# API and mobile access to Statbank Denmark

ICBS 2014

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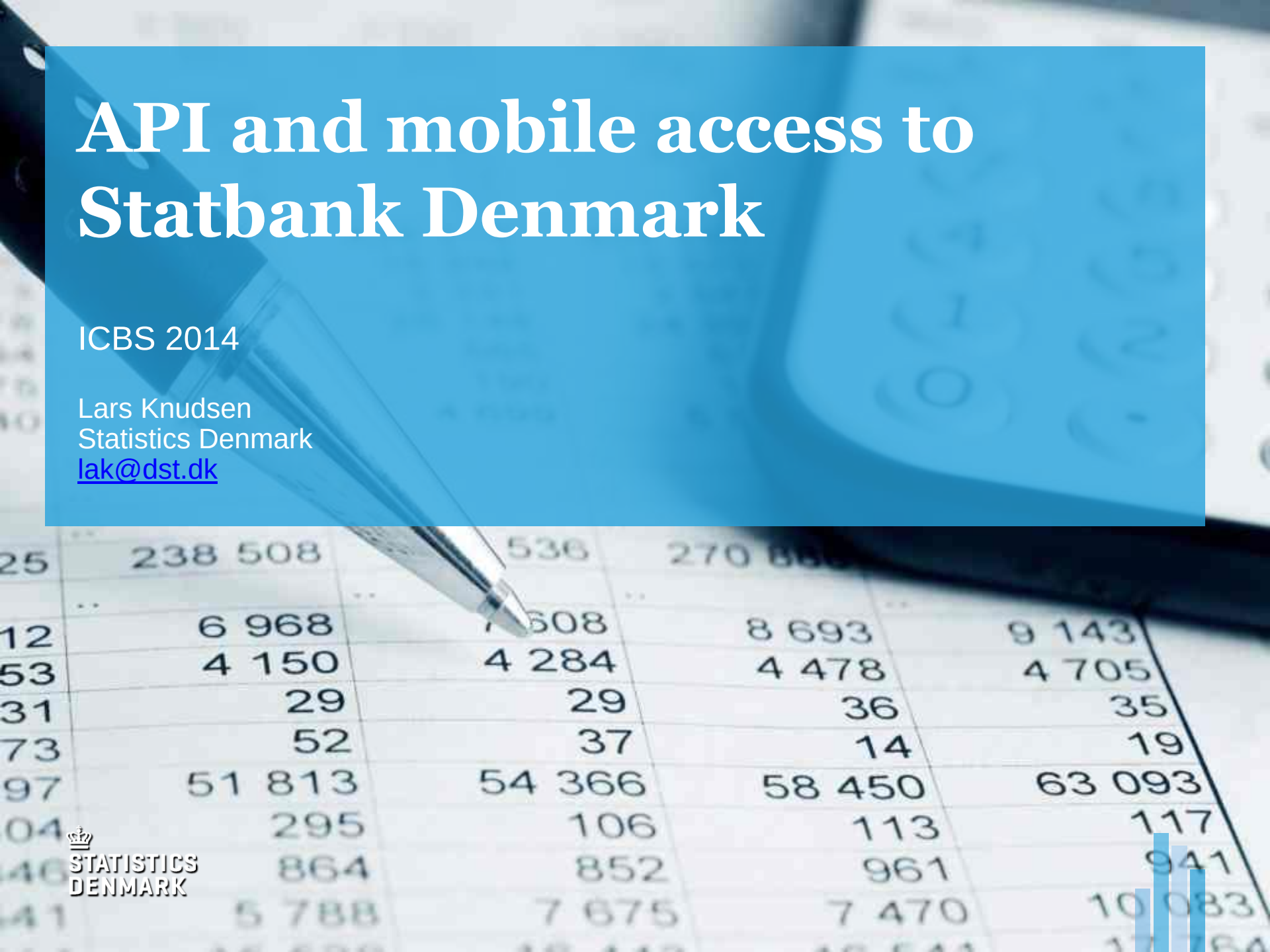


# About the API

Access to 4000+ hypercubes from www.statbank.dk

- http://api.statbank.dk (documentation)
- http://api.statbank.dk/console (help console)

## Features

- Supports streaming (BULK data)
- Supports saved queries made in www.statbank.dk
- Supports both POST and GET requests
- Supports JSON and XML for requesting

## 1) Choose API call:

Retrieve data

*Retrieves the actual dataset.*

## 2) Choose settings for call:

Request method GET

Language Danish

Use saved query

Table id

Format CSV

Value p

Variable

Variable , value ids for selected values (comma delimited list)

Down

- PX
- CSV
- JSONSTAT
- DSTML
- PNG
- AREMOS
- **Streaming**
  - BULK
  - SDMXCOMPACT
  - SDMXGENERIC
- **For presentation**
  - XLSX
  - HTML

**Diagrams**

Line
Column
Stacked Column
Stack Column 100%
Bar
Stacked Bar
Stacked Bar 100%
Area
Stacked Area
Stacked Area 100%
Pie
Column & Lines
Population Pyramide

## 3) Call the API with the chosen settings:

http://api.statbank.dk/v1/data//CSV

Execute

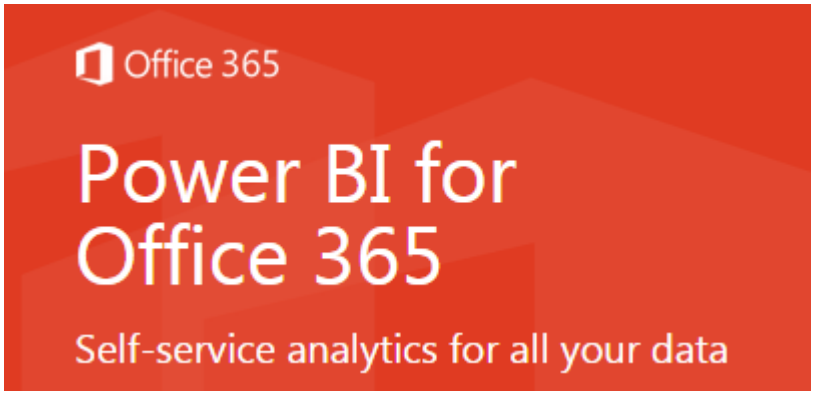
## 4) See the result from the API:

Pretify JSON

```
Click [Execute] to see the result.
```

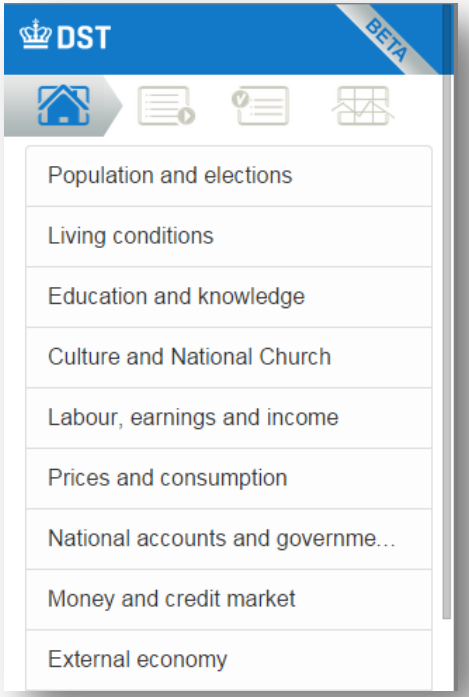
# Statbank API in …






# Mobile output database

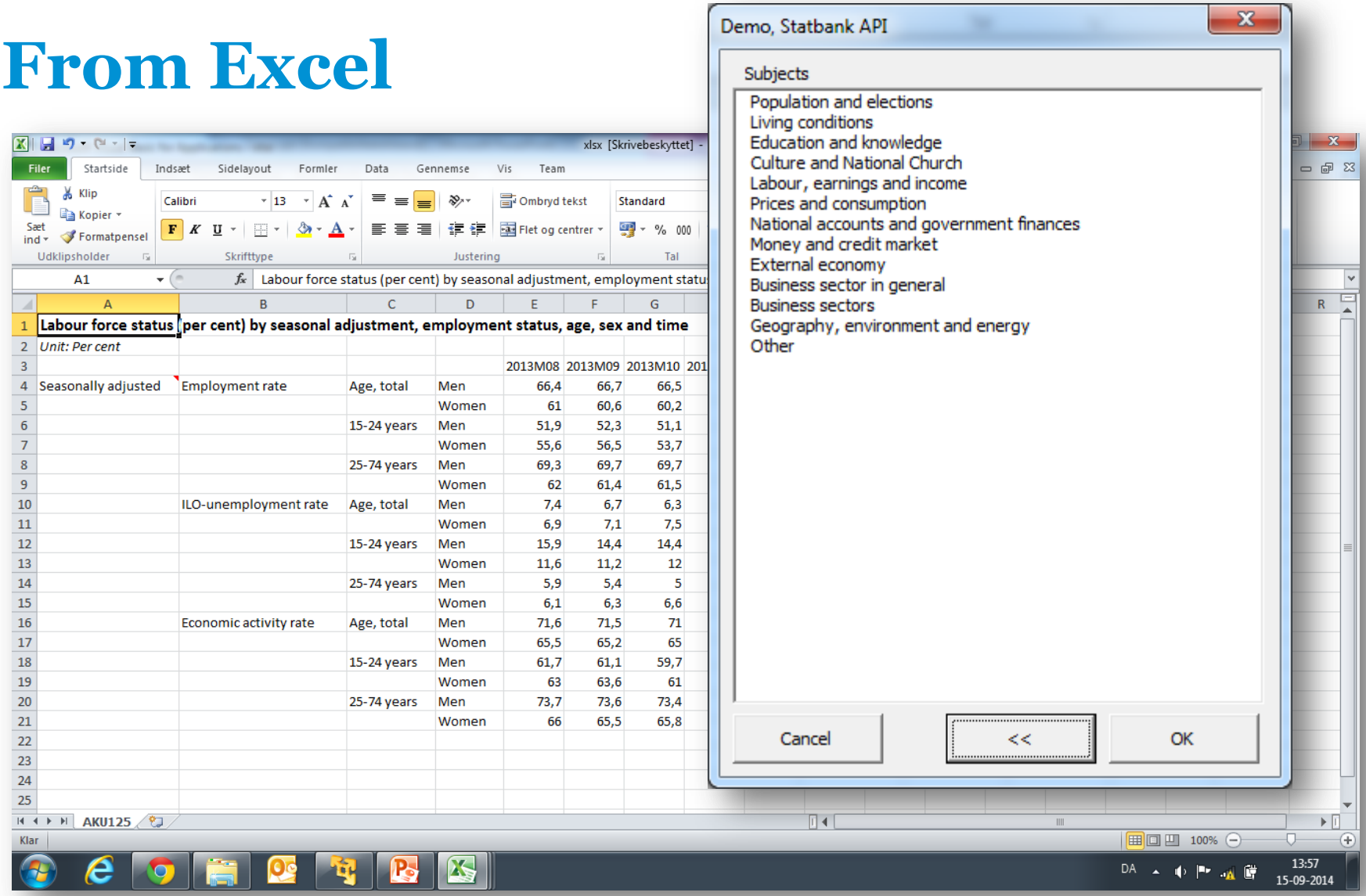



- http://m.statbank.dk

**User statistics show that users:**

- Stay longer on the mobile version (1:46 / 3:04 min.)
- Bounce less (48 / 39 %)
- More page views (3.1 / 5.0)
- Higher rate of returning visitors (18 / 35 %)

# From Excel




| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | **Labour force status (per cent) by seasonal adjustment, employment status, age, sex and time** | | | | | | |
| 2 | *Unit: Per cent* | | | | | | |
| 3 | | | | | 2013M08 | 2013M09 | 2013M10 |
| 4 | Seasonally adjusted | Employment rate | Age, total | Men | 66,4 | 66,7 | 66,5 |
| 5 | | | | Women | 61 | 60,6 | 60,2 |
| 6 | | | 15-24 years | Men | 51,9 | 52,3 | 51,1 |
| 7 | | | | Women | 55,6 | 56,5 | 53,7 |
| 8 | | | 25-74 years | Men | 69,3 | 69,7 | 69,7 |
| 9 | | | | Women | 62 | 61,4 | 61,5 |
| 10 | | ILO-unemployment rate | Age, total | Men | 7,4 | 6,7 | 6,3 |
| 11 | | | | Women | 6,9 | 7,1 | 7,5 |
| 12 | | | 15-24 years | Men | 15,9 | 14,4 | 14,4 |
| 13 | | | | Women | 11,6 | 11,2 | 12 |
| 14 | | | 25-74 years | Men | 5,9 | 5,4 | 5 |
| 15 | | | | Women | 6,1 | 6,3 | 6,6 |
| 16 | | Economic activity rate | Age, total | Men | 71,6 | 71,5 | 71 |
| 17 | | | | Women | 65,5 | 65,2 | 65 |
| 18 | | | 15-24 years | Men | 61,7 | 61,1 | 59,7 |
| 19 | | | | Women | 63 | 63,6 | 61 |
| 20 | | | 25-74 years | Men | 73,7 | 73,6 | 73,4 |
| 21 | | | | Women | 66 | 65,5 | 65,8 |

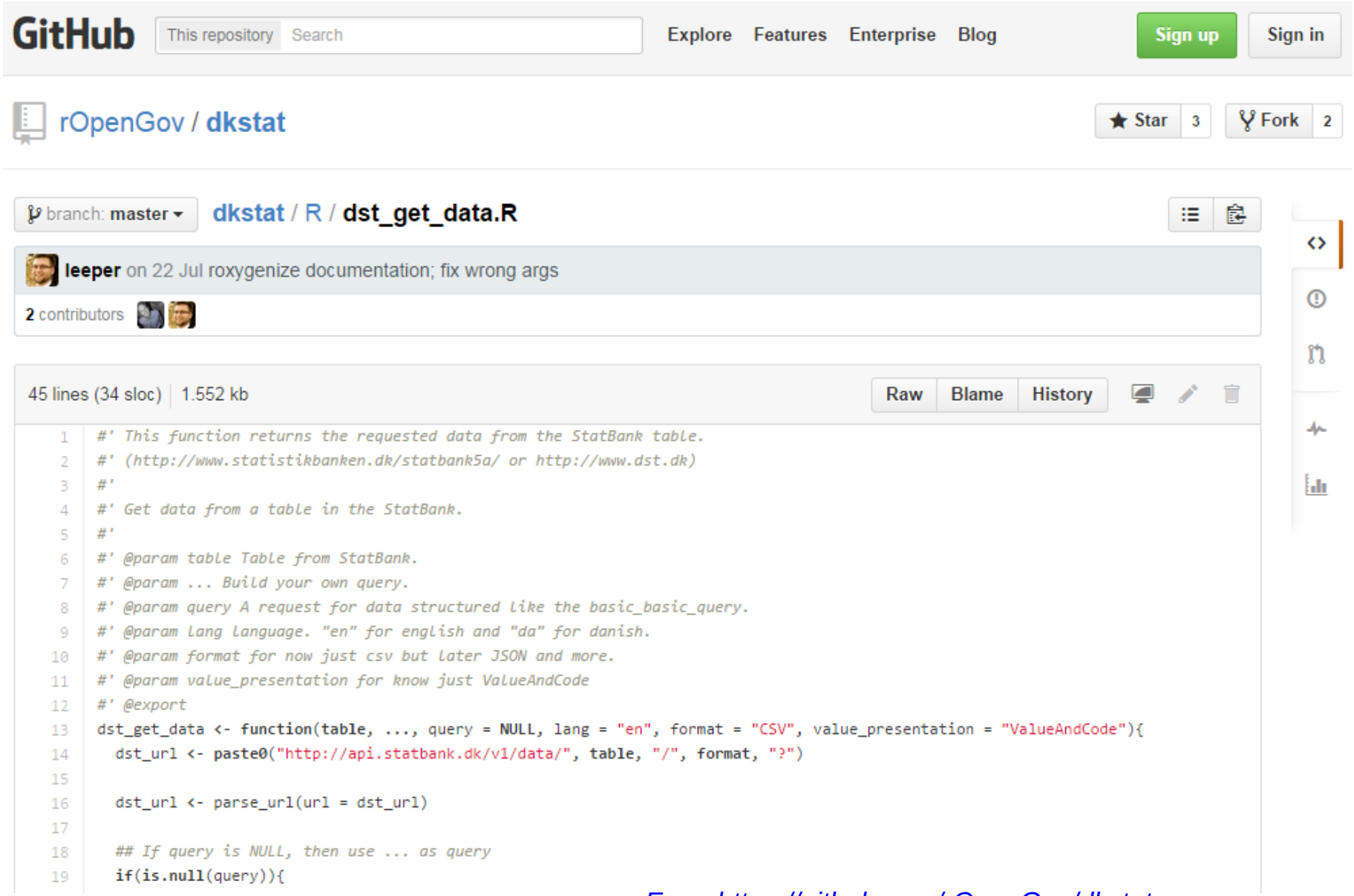
# Reading data from api.statbank.dk into SAS

The code below lets you read data from api.statbank.dk into SAS. api.statbank.dk is an api provided by Statistics Denmark (Danmarks Statistik) for reading their public data.

The code below gets it's data from the table *FOLK1*. You can get a list of avaliable tables from this url – http://api.statbank.dk/v1/tables?format=CSV. The code also sets some filters on the tables, some of the information used in this post comes from here.

```
1  filename dst
2  url
3  'http://api.statbank.dk/v1/data/Folk1/CSV?valuePresentation=Value&Tid=*&K%C3%
4                          proxy='http://<your proxy:and port>/'
5                          debug
6                          lrecl=8192
7                          puser="<your userid to proxy>"
8                          ppass="<your password to proxy>";
9
10 data test;
11         infile dst dlm=';' encoding="utf-8";
12         format Quarter Sex Municipality Age $50.;
13         input Quarter $ Sex $ Municipality $ Age $ Count;
14 run;
```

*From http://www.ryslander.com/reading-data-from-api-statbank-dk-into-sas/*

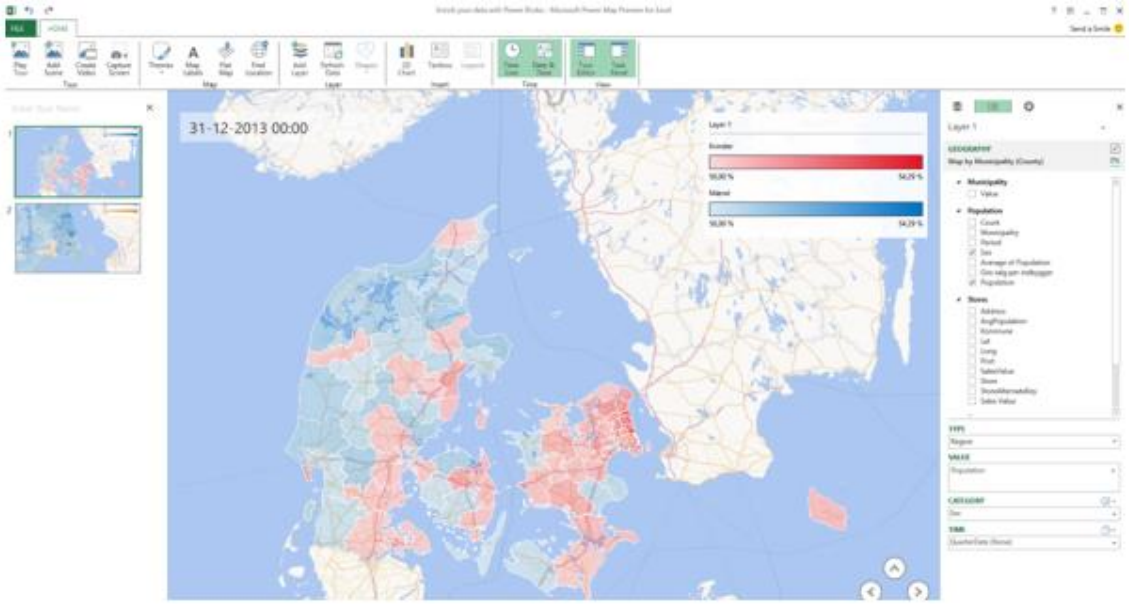



[From https://github.com/rOpenGov/dkstat](https://github.com/rOpenGov/dkstat)

# Using Power BI to enrich your data using public datasets – part 1

Yesterday I presented at a LinkedIn group – Microsoft BI Professionals Denmark a session about how you can use Power Query to enrich your datamodels using public datasets.

My demo contained examples on how to use the API from Statistics Denmark link – to extract all sorts of information about Denmark directly into your datamodel and how you can use the public dataservice http://geo.oiorest.dk/ to do a reverse look up of Danish regions, municipalities from a specific lat/long coordinate.



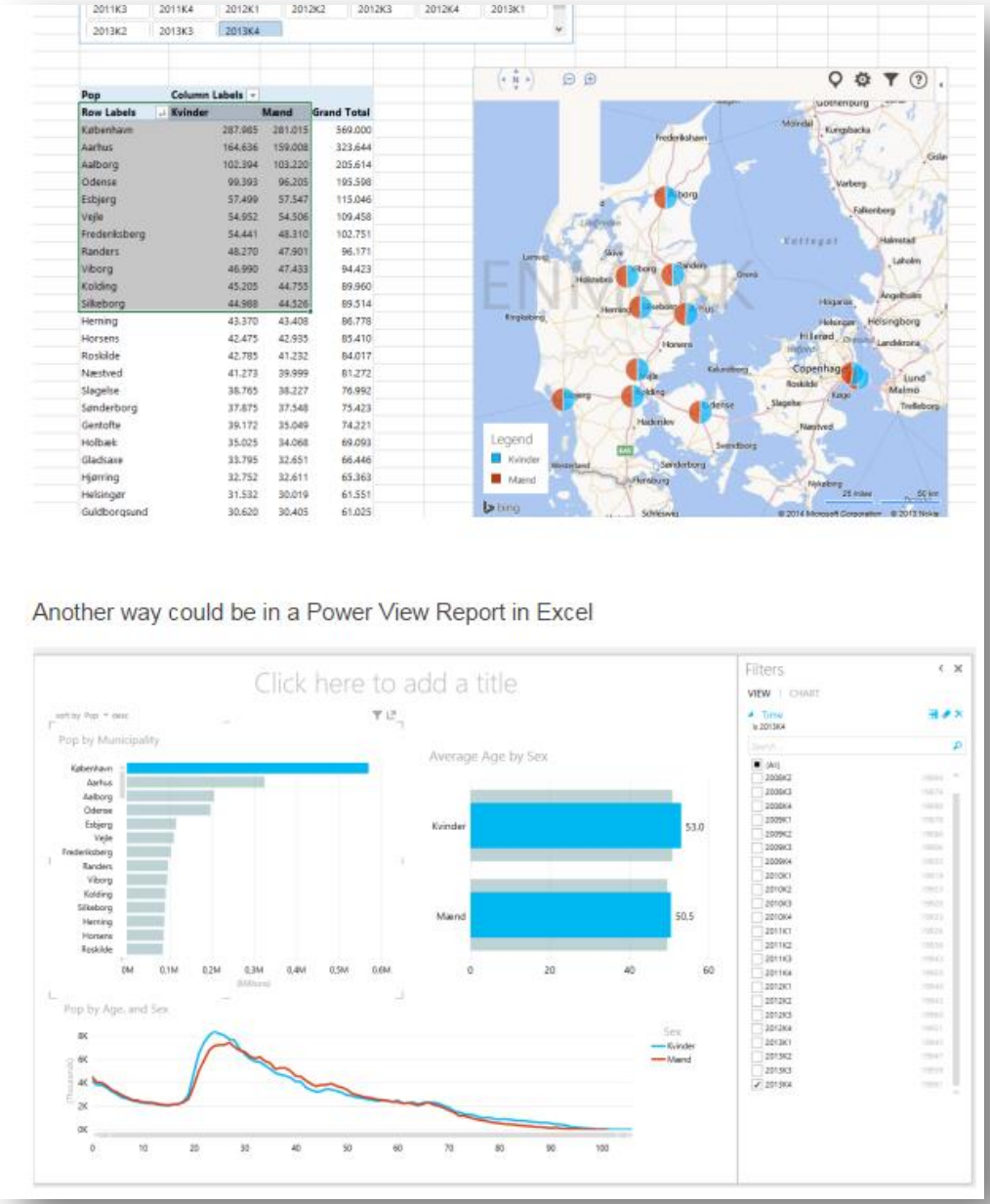

You can download my demo files from here.

Office 365

Power BI for Office 365

Self-service analytics for all your data

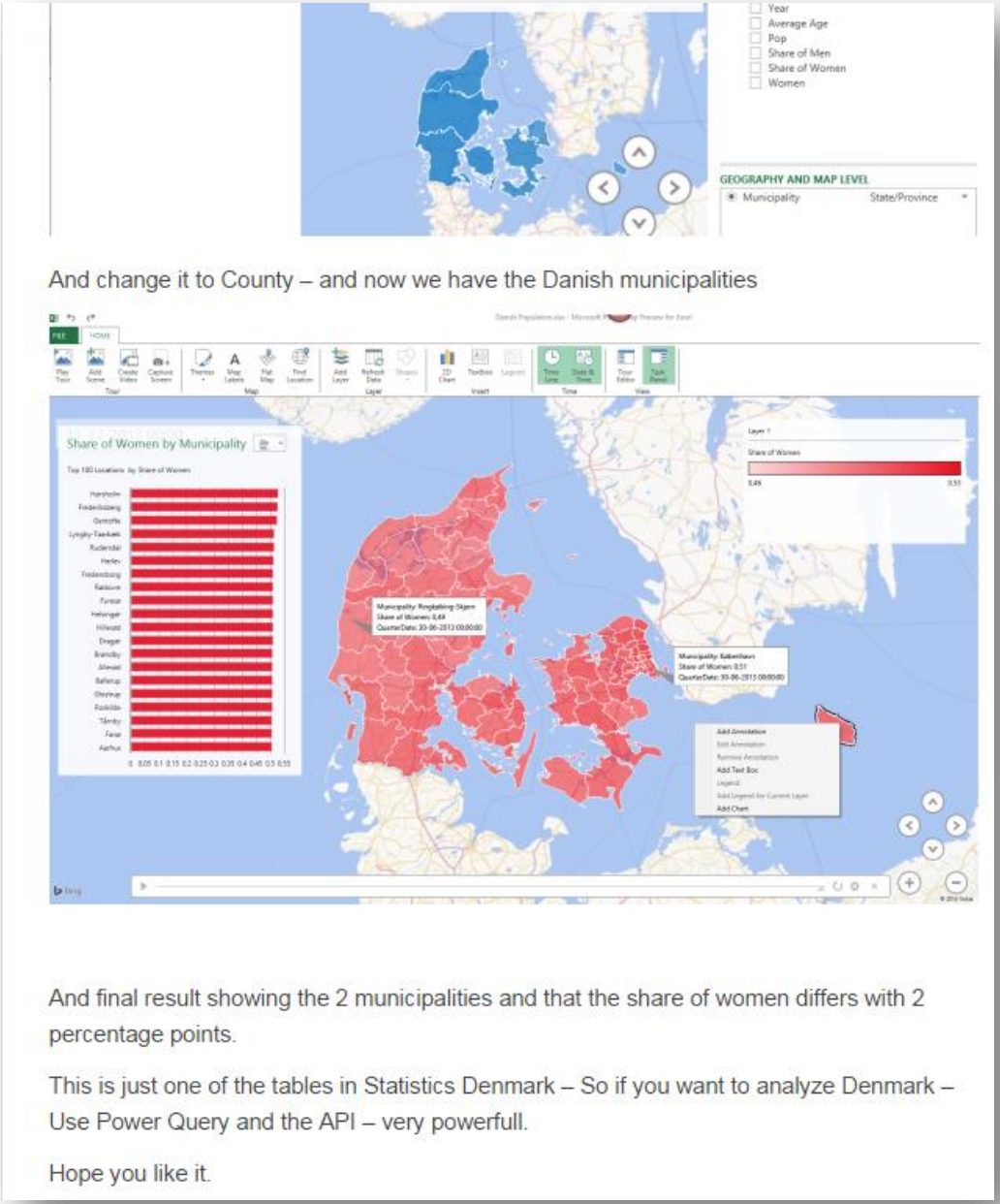
http://eriksvensen.wordpress.com/2014/01/14/using-power-bi-to-enrich-your-data-using-public-datasets-part-1/




**Part 2, Using:**

- Power Query
- Power Pivot
- Power View
- Power Map

*… for Excel*

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