Comparing 1st and 2nd lockdown using electricity consumption in France

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DBnomics (/tag/dbnomics.html) , database (/tag/database.html) , R (/tag/r.html)

TWEET (HTTPS://TWITTER.COM/INTENT/TWEET?TEXT=COMPARING%201ST%20AND%202ND%20LOCKDOWN%20USING%20ELECTRICITY%20CONSUMPTION%20IN%C2%A0FR%20MACROECONOMIC%20OBSERVATORY&URL=%2FARTICLE%2F2020-12%2FELECTRICITY-CONSO-FRANCE%2F)

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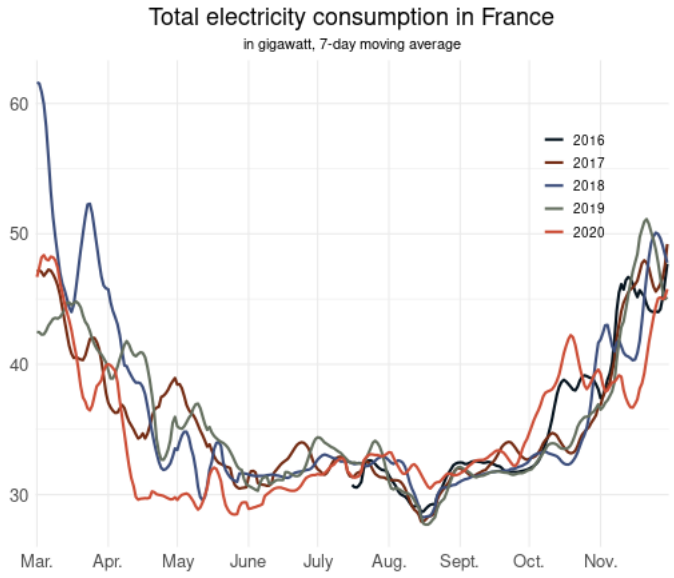
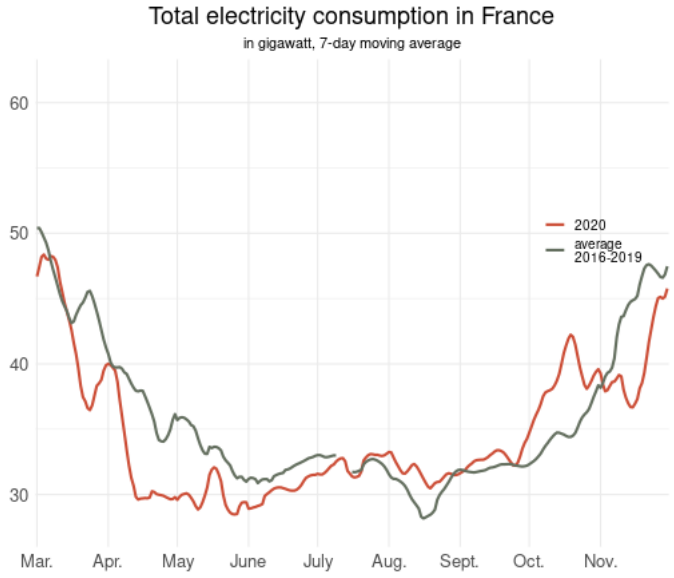
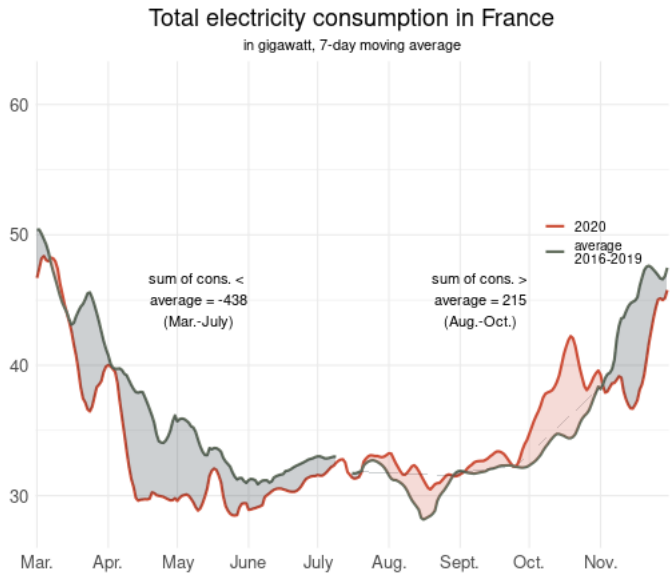
The health and economic crisis is of unprecedented scale and speed. To measure it, high frequency data are used, complementary to traditional data. We focus on electricity consumption from ENEDIS data, available on DBnomics (https://db.nomics.world/), through the rdbnomics (https://cran.r-project.org/web/packages/rdbnomics/index.html) package. All the following code is written in R, thanks to the RCoreTeam (2016) and the RStudioTeam (2016).

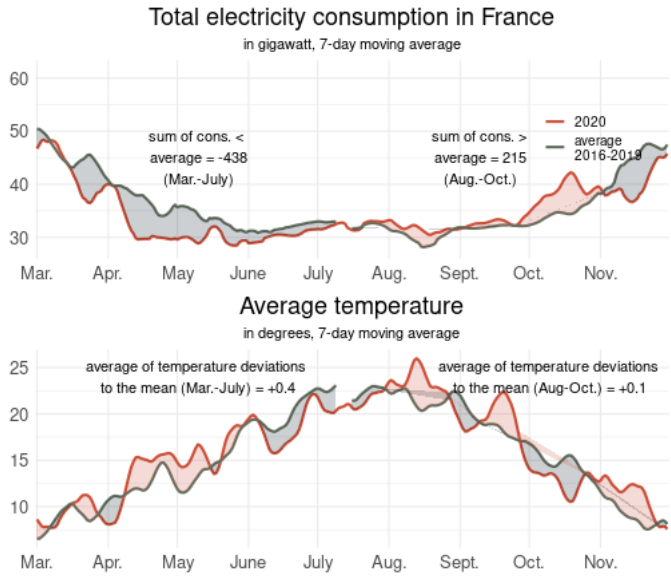




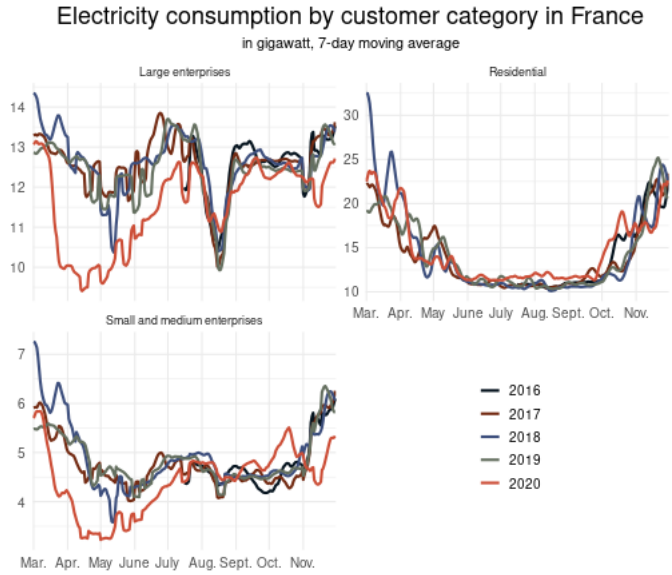
Data shows under-consumption of electricity in the spring and over-consumption of electricity in the fall of 2020.

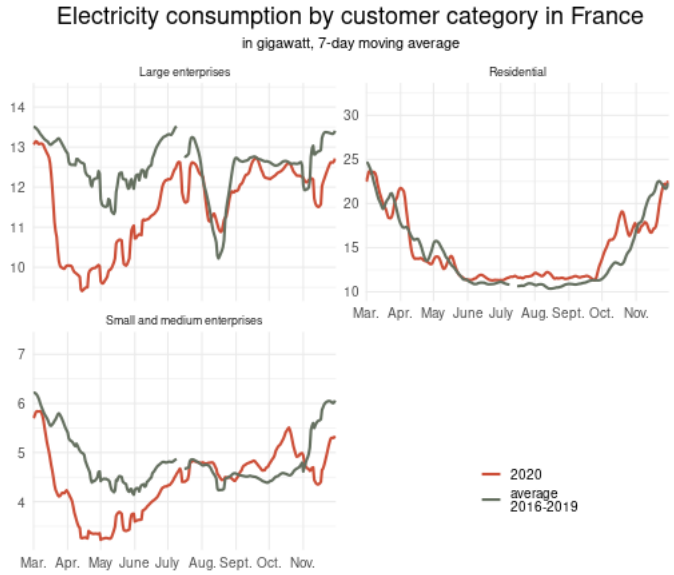


But variations in electricity consumption seem to be correlated with temperatures variations.

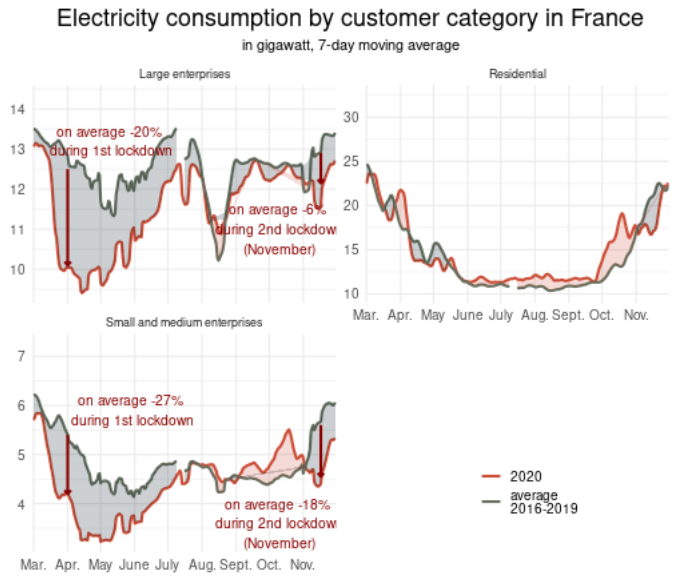


We then look at electricity consumption by customer category.





Residential electricity consumption appears to capture a significant portion of the variations due to temperature.



Large enterprises and SMEs experienced a net decrease (-20% and -27% respectively) during the 1st lockdown. The 2nd lockdown mainly impacts the electricity consumption of SMEs (-18% on average in November), even if large enterprises are also affected (-6% on average).

Useful links :

- Retrieve all the data on DBnomics (https://db.nomics.world/ENEDIS/)
- Reproduce and update the presentation with the code here (https://git.nomics.world/macro/macro.nomics.world/-/tree/master/content/elec_conso_france)
- High frequency data are available on DBnomics thanks to a partnership between Banque de France, Cepremap and OECD

Bibliography

R Core Team. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria, 2016. URL: https://www.R-project.org (https://www.R-project.org). ↩

RStudio Team. *RStudio: Integrated Development Environment for R*. RStudio, Inc., Boston, MA, 2016. URL: http://www.rstudio.com/ (http://www.rstudio.com/). ↩

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