

Rhapsody Group Project

Unemployment & Employment in 2014-2020

Cem Yüzbaşıođlu
Emre Demirhan
Emre Kemal Yurderi
Serhan Bayram
Umut Turhan

MEF University

30 Dec, 2020

Introduction

We used four different datasets which are obtained from TÜİK.

- Unemployed People by the Job Searching Channel¹
- Employed & Unemployed People by Educational Level²
- Unemployment by Occupational Group³
- Unemployment of Higher Education Graduates by Major⁴

We analysed each dataset and combined different outcomes.

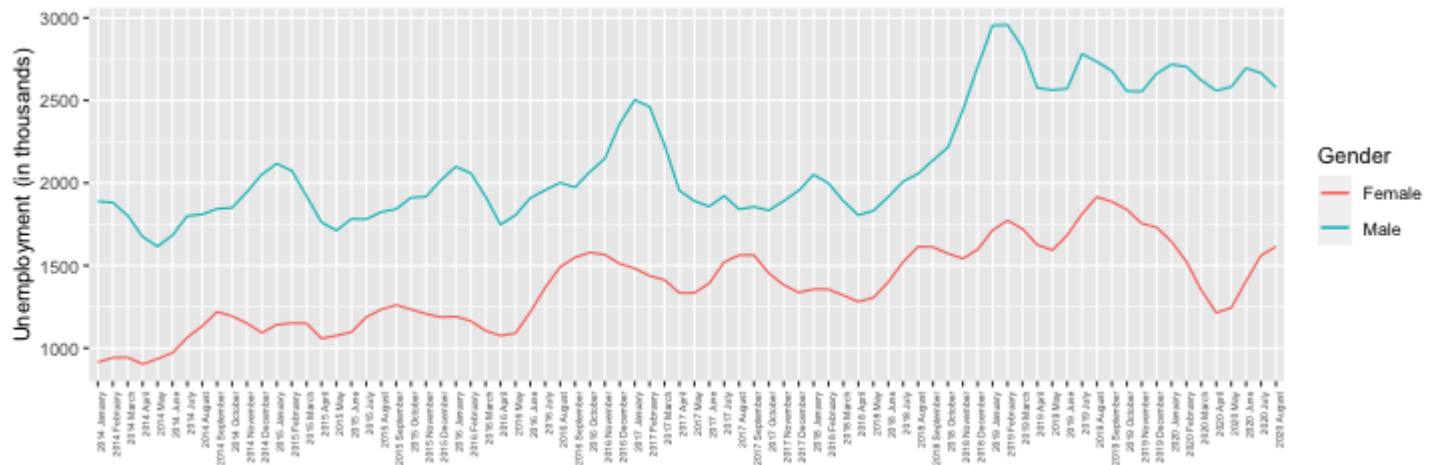
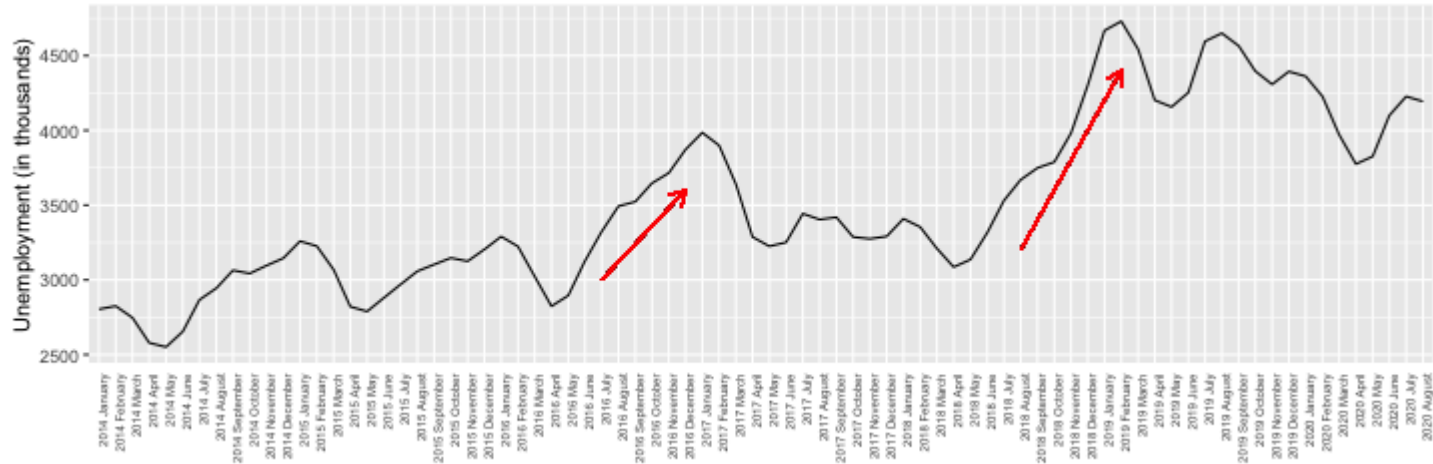
[1] [Dataset 1 - Link](#)

[2] [Dataset 2 - Link](#)

[3] [Dataset 3 - Link](#)

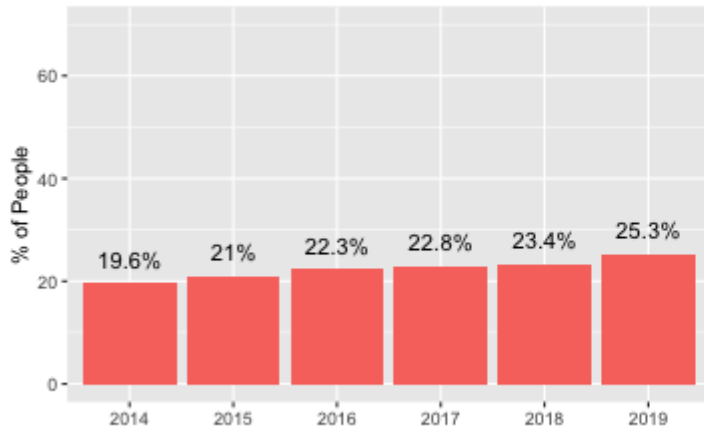
[4] [Dataset 4 - Link](#)

Unemployment in 2014-2020

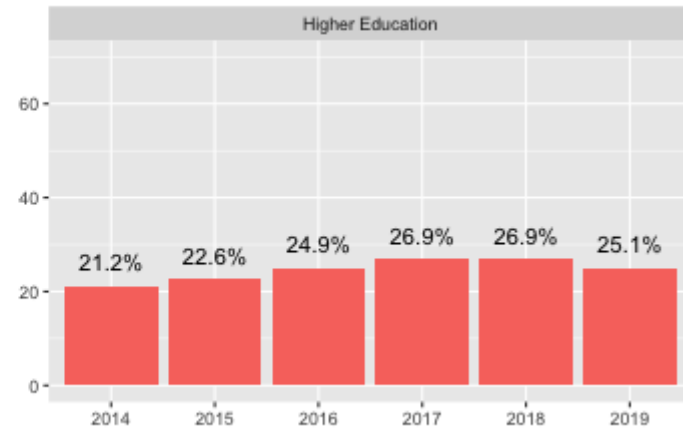


Employed & Unemployed by Educational Level

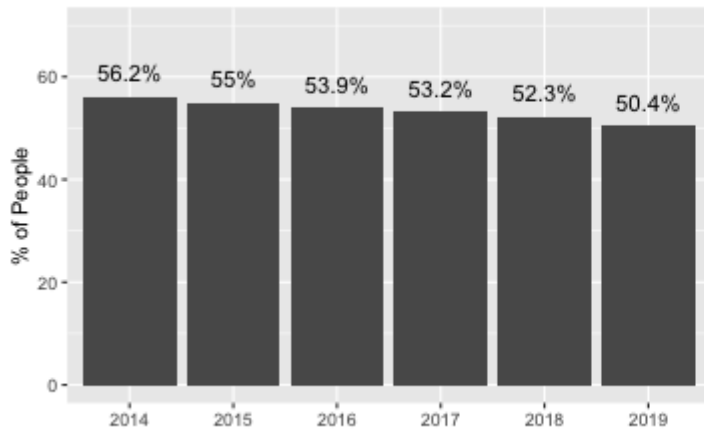
Employment Rates of Higher Education



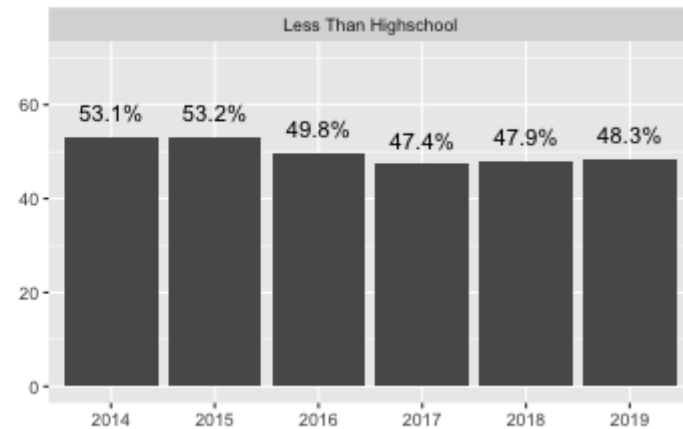
Unemployment Rates of Higher Education



Employment Rates of Less Than Highschool



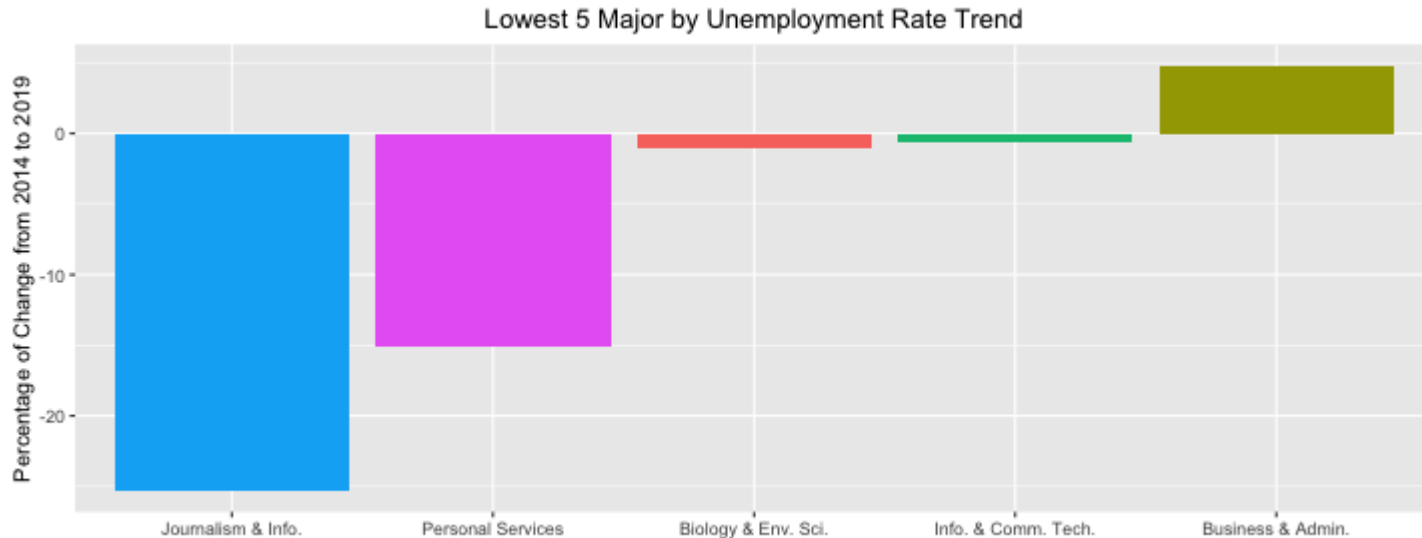
Unemployment Rates of Less Than Highschool



Unemployment of Higher Education Graduates

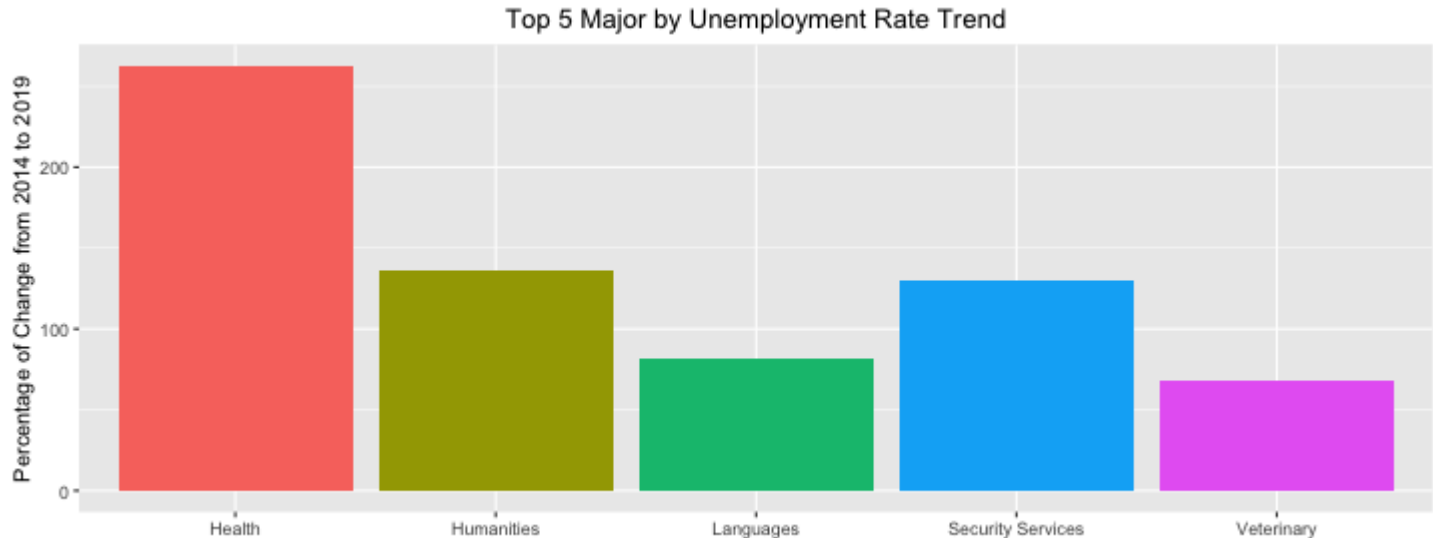
Major	2014	2015	2016	2017	2018	2019	Trend
Architecture and construction	10.9	10.2	12.6	13.5	13.7	18.0	65.6
Biology & Env. Sci.	14.7	20.2	14.1	16.0	16.9	14.5	-1.1
Business & Admin.	13.6	13.3	13.8	13.2	13.3	14.3	4.8
Engineering and engineering trades	8.8	8.8	9.4	9.0	10.3	12.1	38.1
Health	3.1	5.0	6.3	9.6	9.6	11.4	262.7
Info. & Comm. Tech.	16.8	17.1	17.0	19.9	14.0	16.7	-0.6
Journalism & Info.	29.2	17.4	19.2	19.1	23.8	21.8	-25.3
Personal Services	12.9	15.4	16.7	14.3	12.2	11.0	-15.1

Unemployment of Higher Education Graduates



Major	2014	2015	2016	2017	2018	2019	Trend
Journalism & Info.	29.2	17.4	19.2	19.1	23.8	21.8	-25.3

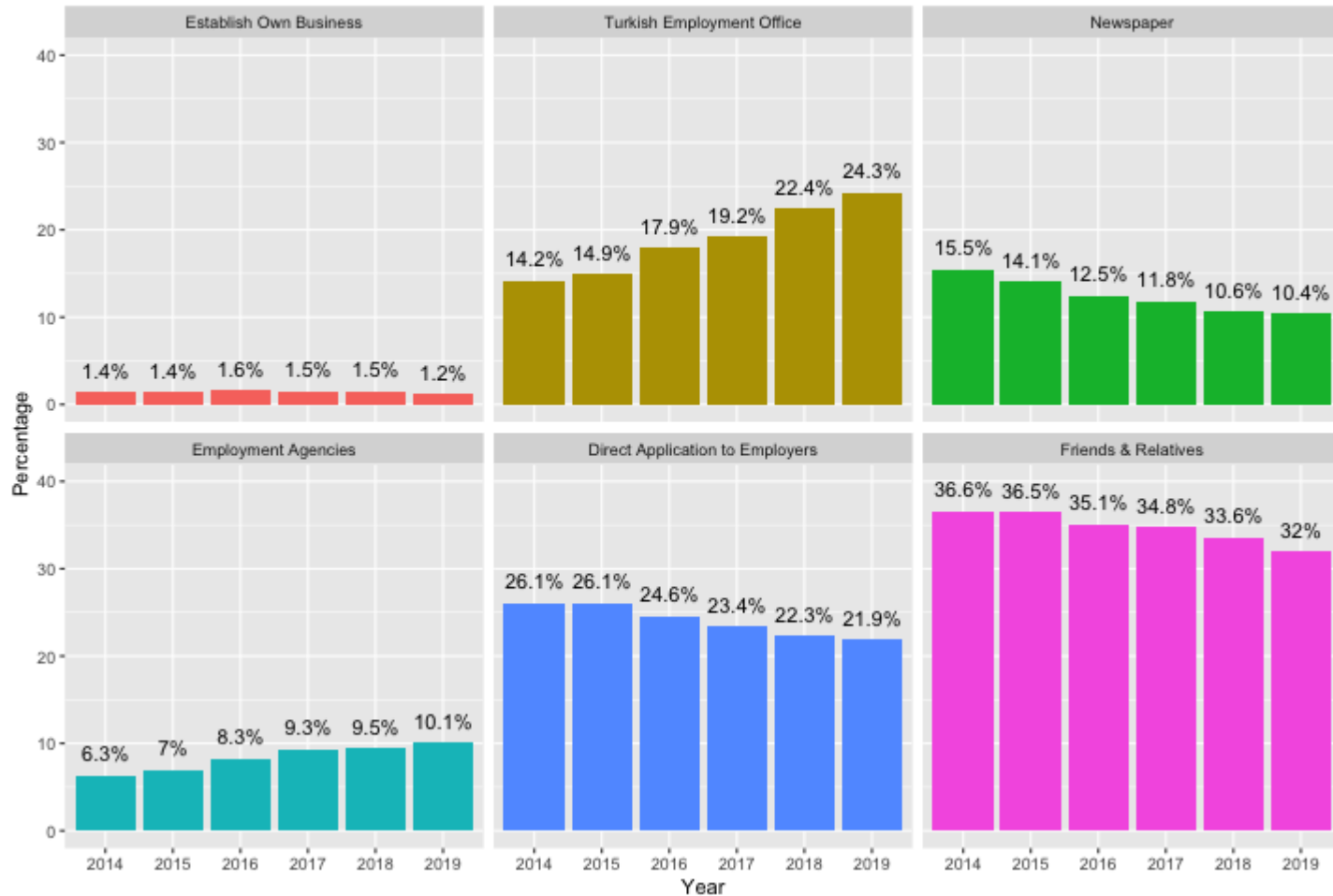
Unemployment of Higher Education Graduates



Major	2014	2015	2016	2017	2018	2019	Trend
Health	3.1	5	6.3	9.6	9.6	11.4	262.7

Unemployed Job Searching People by the Channel

Rates of Job Search Channel Among All Applications



Conclusion

- Number of unemployed in January 2014 is nearly 2.8 million, in August 2020 is nearly 4.2 million. An increase of **50%**.
- **Higher Education** and **Less Than Highschool** levels have the opposite trends both in employment and unemployment.
- Some safe-considered majors have increasing unemployment rates such as **Health, Architecture** and **Engineering**.
- Increase in the number of job applications through Turkish Employment Office, might be related with the decline in job opportunities.

Thank You For Listening!

Check Out [Rhapsody's Progress Journal](#).

Project Documents

[Data Preprocessing](#)

[Final Report](#)

[Shiny App](#)