Project Report

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## Research Question

Is there any relation between inflation, unemployment and suicide data over the years?

## Datasets Used

* - [Consumer Price Index](https://data.tuik.gov.tr/Bulten/DownloadIstatistikselTablo?p=VNahkuJlRdjGi186A0UyGFl4/vvuLqcU9WNSamrnmn2BsuZQSCYHsScr/wPRAsfd)
* - [Unemployment Rates](https://data.tuik.gov.tr/Bulten/DownloadIstatistikselTablo?p=8qvM/mN5mN8/qVhH4ZBw5Oevs/TvsYlRCOC2Dg/dcM7k8bk7Eod5aaqpj9EGFPTS)
* - [Yearly Suicide Data](https://data.tuik.gov.tr/Bulten/DownloadIstatistikselTablo?p=9u2oCqacK3ZUqx4qFHbuTulw5EqmeCn1xvvQcrq4mI95KN20YzGH7r0a1Be7Bz1y)
* - [Global Suicide Data](https://apps.who.int/gho/data/node.main.MHSUICIDEASDR?lang=en)
* - [Global Inflation Data](https://data.oecd.org/price/inflation-cpi.htm)
* - [Global Unemployment Rates](https://data.oecd.org/unemp/unemployment-rate.htm)

# Data Views (Cleaned)

## Unemployment Data

## # A tibble: 6 × 3  
## Year Count Percentage  
## <chr> <dbl> <dbl>  
## 1 2014 2853 9.91  
## 2 2015 3057 10.3   
## 3 2016 3330 10.9   
## 4 2017 3454 10.9   
## 5 2018 3537 11.0   
## 6 2019 4469 13.7

## Consumer Price Index

## # A tibble: 6 × 14  
## Year Total January February March April May June July August September  
## <chr> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl>  
## 1 2014 2904. 234. 235. 237. 240. 241. 242. 243. 243. 244.  
## 2 2015 3127. 250. 252. 255. 259. 261. 260. 260. 261. 263.  
## 3 2016 3370. 274. 274. 274. 276. 278. 279. 283. 282. 282.  
## 4 2017 3746. 300. 302. 305. 309. 311. 310. 310. 312. 314.  
## 5 2018 4358. 331. 333. 336. 343. 348. 357. 359. 368. 391.  
## 6 2019 5019. 398. 399. 403. 410. 414. 414. 419. 423. 427.  
## # ℹ 3 more variables: October <dbl>, November <dbl>, December <dbl>

## Suicide Data

## # A tibble: 6 × 15  
## Year Sex Total January February March April Mayıs June July August  
## <dbl> <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr>   
## 1 2014 Erkek-Male 2352 188 158 193 210 231 189 194 186   
## 2 2015 Erkek-Male 2358 201 173 203 211 235 198 174 208   
## 3 2016 Erkek-Male 2426 175 196 208 200 231 185 234 219   
## 4 2017 Erkek-Male 2445 204 199 188 212 237 182 228 202   
## 5 2018 Erkek-Male 2529 172 204 205 221 222 215 212 236   
## 6 2019 Erkek-Male 2684 219 191 230 231 223 254 284 225   
## # ℹ 4 more variables: September <chr>, October <chr>, November <chr>,  
## # December <chr>

## Global Inflation Data

## LOCATION TIME Value  
## 1 OECD 2000 4.057151  
## 2 OECD 2001 3.671325  
## 3 OECD 2002 2.781272  
## 4 OECD 2003 2.480571  
## 5 OECD 2004 2.411514  
## 6 OECD 2005 2.644015

## Global Unemployment Data

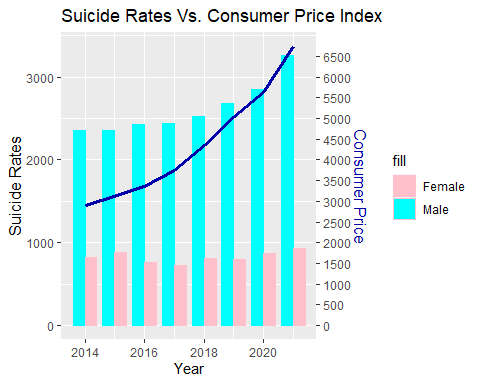
## LOCATION INDICATOR TIME Value  
## 1 OECD HUR 2005 6.863380  
## 2 OECD HUR 2006 6.353146  
## 3 OECD HUR 2007 5.858194  
## 4 OECD HUR 2008 6.187783  
## 5 OECD HUR 2009 8.313142  
## 6 OECD HUR 2010 8.534647

## Global Suicide Data

## # A tibble: 6 × 3  
## # Groups: year [6]  
## year Sex rate  
## <chr> <chr> <dbl>  
## 1 2000 " Male" 21.0  
## 2 2001 " Male" 20.6  
## 3 2002 " Male" 20.4  
## 4 2003 " Male" 20.0  
## 5 2004 " Male" 19.8  
## 6 2005 " Male" 19.7

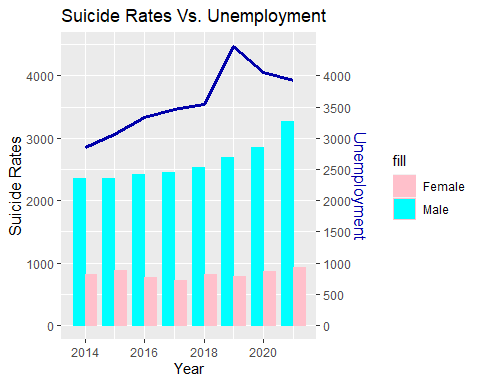
# Plots

## Turkey: Suicide - Consumer Price Index



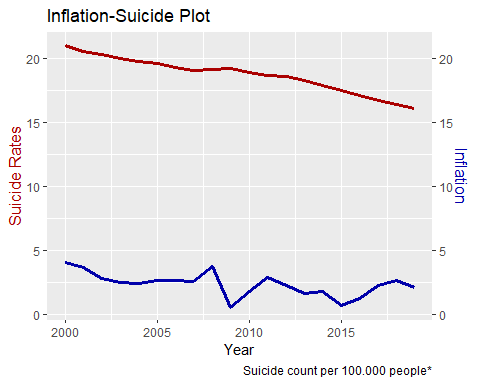
Results show there might be a correlation between consumer prices and suicides, and steadily growing.

## Turkey: Suicide - Unemployment



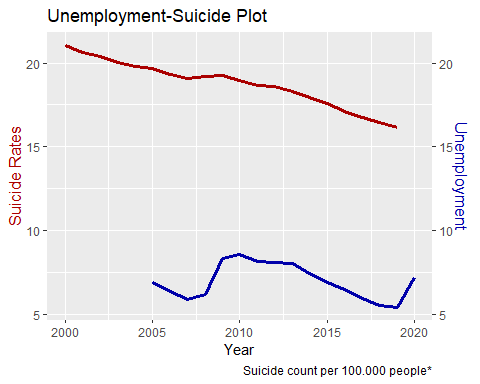
Results show there is no relation between unemployment and suicides.

## World: Suicide - Inflation



Contrary to Turkey, suicide rates have been going down for about 18 years. When examining the global context, although there is no direct relationship between inflation and suicide rates, a correlation can be observed. Large changes in inflation may have caused even very small changes in suicide rates. The most notable example of this is evident in the data from the economic crisis of 2008. Additionally, when looking at the overall trend during these years, we observe a decline in both sets of data. Therefore, we have seen that economic downturns can potentially lead to slight alterations in suicide rates, albeit to a small extent."

## World: Suicide - Unemployment



When we examine the unemployment and suicide graph, you see that the fluctuating data in inflation is no different, it is affected by slightly larger events in this data. We see that the suicide rates, which exploded during the economic crisis of 2008, kept the suicide rates on a decreasing course at stable levels, even for a few years. On the other hand, we see that starting rates have also decreased in parallel with the steadily decreasing interest rates after 2010. When we examined the recorded charts around the world, we found that although there was no direct relationship between the data, there were some changes from time to time.

# Conclusion

Turkey’s inflation rates and, maybe with a correlation, suicide rates has been going up aswell. While world took actions to reduce suicides, such as, National Suicide Prevention hotlines, Turkey currently has none. Because of this, the results show suicide numbers could go higher in next years.