total number of drinks per capita in specified (or not) area. User is able to select one, multiple or all of the states by simpy clicking on the map or diagram below.



## Page „Comparision 2016/1977”

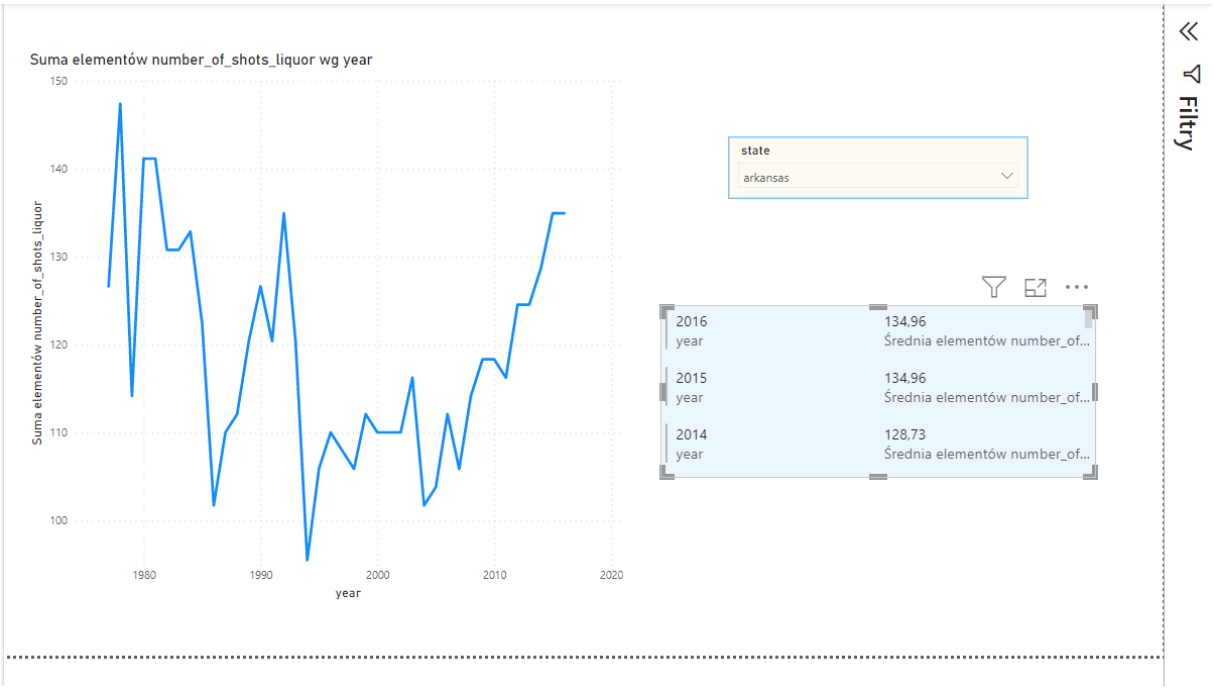
This panel was designed to visualise and compare total number of drinks consumed in the earliest noted year, to latest one. Information included on this page can help answer „How has the consumption changed?”. Yet, conclusions and potential explainations require wider range of information (for exaple: economic and cultural context)

Analogically to previous page, user can choose a state of interest and display total number of drinks by year 1997 and 2016. In this case multiple choice is possible, but limited options are recommended due to decreasing readability of the graph.



## Pages „beer”, „wine” and „liquor”

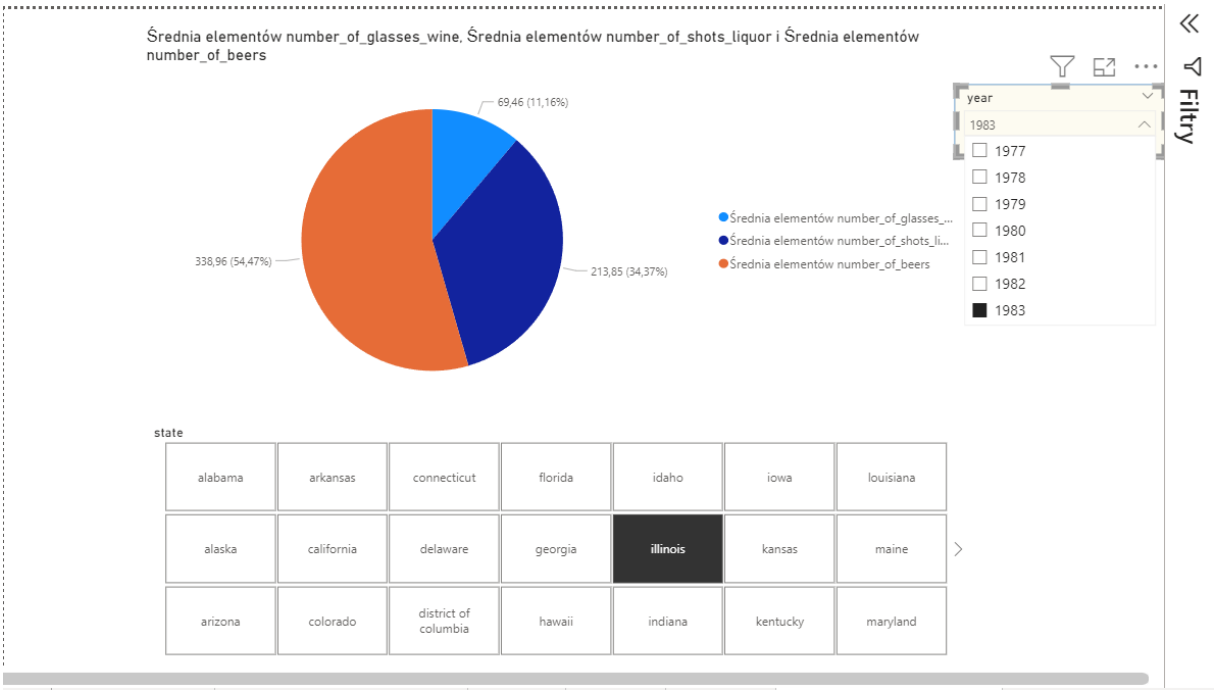
In case of these three pages, the interpretaion of their contents is similar to eachother and rather intuitive. The only difference is alcohol type analysed. Main reason of mentioned panels is to display trend about mean amount of the selected alcohol type consumed throug years.  User picks only one region for graph to display trend of consumption. There is a possibility to highlight concrete years or years range. It all depends on the intrests of a user.



## Page „alcohol proportions”

Last, but not least, panel about how specific alcohol types distribute in overall alcohol consumption. This one may be interesting from the perspective of what alcohol is the most attractive for consumer in a chosen area.

Of course, the panel has an option to pick a year of interest and display data on a pie chart.



# Report

Following analysis is going to describe alcohol consumption in Ohio from year 2010 to 2016 based on a 2240 records. These categories are random and as mentioned in the introduction, should not be considered serious, nor valuable in a scientific way. Main goal of conducted analysis is to show possibilities of PowerBi in the analytcis area.

## Total drinks consumption

From year 2010 to 2016  there hadn't been any noticeable changes in alcohol consumption in Ohio. Values vary from 430,93 to 435,20 of annual alcohol consumption per capita. This fluctuation is considered barely any from the point of view of statistics.

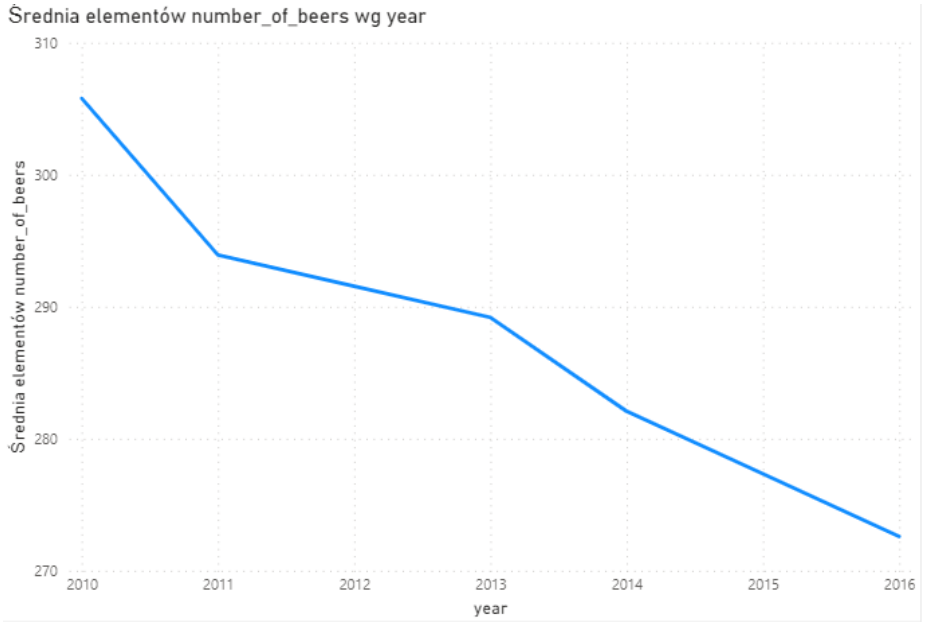
| | state | year | Średnia.elementów.number_of_drinks_total |
|---|---|---|---|
| 1 | ohio | 2010 | 430.93 |
| 2 | ohio | 2011 | 430.93 |
| 3 | ohio | 2012 | 433.07 |
| 4 | ohio | 2013 | 435.20 |
| 5 | ohio | 2014 | 433.07 |
| 6 | ohio | 2015 | 433.07 |
| 7 | ohio | 2016 | 435.20 |

*Table. 1 from R-studio*

Relatively stable overall alcohol intake doesn't mean, that specific alcohol type consumption frequency stays the same. Therefore it's cruical to examine all of the subtypes, to determine changes and eventually start explaining the output.

## Beer consumption

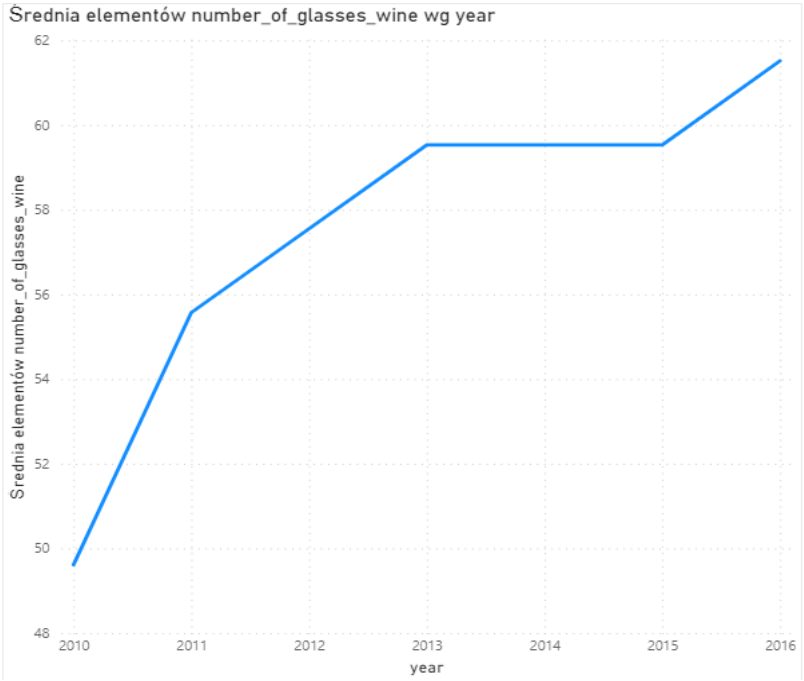
After estabilishing trend graph from year 2010 to 2016, there is noticeable drop in a mean beer units consumption per capita from 305,78 to 272,59, which is a 10,85% decrease in 6 years. Considering stable overall alcohol consumption, and plummeting beer consumption, there is a high possibility, that other alcohol skyrocketed.




*Trend 1 from PowerBi*

## Wine consumption

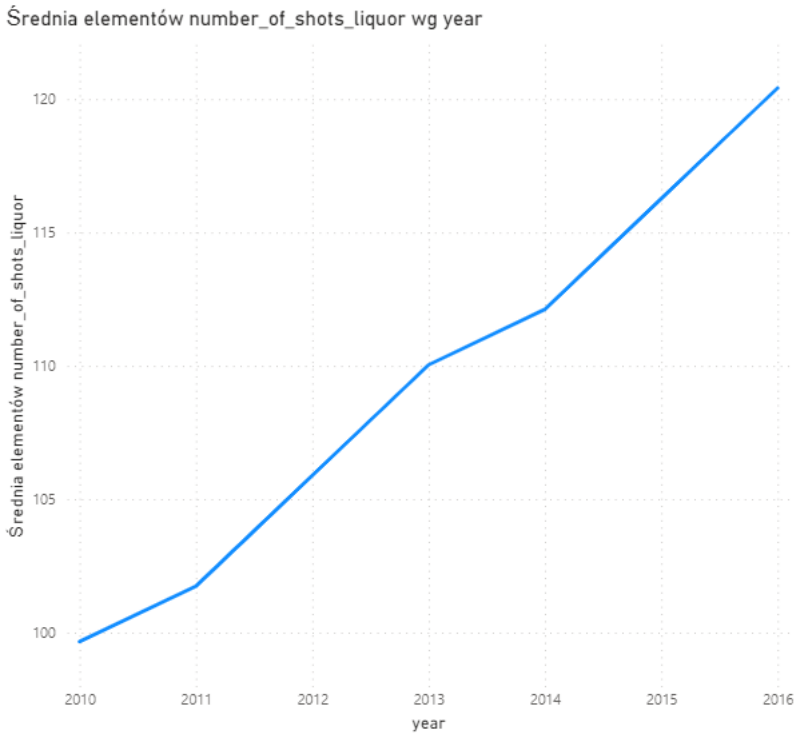
Unlike beer, wine consumption from 2010 to 2016 has been increasing, reaching from 49,61 to 61,52 units per capita, which is 24,01% growth. Between 2013 and 2015 consumption was static equal to 59,53 units per capita level.




*Trend 2 from PowerBi*

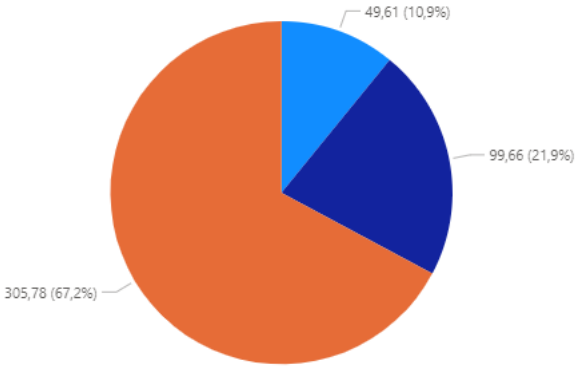
## Liquor consumption

Liquor consumption, similarly to wine, increased by 20,83% per capita during 6 year timespawn.Liquor intake has been only growing year by year.

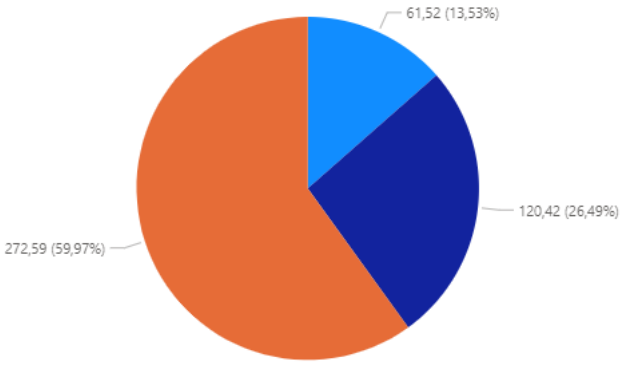



*Trend 3 from PowerBI*

## Alcohol Proportions




*Pie chart 1. 2010*




*Pie chart 2*

Comparing both pie charts, there is noticeable decrease of beer share in 2016 pie chart. Analogically, share of wine and liquor became wider, which corresponds with previous stats about their individual increasing consumption.

## SUMMARY

In the timespawn of 6 years the overall consumption of alcohol hasn't changed. Simultaneusly, amount of specific alcohol has been changing in wine and liquor favor. This may be a consequence of stable financial situation and changing trends regarding alcohol. Another potential explaination may be increasing depression rate across the US, which could lead to more frequent reaching for stronger alcohols as a coping mechanism. As I mentioned before, to fully understand this dataset and it's nuances, there should be more variables and wider context. It is really important to comprehend, that raw data without proper context and information is mostly useless or misleading.