Recap of Eurostat's Statistical Week

A month ago, I had the pleasure of visiting Luxembourg's Eurostat headquarters for a job-shadowing experience open to EMOS students and professionals already working at the National Statistic Institutes, or NSI's. Apart from learning a ton of new jargon (everything from cadastral to SILC), I also got some insight into the many different positions you can take as an official statistician, as well as the challenges they are facing in today's modern landscape. I thought I'd share some of these insights with you. If you'd like to know more about anything, don't hesitate to contact me. Also, feel free to skip to a certain section.

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Contents

Units Available for Job Shadowing and Their Presentations	′
Conference Insights	2
Helpful Links	
Publications	3
Statistics Explained	3
Recommended, Free Data Visualization Tools	3

Units Available for Job Shadowing and Their Presentations

There were more units you could apply for, however these are the ones who gave presentations throughout the week. Email me if you'd like to see a particular one and I can let you browse it over coffee (I'm not sure if I'm allowed to send them).

Unit	Presentation	Content
B4: Dissemination and User	Role of Eurostat and	This unit deals with press,
Support	Dissemination/Communication	media and user accessibility
		 dealing with challenges
		related to communicating
		statistics to the public
B2: Strategy and	Introduction to the European	From task forces to the
Programming	Statistical System (ESS)	European parliament, this
		unit deals with the statistical
		governance structure
		(committees, agendas, peer
		review, etc.)
B1: Methodology	Big Data and Trusted Smart	This unit is currently facing
	Statistics	the challenge of integrating
		big data analytics with official
		statistics

E5: Energy	Energy statistics	Dealing with methodological issues and data related to energy, this unit is becoming every more important in a world increasingly concerned with climate change
A2: Legal Affairs	Statistical Law	This unit deals with the legalities of use and dissemination of data, legal frameworks and more with regards to Eurostat and the EU
E4: Regional Statistics and Geographical Information	Spatial Analysis and Geographic Information Systems (GIS)	In charge of crafting regional statistics and visualizations, this unit combines statistics and GIS
C1: National Accounts	Importance of National Accounts	Going over the history of National Accounts, this unit talked about the importance of indicators like GDP but also the challenges this limited view of the economy brings.

Conference Insights

My unit, E4, was very interesting and highlighted some of the major themes throughout the conference, regardless of the area of focus. The two major themes were:

- How official statistics will integrate big data and machine learning into the collection and analysis of data
 - Example: machine learning and AI used by Belarusian startup to use satellite imagery to get agriculture statistics on a variety of crops (maize, rapeseed, etc.)
 while official statistics don't come out until one or two years after the fact (what they call t+1, t+2).
 - Example: Eurostat's methodology unit running a test on using web-scraping to compile job vacancy/filled positions data
 - Issues:
 - how to integrate big data, webscraping, Al and machine learning into methodology
 - how to ensure public safety, trust and communication
- Communication is a vital component to releasing and promoting statistical information
 - Example: moving more towards online publications of statistical yearbooks for easier public access and less environmental costs of printing
 - Example: creating interactive, easy to understand data visualizations with open channels for users to suggest/critique components of the database
 - Issues:
 - How to keep evolving with user needs

Having a good relationship with journalists

Helpful Links

Here are some helpful links I received from my unit. While we were mainly focused on regional statistics, these links can be extremely useful for all focus areas.

Main reference point to all tools and publications below [http://ec.europa.eu/eurostat/web/regions-and-cities]

- Regions and cities illustrated: http://ec.europa.eu/eurostat/cache/RCI/
 - Tool based on live data feed and presents maps, graphs and an animated timeline in combination with separate tabs for regions, cities, etc.
- Statistical Atlas: http://ec.europa.eu/eurostat/statistical-atlas/gis/viewer/themes/
 - Regional yearbook, NUTS and territorial typologies, land use and land cover statistics, Population and housing census
- My region: http://ec.europa.eu/eurostat/cache/RCI/myregion/
 - See results for a number of indicators for one region at a time
- My region (mobile version): http://ec.europa.eu/eurostat/help/first-visit/tools
 - Mobile app for iOS/Android
- My capital in a bubble: http://ec.europa.eu/eurostat/cache/BubbleCapital/index.html?lg=en
 - o Tool with bubble graphs to compare statistical data for Europe's capital cities

Publications

- Eurostat regional yearbook (2018)
- http://ec.europa.eu/eurostat/web/products-statistical-books/-/KS-HA-18-001
- Methodological manual on territorial typologies (2018)
 http://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-GQ-18-008
- Statistics on cities, towns, suburbs (2016)
- http://ec.europa.eu/eurostat/documents/3217494/7596823/KS-01-16-691-EN-N.pdf

Statistics Explained

The Wikipedia of Eurostat where you can find the latest version of all Eurostat publications as well as short definitions and examples of statistical terminology and concepts

- Articles about regions and cities: http://ec.europa.eu/eurostat/statistics-explained/index/php?title=Regions_and_cities
- Glossary for terminology relating to regions and cities: http://ec.europa.eu/eurostat/statistics-explained/index/php?title=Category:Regions and cities glossary
- Statistics for beginners: http://ec.europa.eu/eurostat/statistics-explained/index/php?title=Beginners:Statistics_4_beginners

Recommended, Free Data Visualization Tools

- Color brewer: color coding advice for making maps
- Datawrapper: creating interactive, colorful charts, maps, and more

- Flourish: interactive data visualizations
- Tableau: students get one year for free!