

AGRODEP
Household survey data course
Dakar, 8-10 October 2012

Survey commands in 



HarvestChoice
BETTER CHOICES, BETTER LIVES



LSMS
Living Standards Measurement Study

svy command: general syntax

```
. svyset PSU [pw=pweight], str(stratum)
```

```
    pweight: pweight
```

```
        VCE: linearized
```

```
Single unit: missing
```

```
    Strata 1: stratum
```

```
        SU 1: PSU
```

```
        FPC 1: <zero>
```

Supports many estimation commands:

- mean, proportion, ratio, total
- cnreg, cnsreg, glm, intreg, nl, ols, tobit, treatreg, truncreg
- stcox, streg
- probit, logit, biprobit, cloglog,...
- clogit, mlogit, mprobit, ologit, oprobit, slogit
- nbreg, poisson, zip, zinb. Ivols, ivprobit, ivtobit. Heckman, heckprob

Examples

- average
- proportion
- model estimation

average

```
. mean TOTPCCONS [pw=pweight], over(urban)
```

```
Mean estimation                Number of obs    =    3638
```

```
Urban: urban = Urban
```

```
Rural: urban = Rural
```

Over	Mean	Std. Err.	[95% Conf. Interval]	
TOTPCCONS				
Urban	12094.48	203.4169	11695.66	12493.3
Rural	8160.521	125.9879	7913.507	8407.535

svy command: average

```
. svy: mean TOTPCCONS, over(urban)
(running mean on estimation sample)
```

Survey: Mean estimation

```
Number of strata =          4          Number of obs      =          3638
Number of PSUs   =          455         Population size     =        3068195
                                           Design df          =           451
```

Urban: urban = Urban

Rural: urban = Rural

		Linearized		
Over	Mean	Std. Err.	[95% Conf. Interval]	
<hr/>				
TOTPCCONS				
Urban	12094.48	296.8412	11511.12	12677.84
Rural	8160.521	209.3881	7749.024	8572.018

svy command: average (test)

```
. lincom [TOTPCCONS]Urban-[TOTPCCONS]Rural
```

```
( 1)  [TOTPCCONS]Urban - [TOTPCCONS]Rural = 0
```

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
(1)	3933.959	365.0498	10.78	0.000	3216.549	4651.368



proportion

```
. proportion poor [pw=pweight], over(urban)
```

```
Proportion estimation          Number of obs    =    3638
```

```
no: poor = no  
yes: poor = yes
```

```
Urban: urban = Urban  
Rural: urban = Rural
```

	Over	Proportion	Std. Err.	[95% Conf. Interval]	
no					
	Urban	.8881416	.009669	.8691843	.9070988
	Rural	.7575375	.013601	.7308709	.7842041
yes					
	Urban	.1118584	.009669	.0929012	.1308157
	Rural	.2424625	.013601	.2157959	.2691291

proportion: svy command

```
. svy: mean poor, over(urban)
(running mean on estimation sample)
```

Survey: Mean estimation

```
Number of strata =          4          Number of obs      =       3638
Number of PSUs   =       455          Population size    =  3068195
                                           Design df         =        451
```

Urban: urban = Urban

Rural: urban = Rural

		Linearized		
Over	Mean	Std. Err.	[95% Conf. Interval]	
poor				
Urban	.1118584	.0108146	.0906052	.1331116
Rural	.2424625	.0195528	.2040366	.2808883

proportion (test): svy command

```
. lincom [poor]Urban-[poor]Rural
```

```
( 1)  [poor]Urban - [poor]Rural = 0
```

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
(1)	-.1306041	.0223587	-5.84	0.000	-.1745441	-.086664

model estimation (w/ continuous)

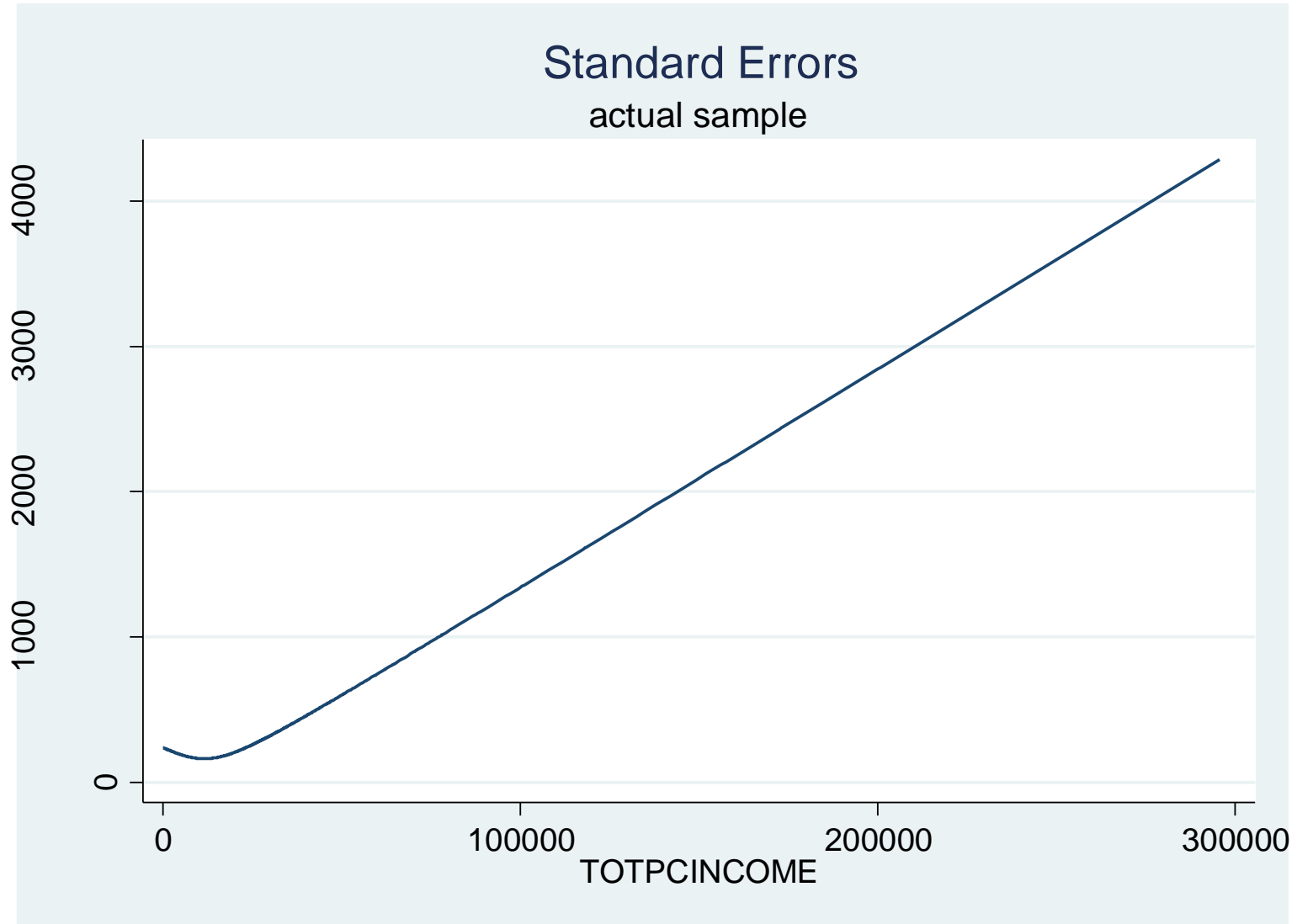
```
. reg TOTPCCONS TOTPCINCOME [pw=pweight]
```

		Robust				
TOTPCCONS	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
TOTPCINCOME	.1676896	.0150931	11.11	0.000	.1380979	.1972814
_cons	7680.692	200.8623	38.24	0.000	7286.878	8074.506

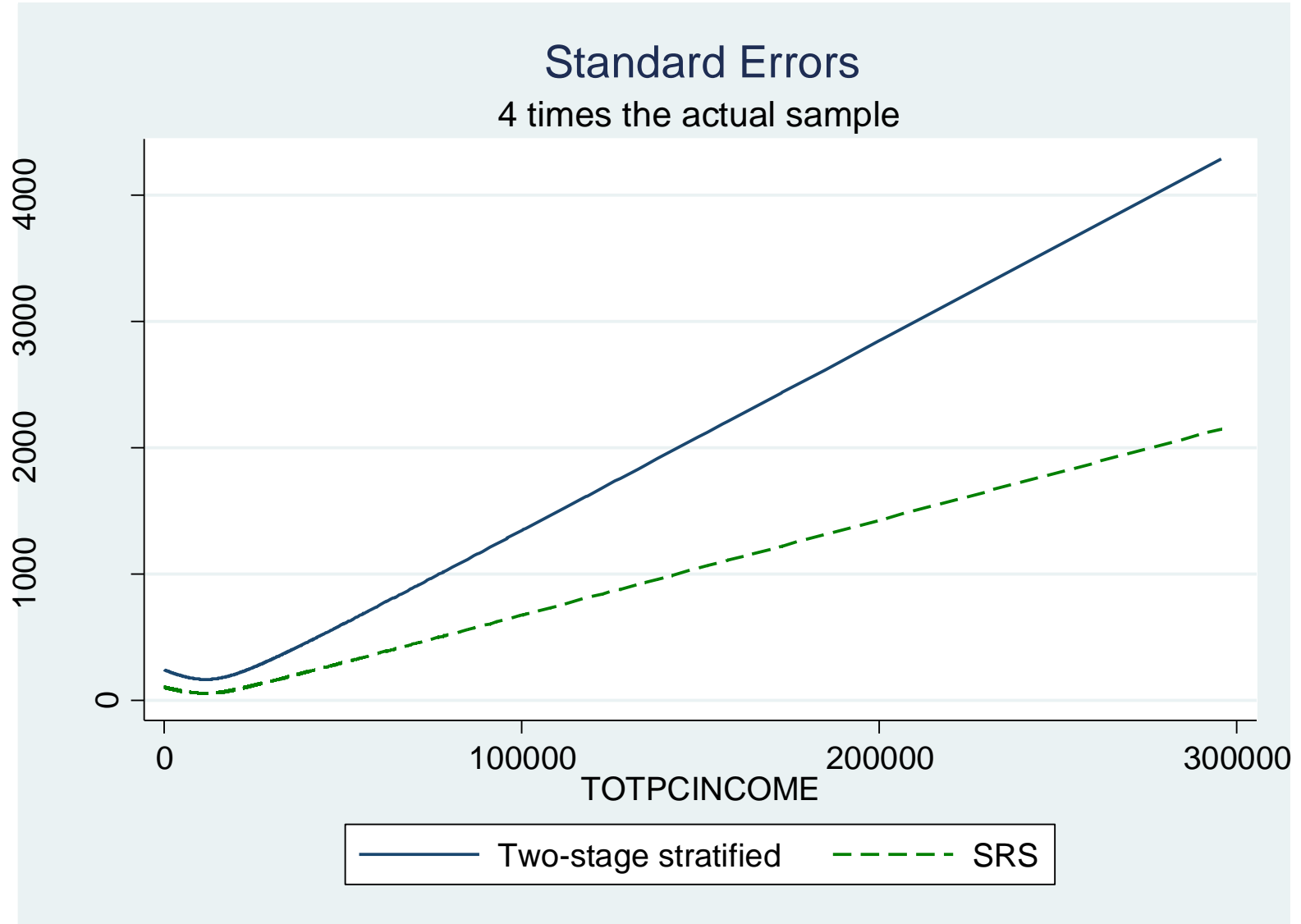
```
. svy: reg TOTPCCONS TOTPCINCOME  
(running regress on estimation sample)
```

		Linearized				
TOTPCCONS	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
TOTPCINCOME	.1676896	.0150648	11.13	0.000	.1380838	.1972954
_cons	7680.692	238.9625	32.14	0.000	7211.074	8150.31

model estimation (actual sample)



model estimation (4 times actual sample)



model estimation (w/ dummy)

```
. svy: reg TOTPCCONS urban
```

Survey: Linear regression

Number of strata	=	4	Number of obs	=	3638
Number of PSUs	=	455	Population size	=	3068194.7
			Design df	=	451
			F(1, 451)	=	116.13
			Prob > F	=	0.0000
			R-squared	=	0.0897

		Linearized				[95% Conf. Interval]	
TOTPCCONS	Coef.	Std. Err.	t	P> t			
urban	-3933.959	365.0498	-10.78	0.000	-4651.368	-3216.549	
_cons	16028.44	631.5923	25.38	0.000	14787.21	17269.67	

