# Lab 6 - Cansim

In this lab and the next, we will be learning how to download data from Statistics Canada (StatCan) using Cansim.

\*\*Important Note: The Statistics Canada and University Library websites described in these two labs may change over time. These labs are general guides to the websites, and you may find that menus have been moved or renamed, but the basics of retrieving data remain the same.

\*\*If you can't find the exact menu or link listed below, use your best judgement to find a similar menu or link.

## LAB 6 QUICK VIEW

- You can access Cansim through the university's library website at https://www.library.ualberta.ca/
- You can access Camsim's CHASS data through the database menu (you may need to sign in to your university account).
- > This lab will only cover a few of MANY, MANY ways to use Cansim
- On the main menu, choose "Time Series View"
- To find frequently used data, select "Cansim Quick Start"
  In Cansim, collections of related variable data are called <u>TABLES</u>.
  Data on one individual variable is referred to as a <u>SERIES</u> and given a code usually starting with a V. (For example, V183406 shows Canada's balance of payments imports.)
- > It is important to record the information on any data you collect
- To preview your data, find "Retrieve Cansim Vector". And click the "Retrieve" button to preview your data.
- After searching for multiple series and writing down their series numbers, click on "Direct series retrieval by label", "Multiple series by label or/and range(s) of labels" to download all the data on one page.
  - Under "Label List or/and Range(s):" list all series you want to download, separated by commas
  - Under "Beginning date:" and "Terminating data", enter the date of the first data point you want to download in the format YYYYMMDD. For example, June 1<sup>st</sup>, 2004 would be entered as 20040601.
  - For "Output format:", select "Spreadsheet" for the purpose of this lab and for "Redirect the results to:", select "Screen" (other options are possible).
- To save this data as a text file, select "Save" or possible "Save Page" in your browser. Make sure you choose an appropriate name, and that the file type is selected as "Text Document".

### A) Accessing Cansim

- You can access Cansim through the university's library website at <a href="https://www.library.ualberta.ca/">https://www.library.ualberta.ca/</a>
- Once on the website, simply choose databases and find or search for Cansim. (If you are not using a university computer, you may need to log in with your university ID.) When given an option, choose CHASS.

#### Two versions of **CANSIM** are available:

CANSIM (Statistics Canada)

CANSIM (CHASS) - Restricted to University Retrieved Series, and more options for tim

### B) Finding Frequently Used Data Using Cansim

Cansim contains a huge amount of data, and multiple ways to search for it. This lab only aims to cover a few ways to use Cansim.

On the main menu, choose "Time Series View" then choose your preferred language (English or French)

CANSIM Multidimensional View

CANSIM Time Series View

Historical versions of CANSIM

- > To find frequently used data, select "Cansim Quick Start"
  - CANSIM Quick Start
    - Vital economic and social statistics about Canada -updated-
- Next, search through the menus to find the data you are looking for

- In Cansim, collections of related variable data are called TABLES.
- ➤ Data on one individual variable is referred to as a SERIES and given a code usually starting with a V.

(For example, V183406 shows Canada's balance of payments imports.)

- Once you have found the data on the variable you are interested in, and clicked on the <u>series</u> code, a page will come up describing the variable. It is important to record the information on the data presented in this page, especially:
  - How frequently the data is collected
  - The units of measurement of the data (scaling factor)
  - Whether the data is real or nominal (if this applies)
  - How the data was collected (if listed)
  - The start and end date of the data
- Further down the page, you are given the option to "Retrieve Cansim Vector". Click the "Retrieve" button to <u>preview</u> your data.

#### Retrieve CANSIM Vector

To retrieve a vector	V191490	fill ou	at this form and click	on the	Retrieve	button.
and a terminating da	ite:		for your time series.	You ca	n also sele	ct output

### C) Retrieving Multiple Series

Often you will be looking for multiple variables in Cansim. These variables can all be combined on one page.

> To return to the main menu, simply click on the Cansim banner at the top of the page. (If you are still previewing data you may need to click the "Back" button on your browser.)



After searching for multiple series and writing down their series numbers, click on "Direct series retrieval by label", "Multiple series by label or/and range(s) of labels" to download all the data on one page.

- Direct series retrieval by label
  - Single series by label
  - Multiple series by label or/and range(s) of labels
  - Plot a single series by label
- The retrieval form will appear and needs to be filled out:
  - Under "Label List or/and Range(s):" list all series you want to download, separated by commas
  - ➤ Under "Beginning date:" enter the date of the first data point you want to download in the format YYYYMMDD. For example, January 1<sup>st</sup>, 1996 would be entered as 19960101.
  - ➤ Under "Terminating date:" enter the date of the first data point you want to download in the format YYYYMMDD. For example, June 1<sup>st</sup>, 2004 would be entered as 20040601.
  - For "Output format:", select "Spreadsheet" for the purpose of this lab (other options are possible).
  - For "Redirect the results to:", select "Screen" for the purpose of this lab (other options are possible).
  - Click on the retrieve button.

#### Retrieve multiple CANSIM series by label or/and range(s)

To retrieve multiple CANSIM series, enter a list of labels or/and range(s) of CANSIM series separated by either spaces or commas, fill out this form and click on the "Retrieve" button. To reset the retrieval options to their default settings, click on the "Clear" button.

If you wish to retrieve data for a specific time period, you can truncate the series by specifying a beginning date and a terminating date for your time series.

Label List or/and Range(s):	v2, v8
(ex: v2, v5-v7, v9-v11, v3 it will ret	rieve v2, v5, v6, v7, v9, v10, v11, v3)
Beginning date:	19960101
Terminating date:	20040601
Output format:	Spreadsheet ▼
Redirect the results to:	screen ▼
(If you requested more than 50 series requested can be 1000!)	eries the results will be automatically directed to the file! The maximum number of
E-mail address (optional):	
(It is recommended to type your when the file is available for down	e-mail address if you are retrieving a large number of seris. The system will notify you iload.)
Retrieve	

Return to Menu Page

- The selected data will now appear on the screen. Note that the variable title is simply the series code, which is why it is important to write down the variable information earlier
  - > If an entry has a ".", that means that no data is available for that time period
  - If you made any error in the previous form (for example, if you entered the date wrong), simply hit the "Back" button on your browser and correct your form.

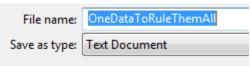
YEARS	V2	V8
1996Q1	563679	135119
1996Q2	561646	135311
1996Q3	559698	135737
1996Q4	557281	136004
1997Q1	555432	135935
1997Q2	553115	135931
1997Q3	550911	136095
1997Q4	547639	136165
1998Q1	545769	135938
1998Q2	542479	135635
1998Q3	539843	135804
1998Q4	537908	135908
1999Q1	536515	135994
1999Q2	534498	136025
1999Q3	533329	136281
1999Q4	532246	136424
2000Q1	531774	136442
2000Q2	529574	136289
2000Q3	527966	136470
2000Q4	526732	136400
2001Q1	525299	136377
2001Q2	523235	136499
2001Q3	522046	136665
2001Q4	521601	136878
2002Q1	521436	136864
2002Q2	520258	136896
2002Q3	519483	136876
2002Q4	519423	137076
2003Q1	519227	137075
2003Q2	518819	137118
2003Q3	518445	137221
2003Q4	518760	137418
2004Q1	518717	137508
2004Q2	517929	137630
2004Q3	•	
2004Q4	•	

## D) Copying data into excel

> To import the data directly into excel, simply click and drag to highlight the data, then right-click and select "Copy". Paste the data into an excel spreadsheet, and then, if needed, convert to columns as seen in a previous lab.

## E) Saving as a text file

> To save this data as a text file, select "Save" or possible "Save Page" in your browser. Make sure you choose an appropriate name, and that the file type is selected as "Text Document".



# Econ 299 Practice Lab 6:

- A) Using Cansim, find the following series for Canada from 1980 to the end of 2002:
  - Monthly, seasonally adjusted unemployment
  - Monthly CPI, excluding food and energy
- B) Using either method above, retrieve this data and insert it into excel
- C) Format your excel spreadsheet, inserting a main title, data titles, and including at the top a brief description of your data.

# Econ 299 Practice Lab 6 Answers:

(top of spreadsheet only)

4	Α	В	С	D	Е	F	G	Н	I	J	K	L
1	Canadian Unemployment and CPI, 1980-2002											
2												
3	Unemploy	y = CANADA	; UNEMPLO	OYMENT R	ATE (Perce	ent); BOTH	SEXES; 15	YEARS AND	OVER; EST	IMATE; SEA	ASONALLY	ADJUSTED
4	CPI* = CO	NSUMER PR	ICE INDEX,	CANADA;	ALL-ITEM	S EXCLUDIN	NG FOOD A	ND ENERG	Y (2002=BA	SE YEAR)		
5												
6	YEARS	Unemploy	CPI*									
7	1980M01	7.5	42									
8	1980M02	7.6	42.4									
9	1980M03	7.6	42.8									
10	1980M04	7.7	43.1									
11	1980M05	7.8	43.6									
12	1980M06	7.7	44									