Food Price Data Analysis Using STATA

Fundamentals of STATA

May 25, 2022

Goals

- Understand the Stata program and interface
- Import survey data into Stata
- Able to use basic Stata commands for summarizing data and adding variables.

Content

- Introduction to Stata
- Import survey data from Kobo ToolBox
- Data cleaning and analysis
- Data visualization

The status of food price data collection

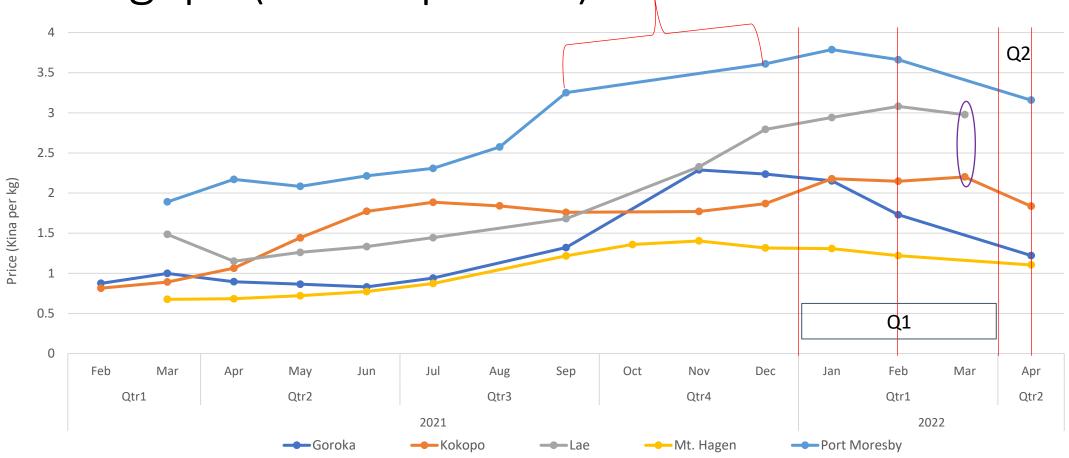
- It is designed to regularly monitor food price trends in major markets.
- Despite the fact that thorough price monitoring necessitates more frequent price information per month, it was designed to collect fortnightly owing to frequent logistical issues.
- However, the recent logistical difficulty has further disrupted fortnightly data, thereby making it monthly data.
- It lacks to represent realistic price trends, which are required for policymakers to devise informative measures.

Quarter	Start	End	Goroka	Banz	Kokopo	Lae	Mt_Hagen	Kundiawa	Port_Moresby	
	26-Mar-22	2 8-Apr-22	2							
	9-Apr-22	2 22-Apr-22	2	1	1	1	1	1	1	1
	23-Apr-22	2 6-May-22	2		1		1	1	1	1
Quarter II	7-May-22	2 20-May-22	2							
	21-May-22	2 3-Jun-22	2							
	4-Jun-22	2 17-Jun-22	2							
	18-Jun-22	2 1-Jul-22	2							
Total number of rounds in quarter II					2	1	2	2	2	2

Fortnight data collection gaps

Quarter	Start	End	Goroka	Banz	Kokopo	Lae	Mt_Hagen	Kundiawa	Port_Moresby	
	1-Jan-22	14-Jan-22	1		:	1 1		1	1	1
	15-Jan-22	28-Jan-22	1	. 2		1 1		1	1	1
	29-Jan-22	11-Feb-22								
Quarter I	12-Feb-22	25-Feb-22	1	. 1		2 1		1	1	1
	26-Feb-22	11-Mar-22	1	. 1		1 1	-	1	1	1
	12-Mar-22	25-Mar-22								
	26-Mar-22	8-Apr-22								
Total number of rounds in quarter I			4	. 4	. [5 4	ŀ	4 4	1	4
Quarter	Start	End	Goroka	Banz	Kokopo	Lae	Mt_Hagen	Kundiawa	Port_Moresby	
	26-Mar-22	8-Apr-22	2							
	9-Apr-22	22-Apr-22	2	1	1	1	1	1	1	1
	23-Apr-22	e 6-May-22	2		1		1	1	1	1
Quarter II	7-May-22	20-May-22	2							
	21-May-22	2 3-Jun-22	2							
	21-May-22 4-Jun-22									
	-	2 17-Jun-22	2							

Data gaps (sweet potato)



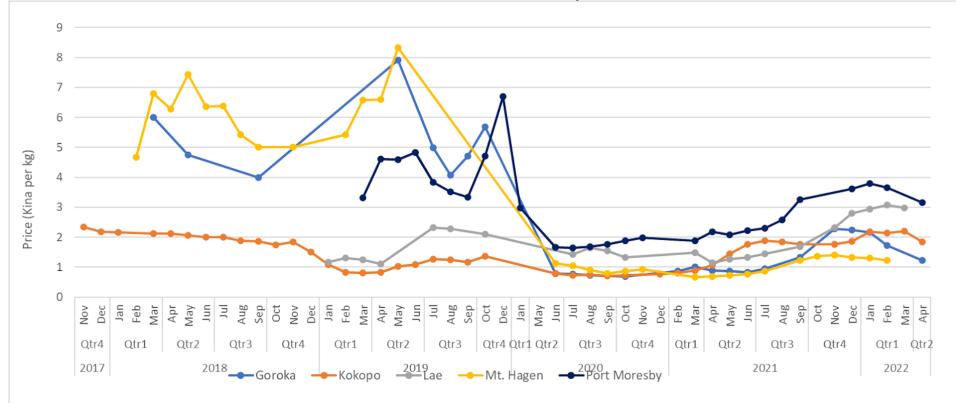
- A significant price data gap reduces the fortnightly quality to monthly data.
- Any conceivable option to maintain the relevance and quality of such an established data collection scheme?

Data quality issues

- It is essential that the data be high quality for research, planning and policy making.
- Even if the quality of price data collection is improving, data entry concerns must still be addressed.
- The key concern noted in the price survey database, among others,
 - Entering unit price instead of total price
 - Incorrectly entering the number of pieces as the weight and vice versa

Example

Observation: The price of sweet potato appears to be more expensive in the producing regional markets of Mt Hagen and Goroka than in the consuming markets of POM, Lae, and Kokopo in 2017-2019, would this be possible?



Example 2 (potato price in Mt Hagen market)

	crops	croptype	unitprice	pieces	weight	availability	quality	year	month	day	market
5482	Potato	Root Crop	10	14	2.2	High	Good	2019	6	19	Mt. Hage
5483	Potato	Root Crop	10	14	1.88	High	Good	2019	6	19	Mt. Hage
5484	Potato	Root Crop	5	13	1.22	High	Good	2019	6	19	Mt. Hage
5494	Potato	Root Crop	4	6	1.64	Low	Excellent	2018	2	20	Mt. Hage
5495	Potato	Root Crop	4	6	1.4	Low	Excellent	2018	2	20	Mt. Hage
5496	Potato	Root Crop	3	6	1.5	Low	Excellent	2018	2	20	Mt. Hage
5497	Potato	Root Crop	4	6	1.5	Low	Excellent	2018	2	20	Mt. Hage
5498	Potato	Root Crop	4	6	1.52	Low	Excellent	2018	2	20	Mt. Hage
5499	Potato	Root Crop	4	6	1.5	Low	Excellent	2018	2	20	Mt. Hage
5500	Potato	Root Crop	3	9	1.26	High	Good	2018	2	20	Mt. Hage
5501	Potato	Root Crop	3	11	1.3	High	Good	2018	2	20	Mt. Hage
5502	Potato	Root Crop	3	9	1.2	High	Good	2018	2	20	Mt. Hage
5503	Potato	Root Crop	2	16	1.4	Medium	Good	2018	2	23	Mt. Hage
5504	Potato	Root Crop	2	15	1.3	Medium	Good	2018	2	23	Mt. Hage
5505	Potato	Root Crop	2	16	1.4	Medium	Good	2018	2	23	Mt. Hage
5506	Potato	Root Crop	5	1	1.8	Medium	Good	2018	2	28	Mt. Hage
5507	Potato	Root Crop	5	1	1.71	Medium	Good	2018	2	28	Mt. Hage
5508	Potato	Root Crop	5	1	1.71	Medium	Good	2018	2	28	Mt. Hage
5518	Potato	Root Crop	10	1	2.3	Medium	Good	2018	3	29	Mt. Hage
5519	Potato	Root Crop	10	1	3.1	Medium	Good	2018	3	29	Mt. Hage
5520	Potato	Root Crop	10	1	2.6	Medium	Good	2018	3	29	Mt. Hage
5521	Potato	Root Crop	5	1	1.7	Medium	Good	2018	4	13	Mt. Hage
5522	Potato	Root Crop	5	1	1.7	Medium	Good	2018	4	13	Mt. Hage
5523	Potato	Root Crop	5	1	1.71	Medium	Good	2018	4	13	Mt. Hage
5524	Potato	Root Crop	3	9	1.5	High	Excellent	2018	4	23	Mt. Hage
5525	Potato	Root Crop	3	9	1.5	High	Excellent	2018	4	23	Mt. Hage
5526	Potato	Root Crop	2	9	.9	High	Excellent	2018	4	23	Mt. Hage
5527	Potato	Root Crop	3	9	1.2	Medium	Good	2018	4	23	Mt. Hage
5528	Potato	Root Crop	3	9	1.26	Medium	Good	2018	4	23	Mt. Hage
5529	Potato	Root Crop	3	9	1.32	Medium	Good	2018	4	23	Mt. Hage
5533	Potato	Root Crop	5	1	1.8	Medium	Good	2018	5	14	Mt. Hage
5534	Potato	Root Crop	5	1	1.72	Medium	Good	2018	5	14	Mt. Hage
5535	Potato	Root Crop	5	1	1.78	Medium	Good	2018	5	14	Mt. Hage
5536	Potato	Root Crop	5	1	1.8	Medium	Good	2018	5	24	Mt. Hage
5537	Potato	Root Crop	5	1	1.6	Medium	Good	2018	5	24	Mt. Hage
5538	Potato	Root Crop	5	1	2.1	Medium	Good	2018	6	7	Mt. Hage
5539	Potato	Root Crop	5	1	1.87	Medium	Good	2018	6	7	Mt. Hage
5540	Potato	Root Crop	5	1	1.93	Medium	Good	2018	6	7	Mt. Hage

Current survey implementation

» » Sample 1: price for Taro True S1. Price of one (bunch / heap / piece / etc.) S1. No of Pieces per (bunch / heap / piece / etc.) S1. Weight (Kg) of one (bunch / heap / piece / etc.) S1. Supply Source (Province) Western ◯ Gulf Central National Capital District Milne Bay Northern (Oro) Southern Highlands C Enga O Western Highlands Chimbu (Simbu)

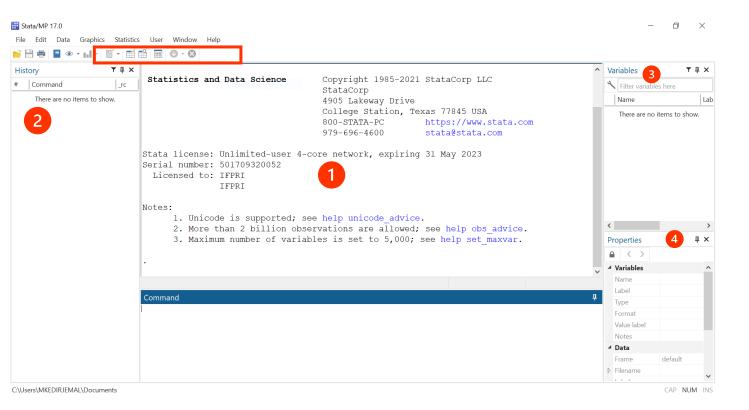
Stata

- STATA is a powerful command driven statistical package with data management, statistical analysis and graphics capabilities.
- It is a complete, integrated software package that provides all your data science needs—data manipulation, visualization, statistics, and automated reporting.
- It is a fast, accurate, and easy to use software.
- SATA's commands for performing tasks are intuitive and easy to learn.

The Stata Interface

- **Results window:** shows the results in the larger window
- 2 History: keep track of command operations used
- 3 Variables: located on the top right that lists the variables in the dataset being used
- Properties: displays properties of the variables and datasets

Icons in menu options: Data Editor (edit and browse) and browse) and browse)



Three ways to enter commands

1. Stata has a graphical user interface (GUI) for command entry via menus and dialogs File >> open

> Statistics >> summaries, tables, tests File >> Import >> Excel

2. Command window: type the commands in the boxed listings below into the small window labeled Command

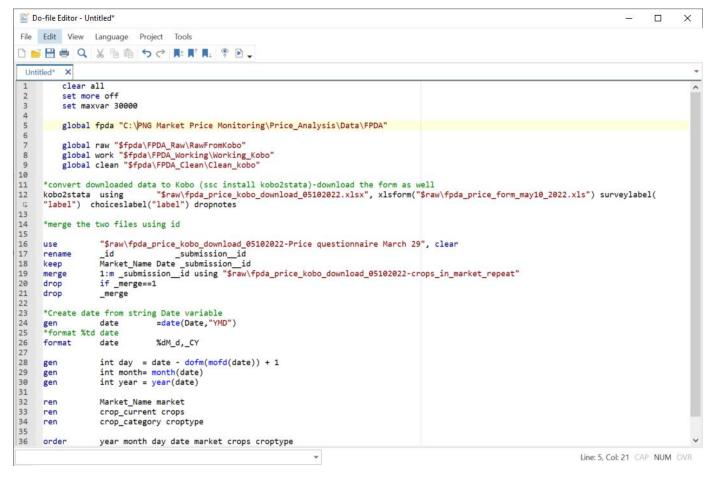
browse

describe

tabulate

Command rc	X Statistics and Data Science	Copyright 1985-202	21 StataCorp LLC	^	Variables	▼ ‡
There are no items to show.	window ship	StataCorp 4905 Lakeway Drive College Station, 7 800-STATA-PC 979-696-4600		1	Name There are no	items to show.
	Licensed to: IFPRI IFPRI Notes: 1. Unicode is supported; se		<			
			d. see help she eduine			
	2. More than 2 dillion obse 3. Maximum number of variak		d; see help obs_advice. ; see help set_maxvar.		Properties	- д
					Properties	Ą
				~	Properties A Variables	Ą
				v	Properties Image: Constraint of the second secon	Ļ
				~ Ŧ	Properties Comparison Properties Variables Name Label	Ţ
	3. Maximum number of variak			, Ŧ	Properties Image: Constraint of the second secon	Ţ
	3. Maximum number of variak			, T	Properties Variables Name Label Type	Ţ
	3. Maximum number of variak			- +	Properties	
	3. Maximum number of variak			Ţ	Properties	₽
	3. Maximum number of variak			÷	Properties	Д Д default

- 3. Do-file: write commands/script in a "do-file" and execute the do-file
 - It is a good practice to use do files when performing long or repetitive tasks
 - Since do files are stored as permanent records, they are editable in the future.
 - Manipulation driven by menus or commands is useful for testing commands/menus on the fly, and then using the command in a do file later.



Exercise:

Start by loading the 'fpda_price_sample_2021.dta' dataset, located in the training folder.

Note that Stata datasets always have '.dta' extension.

To access existing Stata data file using GUI

- 1. Select File > your working directory
- 2. Click on 'fpda_price_sample_2021' in the directory folder.

Explore the data

🔢 Stata/MP 17.0 - C:\Users\MKEDIRJEMAL\Dropbox (IFPRI)\Kobo and stata training\Kobo and Stata\stata\data\fpda_price_sample_2021.dta File

– 0 ×

Click Data Editor (Browse) T Or From the main menu click Data > Data Editor > Data

Editor (Browse)

Type 'browse' in the command window

History	▼ ¶ × 4905 Lakeway Drive	^	Variables	₹џ>
# Command	College Station, Texas 77845 USA		Kilter variabl	es here
use "C:\Users\MKEDIRJEM	800-STATA-PC https://www.stata.com 979-696-4600 stata@stata.com		Name	
	979-696-4600 Stata@Stata.com		date	
	Stata license: Unlimited-user 4-core network, expiring 31 May 2023			
	Serial number: 501709320052		year month	
	Licensed to: IFPRI			
	IFPRI		month_name	
			day	
	Notes:		market	
	1. Unicode is supported; see help unicode_advice.		crop	
	2. More than 2 billion observations are allowed; see help obs_advice.		unitprice	(
	3. Maximum number of variables is set to 5,000; see help set_maxvar.		movingave_a	
	. use "C:\Users\MKEDIRJEMAL\Dropbox (IFPRI)\Kobo and stata training\Kobo and Stata\stat		<	>
	> a\data\fpda price sample 2021.dta"		Properties	Į,
	, a (au ou (ipau_piioo_bampio_zozi a ou			
			\square < >	
		\mathbf{v}	Variables	
		_	Name	
	Command	h	Label	
	Command	F	Туре	
			Format	
			Value label	
			Notes	
			A Data	
			Frame	default
			▶ Filename	fpda_price_sar

C:\Users\I

Data Editor (Browse) - [fpda_price_sample_2021.dta]

File Edit View Data Tools

≝ 🛃 - 💕 😫 🖶 🐘 🔍 ▼ -date[1] 22apr2021

date	year	month	month_name	day	market	crop	unitprice	<pre>movingave_a</pre>	<pre>movingave_b</pre>	<pre>movingave_c</pre>	movingave_d	movingave_e 🔨	Variables	
1 22apr2021	2021	4	April	22	Banz	Aibika	2.173913	2.173913					Kilter variables here	
2 26nov2021	2021	11	November	26	Banz	Aibika	2.279719	2.279719					✓ Name	Label
3 01dec2021	2021	12	December	1	Banz	Aibika	1.136364	1.955319	1,955319	1.955319	1.955319	1.955319	☑ date	Labor
4 29dec2021	2021	12	December	29	Banz	Aibika	2.347222	1.955319	1,955319	1.955319	1.955319	1,955319	V year	
5 17dec2021	2021	12	December	17	Banz	Aibika	2.057971	1.955319	1.955319	1.955319	1.955319	1.955319	✓ month	
6 17jan2022	2022	1	January	17	Banz	Aibika	2.932423						✓ month_name	
7 24feb2021	2021	2	February	24	Goroka	Aibika	3.270202	3.231061	3.231061				☑ day	
8 11feb2021	2021	2	February	11	Goroka	Aibika	3.191919	3.231061	3.231061				✓ market	
9 24mar2021	2021	3	March	24	Goroka	Aibika	3.611111	3.203914	3.203914	3.203914	3.203914	3.203914	🗹 crop	
0 10mar2021	2021	3	March	10	Goroka	Aibika	2.742424	3.203914	3.203914	3.203914	3.203914	3.203914	✓ unitprice	(mean) unitprice
1 28apr2021	2021	4	April	28	Goroka	Aibika	3.020202	3.305976	3.305976	3.305976	3.305976	3.305976	✓ movingave_a	No restriction on minimum # of values aver
2 21apr2021	2021	4	April	21	Goroka	Aibika	4	3.305976	3.305976	3.305976	3.305976	3.305976	✓ movingave_b	At least 2 values averaged during a 3-mont
3 19may2021	2021	5	Мау	19	Goroka	Aibika	3.130159	3,339875	3,339875	3.339875	3.339875	3,339875	☑ movingave_c	At least 2 values from at least 2 months ave
4 26may2021	2021	5	Мау	26	Goroka	Aibika	3.535354	3.339875	3.339875	3.339875	3.339875	3.339875	☑ movingave_d	At least 3 values averaged during a 3-mont
5 30jun2021	2021	6	June	30	Goroka	Aibika	2.555556	3.051133	3.051133	3.051133	3.051133	3.051133	☑ movingave_e	At least 3 values from at least 2 months ave
6 23jun2021	2021	6	June	23	Goroka	Aibika	2.065527	3.051133	3.051133	3.051133	3.051133	3.051133	✓ movingave_f	At least 3 values from at least 3 months av
7 16jul2021	2021	7	July	16	Goroka	Aibika	2.705255	2.786033	2.786033	2.786033	2.786033	2.786033		
8 28jul2021	2021	7	July	28	Goroka	Aibika	2.724349	2.786033	2.786033	2.786033	2.786033	2.786033	<	
9 22sep2021	2021	9	September	22	Goroka	Aibika	3.247863	2.892489	2.892489	2.892489	2.892489	2.892489	Variables Snapshots	
0 23nov2021	2021	11	November	23	Goroka	Aibika	5.351515	4.390028	4.390028	4.390028	4.390028	4.390028	Properties	
1 29nov2021	2021	11	November	29	Goroka	Aibika	4.570707	4.390028	4.390028	4.390028	4.390028	4.390028	▲ Variables	
2 17dec2021	2021	12	December	17	Goroka	Aibika	4.004273	4.123158	4.123158	4.123158	4.123158	4.123158	Name	date
3 29dec2021	2021	12	December	29	Goroka	Aibika	2.566138	4.123158	4.123158	4.123158	4.123158	4.123158	Label	
4 18feb2021	2021	2	February	18	Кокоро	Aibika	.6666667	1.039239	1.039239	1.039239	1.039239	1.039239	Туре	float
5 26feb2021	2021	2	February	26	Кокоро	Aibika	1.581197	1.039239	1.039239	1.039239	1.039239	1.039239	Format	%td
6 31mar2021	2021	3	March	31	Кокоро	Aibika	1.217949	1.203304	1.203304	1.203304	1.203304	1.203304	Value label Notes	
7 11mar2021	2021	3	March	11	Кокоро	Aibika	1.347403	1.203304	1.203304	1.203304	1.203304	1.203304	Data	
8 21apr2021	2021	4	April	21	Кокоро	Aibika	.969697	1.235769	1.235769	1.235769	1.235769	1.235769	Frame	default
9 28apr2021	2021	4	April	28	Кокоро	Aibika	1.631702	1.235769	1.235769	1.235769	1.235769	1.235769	▷ Filename	fpda_price_sample_2021.dta
0 26may2021	2021	5	May	26	Кокоро	Aibika	1.242424	1.219711	1.219711	1.219711	1.219711	1.219711	Label	· · · · · · · · · · · · · · · · · · ·
1 20may2021	2021	5	May	20	Кокоро	Aibika	.9090909	1.219711	1.219711	1.219711	1.219711	1.219711	Notes	
2 23jun2021	2021	6	June	23	Кокоро	Aibika	2.166667	1.432336	1.432336	1.432336	1.432336	1.432336	Variables	14
3 30jun2021	2021	6	June	30	Кокоро	Aibika	1.674437	1.432336	1.432336	1.432336	1.432336	1.432336	Observations	2,310
4 19jul2021	2021	7		19	Kokopo	Aibika	1	1.322002	1.322002	1.322002	1.322002	1.322002	Size	230.10K
5 31jul2021	2021	7		31	Kokopo	Aibika	.9393939	1.322002	1.322002	1.322002	1.322002	1.322002	Memory	64M
6 27aug2021	2021	8	August	27	Kokopo	Aibika	1		1.356099	1.356099	1.356099	1.356099	Sorted by	
7 30sep2021	2021	9		30	Kokopo	Aibika	2	1.50303	1.50303	1.50303	1.50303	1.50303		
8 22sep2021	2021	9		22	Кокоро	Aibika	_	1.50303	1.50303	1.50303	1.50303	1.50303		
reschrort	2022	,	a ch c cuine i		Koropo	DIVING	2.575750	2130303	2150505	2150503	2150505	×		

– o ×

Data Manipulation

- The most important arithmetic, logical and relational operators in Stata.
 - Among the most common are & (and), (or), and (not).

Logical Operators in Stata						
And	&					
Or	T					
Not	! or ~					
Multiplication	*					
Division \	١					
Addition	+					
Subtraction	-					
Less Than	<					
Greater Than	>					
Less Than or Equal	<=					
More Than or Equal	>=					
To The Power Of	^					
Wildcard	*					

Describing Data

• **Browse**: there are several ways in Stata to investigate and describe data. You have begun browsing the data in the previous section.

//type browse in the command window

- browse
- browse market crop year

Command		
browse		
Command		
browse market crop year		

List

If the dataset is not too large, you can also examine it in the results window by using the *list* command

Command

list in 1/50

- For example the observation 1 to 50:
- //type list market in the command window

list market

list in 1/50 //lists observation from 1 to 50

list in 10/29 //lists observation from 10 to 29

list in 100/l //lists observation from 100 to last
observation (lower case `l')

list in -10/l //lists observation from last 10 observation
 (lower case `l')

Assert

One useful command is *assert*, which verifies whether a certain statement is true or false. Check that all unitprice values are positive, for example:

assert unitprice > 0

assert unitprice < 0</pre>

Describe

This command provides a brief overview of the dataset and its variables (size, number of variables, observations, storage types of variables, etc.).

describe

Observation Variable		2,310 14		May 2022 17:52
Variable	Storage	Display	Value	
name	type	format	label	Variable label
date	float	%td		
year	int	%8.0g		
month	int	%8.0g		
month name	float	%tmMonth		
day	int	88.0g		
market	str36	%36s		
crop	str24	%24s		
unitprice	float	%9.0g		(mean) unitprice
movingave_a	float	%9.0g		No restriction on minimum # of values averaged during 3-month period
movingave b	float	%9.0g		At least 2 values averaged during a 3-month period
movingave_c	float	%9.0g		At least 2 values from at least 2 months averaged during a 3-month period
movingave d	float	%9.0g		At least 3 values averaged during a 3-month period
movingave_e	float	%9.0g		At least 3 values from at least 2 months averaged during a 3-month period
movingave_f	float	%9.0g		At least 3 values from at least 3 months averaged during a 3-month period

Codebook

It provides additional information about the variables, such as summary statistics for numeric, examples of data points for strings, etc. Without a list of variables, codebook will give information on all variables in the dataset.

//the command displays the frequency of each
market

codebook market

Summarize

This command gives summary statistics, such as means, standard deviations, and so on.

You can also specify a variable (e.g. *sum* unitprice) after the command to summarize only specific variables.

If you would like more precise information (e.g. percentiles) then you can add the detail option to the end of that command, i.e. *sum* unitprice, detail.

//in the command window type sum

sum

sum unitprice

sum unitprice, detail

Tabulate

Use this command to create a frequency table or a cross-tabulation of two variables.

Typing 'tab market' will show how many markets are there in the data.

The 'tab market crop', for example, will display the crop and number of observations for each market.

tab market

tab crop

tab market crop

With the tabulate command and the sum(varname) option, it is possible to get a quick idea of the descriptive statistics of some subgroups.

For example, the average sweet potato unitprice per market:

tab market if crop=="Sweet Potato", sum(unitprice)

tab market if crop=="Sweet Potato", sum(unitprice)

	Summary o	of (mean) unit	price
	Mean	Std. dev.	Freq.
Banz	1.2962642	.19958018	7
Goroka	1.2873904	.63626853	17
Kokopo	1.6164387	.48731619	19
Kundiawa	1.2256389	.15180282	8
Lae	1.8077708	.79371596	16
Mt. Hagen	1.0134973	.34365974	16
Port Moresby	2.7486693	.86287757	17
Total	1.633446	.81793677	100

• Another tabulate command is "tabstat". This is used for continuous variables, and it is mainly used to determine mean values. For example tabstat unitprice will give the average unit price in the dataset. The 'if' command can be used to subset the data to get the average price of each crop by a market.

tabstat unitprice, by(crop)

tabstat unitprice if market=="Lae", by(crop)

tabstat unitprice, by(crop)

1		` _ '		
crop	Mean		crop	Mean
	0.000144		Karakap	2.577978
Aibika	2.680144		Lemon	4.917943
Amaranthus-Aupa	2.510823		Lettuce	11.64506
Asparagus	21.59091		Mandarine	7.818021
Banana-Cooking	2.727463		Onion Bulb	7.531552
Banana-Ripe	2.192472		Orange	4.842498
Broccoli	7.538422		Pakchoi	4.208492
Cabbage-English	2.699988		Pawpaw	2.32537
Capsicum	7.270709		Peanut	7.747872
Carrot	6.220998		Pineapple	3.982939
Cassava	1.179519		Potato	3.21211
Choko-Tips	2.612188		Pumpkin-Tips	2.018589
Cucumber	2.427502		Rice	3.979762
Fern	2.421382		Sweet Potato	1.633446
French/Dwarf Bea	5.624007		Taro True	3.721406
Garlic	29.28704		Tomato	5.892871
Ginger	6.740609		Watermelon	3.935437
				5.702879
			Wongbok	5.702079
			Total	4.417942

Working with do file

- Rather than typing commands one by one interactively, you can enter them all at one time in a do-file, then run the do-file once.
- Upon completion of the do-file, the results of each command can be reviewed in a log file.
- Stata has a built-in editor simply click the pad-and-pencil icon on the from the main menu.
- Text editors such as Word and Notepad can be used to create Do-files.

Major commands

- Clear- clears any data currently in Stata"s memory, closes open files, windows, and dialog boxes while clearing data, labels, and stored results. Then you can run a new do-file and clear all previous work.
- cd "/[path]/[working directory]/" sets your working directory, the location from which yo
- *capture log close* closes an already-opened log. u will retrieve and save your data/files.
- log using sample1.log, replace text creates a log file of all the results.
- set more off Stata will not pause and display the ---more--- message in the results window for you to review each page on-screen and press a key to get more. Stata will instead run the entire dofile without pausing.
- *set memory 100m* specify 100m as Stata's default memory might not be enough for large datafiles.
- Use "[pathway]/[filename]" to open or retrieve data from the current directory
- *Save* "*[pathway]/[filename]*" saves data to working directory

Comments/Notes

- // Stata ignores two consecutive slashes (or a slash followed by an asterisk *)
- /* */ a note can be inserted inside these pseudoparentheses after a command.
- *** describe a task or line of code.
- * notes or explanations of what a line of code does.

price_data_summary_vis.do 🛛 🗙

```
1
     2
3
        * FPDA food price survey data: simple analysis training
4
        *Stata programs are referred to as do-files. The files have the suffix .do and contains the Stata commands that you want to execute. off of your work.
5
     * Do file provides basic information on how to get started with Stata:
7
8
9
        * Commands
10
    * 1. Review a) changing directory: cd "....directory..." and b) changing paths
   * 2. commenting commands and commenting "good habit"
11
   * 3. description of files: do, log, scml, dta
12
   * 4. basic statistics: means, standard deviations, min, max
13
14 * 5.a-variable information: # of observations, describe, codebook
15 * 5.b-types of variables: binary, categorical, ordinal, continuous
   * 6. logical & relational operators: =, ==, >, >=, <, <=, !=, &,
16
17 * link to set theory: union and intersection
18 * 7. Arithmetic/String operators: +, -, /, *, ^
   * 8. if (link to set theory of sub-sets) and by commands
19
   * 9. generatiing variables: gen (across variables); egen (across observations)
20
21
    *
                               g byte (binary variables)
22
   *
                               ordinal variables
   * 10. test of means of the variables: ttests (continuous) and tab var1 var2, row col chi2 (binary)
23
   * 11. saving data
24
25
    * 12. collapsing data
26
27
    *Begin typing your commands. This clears your workspace, frees Memory for faster calculations, opens your data file, and displays a Stata log.
28
        clear all
29
30
        set more off
31
        set memory 100m
32
33
        capture log close
34
35
36
37
    **1: DIRECTORY
38
     *******
39
40
41
    * A. The following command, cd, changes your working directory. This enables us to tell Stata where to work.
    * from where to get the files, save the files, and send the output
42
43
        *cd "C:\Users\MKEDIRJEMAL\Dropbox (IFPRI)\Kobo and stata training\"
44
45
    * B. setting a global path is another way to more efficiently refer to files
46
        global dir "C:\Users\MKEDIRJEMAL\Dropbox (IFPRI)\Kobo and stata training\"
47
        global data
                           "$dir\data"
48
        global analysis
                           "$dir\analysis"
49
        global graphs
                           "$dir\graphs"
50
51
    **2: COMMENTING
    *****************************
52
53
    * An asterisk (*) at the start of a line allows you to remark on the line but does not execute the command.
    * as shown below. Text in GREEN means that it is a comment. Text in BLUE means that it is a Stata key word to be run
54
55
        * clear
56
```