

```

. constraint define 36 [qnonfresh]ln_tot_exp +[qVnonfresh]ln_tot_exp +[qdensefoods]ln_tot_exp +[q>
ein]ln_tot_exp +[qhousehold]ln_tot_exp +[qtransport]ln_tot_exp =0

. global demand1 "(qnonfresh: w_nonfresh ln_tot_exp educ_rank age occupation_rank consu lpnonfresh) =0"
. global demand2 "(qVnonfresh: lnV_nonfresh ln_tot_exp educ_rank age occupation_rank consu lpnonfresh) =0"
. global demand3 "(qdensefoods: w_densefoods ln_tot_exp educ_rank age occupation_rank consu lpnondense) =0"
. global demand4 "(qVdensefoods: lnV_densefoods ln_tot_exp educ_rank age occupation_rank consu lpVdense) =0"
. global demand5 "(qcomplements: w_complements ln_tot_exp educ_rank age occupation_rank consu lpcomplements) =0"
. global demand6 "(qVcomplements: lnV_complements ln_tot_exp educ_rank age occupation_rank consu lpVcomplements) =0"
. global demand7 "(qfruitsveg: w_fruitsveg ln_tot_exp educ_rank age occupation_rank consu lpnonfruitsveg) =0"
. global demand8 "(qVfruitsveg: lnV_fruitsveg ln_tot_exp educ_rank age occupation_rank consu lpVfruitsveg) =0"
. global demand9 "(qprotein: w_protein ln_tot_exp educ_rank age occupation_rank consu lpnonprotein) =0"
. global demand10 "(qVprotein: lnV_protein ln_tot_exp educ_rank age occupation_rank consu lpVprotein) =0"
. global demand11 "(qhousehold: w_household ln_tot_exp educ_rank age occupation_rank consu lpnonhousehold) =0"
. global demand12 "(qtransport: w_transport ln_tot_exp educ_rank age occupation_rank consu lpnontransport) =0"

. sureg $demand1 $demand2 $demand3 $demand4 $demand5 $demand6 $demand7 $demand8 $demand9 $demand10 $demand11 $demand12

Iteration 1: tolerance = .0515138
Iteration 2: tolerance = .00074612
Iteration 3: tolerance = .00002539
Iteration 4: tolerance = 8.736e-07

```

Seemingly unrelated regression, iterated

Equation	Obs	Parms	RMSE	"R-sq"	chi2	P
qnonfresh	2,632	11	.1134886	0.0554	165.98	0.0000
qVnonfresh	2,632	11	.3981845	0.1265	396.97	0.0000
qdensefoods	2,632	11	.060392	0.1087	338.52	0.0000
qVdensefoods	2,632	11	.3844755	0.0896	263.66	0.0000
qcomplements	2,632	11	.0290329	0.2640	978.68	0.0000
qVcomplements	2,632	11	.4418243	0.1409	472.69	0.0000
qfruitsveg	2,632	11	.0583034	0.0812	222.63	0.0000
qVfruitsveg	2,632	11	.3229322	0.1833	570.34	0.0000
qprotein	2,632	11	.080897	0.0669	221.22	0.0000
qVprotein	2,632	11	.4639216	0.1657	540.13	0.0000
qhousehold	2,632	11	.101966	0.0691	218.32	0.0000
qtransport	2,632	11	.0836971	0.0853	378.37	0.0000

- ( 1) [qnonfresh]lpdensefoods - [qdensefoods]lpnonfresh = 0
- ( 2) [qnonfresh]lpcomplements - [qcomplements]lpnonfresh = 0
- ( 3) [qnonfresh]lpfruitsveg - [qfruitsveg]lpnonfresh = 0
- ( 4) [qnonfresh]lpprotein - [qprotein]lpnonfresh = 0
- ( 5) [qnonfresh]lphousehold - [qhousehold]lpnonfresh = 0
- ( 6) [qnonfresh]lptransport - [qtransport]lpnonfresh = 0
- ( 7) [qdensefoods]lpcomplements - [qcomplements]lpdensefoods = 0
- ( 8) [qdensefoods]lpfruitsveg - [qfruitsveg]lpdensefoods = 0
- ( 9) [qdensefoods]lpprotein - [qprotein]lpdensefoods = 0
- (10) [qdensefoods]lphousehold - [qhousehold]lpdensefoods = 0
- (11) [qdensefoods]lptransport - [qtransport]lpdensefoods = 0
- (12) [qcomplements]lpfruitsveg - [qfruitsveg]lpcomplements = 0
- (13) [qcomplements]lpprotein - [qprotein]lpcomplements = 0
- (14) [qcomplements]lphousehold - [qhousehold]lpcomplements = 0
- (15) [qcomplements]lptransport - [qtransport]lpcomplements = 0
- (16) [qfruitsveg]lpprotein - [qprotein]lpfruitsveg = 0
- (17) [qfruitsveg]lphousehold - [qhousehold]lpfruitsveg = 0
- (18) [qfruitsveg]lptransport - [qtransport]lpfruitsveg = 0
- (19) [qprotein]lphousehold - [qhousehold]lpprotein = 0
- (20) [qprotein]lptransport - [qtransport]lpprotein = 0
- (21) [qhousehold]lptransport - [qtransport]lphousehold = 0

(22) [qnonfresh]lpnonfresh + [qnonfresh]lpdensefoods + [qnonfresh]lpcomplements + [qnonfresh]lp  
(23) [qvnonfresh]lpnonfresh + [qvnonfresh]lpdensefoods + [qvnonfresh]lpcomplements + [qvnonfresh]  
(24) [qdensefoods]lpnonfresh + [qdensefoods]lpdensefoods + [qdensefoods]lpcomplements + [qdense]  
(25) [qvdensefoods]lpnonfresh + [qvdensefoods]lpdensefoods + [qvdensefoods]lpcomplements + [qvda]  
(26) [qcomplements]lpnonfresh + [qcomplements]lpdensefoods + [qcomplements]lpcomplements + [qco]  
(27) [qvcomplements]lpnonfresh + [qvcomplements]lpdensefoods + [qvcomplements]lpcomplements + [qv  
(28) [qfruitsveg]lpnonfresh + [qfruitsveg]lpdensefoods + [qfruitsveg]lpcomplements + [qfruitsveg]  
(29) [qvfruitsveg]lpnonfresh + [qvfruitsveg]lpdensefoods + [qvfruitsveg]lpcomplements + [qvfrui  
(30) [qprotein]lpnonfresh + [qprotein]lpdensefoods + [qprotein]lpcomplements + [qprotein]lpfrui  
(31) [qvprotein]lpnonfresh + [qvprotein]lpdensefoods + [qvprotein]lpcomplements + [qvprotein]lp  
(32) [qhousehold]lpnonfresh + [qhousehold]lpdensefoods + [qhousehold]lpcomplements + [qhousehol  
(33) [qtransport]lpnonfresh + [qtransport]lpdensefoods + [qtransport]lpcomplements + [qtranspor  
(34) [qnonfresh]educ\_rank + [qnonfresh]age + [qnonfresh]occupation\_rank + [qnonfresh]consu + [q  
[qdensefoods]occupation\_rank + [qdensefoods]consu + [qvdensefoods]educ\_rank + [qvdensefood  
[qcomplements]consu + [qvcomplements]educ\_rank + [qvcomplements]age + [qvcomplements]occupa  
[qvfruitsveg]age + [qvfruitsveg]occupation\_rank + [qvfruitsveg]consu + [qprotein]educ\_rank  
[qhousehold]educ\_rank + [qhousehold]age + [qhousehold]occupation\_rank + [qhousehold]consu  
[qnonfresh]ln\_tot\_exp + [qvnonfresh]ln\_tot\_exp + [qdensefoods]ln\_tot\_exp + [qvdensefoods]ln  
[qvprotein]ln\_tot\_exp + [qhousehold]ln\_tot\_exp + [qtransport]ln\_tot\_exp = 0

(35)

	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
<b>qnonfresh</b>					
ln_tot_exp	-.0304822	.0037862	-8.05	0.000	-.037903 -.0230613
educ_rank	-.0400327	.0234612	-1.71	0.088	-.0860157 .0059504
age	.0001301	.0001763	0.74	0.461	-.0002155 .0004757
occupation_rank	.0066426	.0023495	2.83	0.005	.0020377 .0112476
consu	.0020131	.0007998	2.52	0.012	.0004455 .0035806
lpnonfresh	.0297512	.0056035	5.31	0.000	.0187687 .0407338
lpdensefoods	-.0066136	.0026847	-2.46	0.014	-.0118756 -.0013517
lpcomplements	-.0019125	.0015175	-1.26	0.208	-.0048867 .0010616
lpfruitsveg	.0149367	.0028289	5.28	0.000	.0093921 .0204813
lpprotein	.0087333	.0035728	2.44	0.015	.0017308 .0157357
lphousehold	-.0333917	.0051483	-6.49	0.000	-.0434821 -.0233013
lptransport	-.0115034	.0042052	-2.74	0.006	-.0197454 -.0032613
_cons	.5533837	.0517174	10.70	0.000	.4520194 .654748
<b>qvnonfresh</b>					
ln_tot_exp	-.103791	.0123639	-8.39	0.000	-.1280239 -.0795582
educ_rank	.0278872	.0735892	0.38	0.705	-.1163449 .1721193
age	.0012756	.0006194	2.06	0.039	.0000617 .0024896
occupation_rank	-.042117	.00823	-5.12	0.000	-.0582474 -.0259866
consu	.0136129	.0028549	4.77	0.000	.0080175 .0192084
lpnonfresh	.030828	.0222191	1.39	0.165	-.0127207 .0743767
lpdensefoods	.0070091	.0184685	0.38	0.704	-.0291886 .0432068
lpcomplements	.1148712	.0206936	5.55	0.000	.0743126 .1554299
lpfruitsveg	.0339746	.0270543	1.26	0.209	-.0190508 .087
lpprotein	-.0586915	.0224185	-2.62	0.009	-.102631 -.0147521
lphousehold	.5913393	.0644771	9.17	0.000	.4649664 .7177121
lptransport	-.7193307	.0553404	-13.00	0.000	-.8277958 -.6108656
_cons	8.95809	.1898887	47.18	0.000	8.585915 9.330265
<b>qdensefoods</b>					
ln_tot_exp	-.0218177	.0020346	-10.72	0.000	-.0258055 -.0178299
educ_rank	-.060052	.0124847	-4.81	0.000	-.0845214 -.0355825
age	.0000855	.0000939	0.91	0.362	-.0000985 .0002695
occupation_rank	-.0019407	.0012564	-1.54	0.122	-.0044031 .0005218
consu	.0006574	.0004286	1.53	0.125	-.0001826 .0014975
lpnonfresh	-.0066136	.0026847	-2.46	0.014	-.0118756 -.0013517
lpdensefoods	-.0005887	.0027645	-0.21	0.831	-.0060071 .0048296
lpcomplements	.0035766	.0012188	2.93	0.003	.0011878 .0059654
lpfruitsveg	.0026797	.0022205	1.21	0.228	-.0016725 .0070318
lpprotein	-.0020588	.002481	-0.83	0.407	-.0069215 .002804
lphousehold	.0017369	.0039157	0.44	0.657	-.0059377 .0094116
lptransport	.0012679	.0033526	0.38	0.705	-.0053031 .007839
_cons	.42857	.0278943	15.36	0.000	.3738982 .4832419
<b>qvdensefoods</b>					
ln_tot_exp	.013302	.0119141	1.12	0.264	-.0100492 .0366532
educ_rank	-.0666885	.07084	-0.94	0.347	-.2055324 .0721554
age	-.0020464	.000598	-3.42	0.001	-.0032186 -.0008743
occupation_rank	-.0155324	.0079457	-1.95	0.051	-.0311056 .0000409
consu	.0141636	.0027579	5.14	0.000	.0087583 .019569

lpnonfresh	-.0113335	.0215079	-0.53	0.598	-.0534883	.0308213
lpdensefoods	.1462638	.0179946	8.13	0.000	.110995	.1815326
lpcomplements	-.0017346	.0202463	-0.09	0.932	-.0414167	.0379475
lpfruitsveg	.0627404	.0263667	2.38	0.017	.0110627	.1144182
lpprotein	.0393487	.0218239	1.80	0.071	-.0034253	.0821227
lphousehold	.3888821	.0630064	6.17	0.000	.2653918	.5123724
lptransport	-.6241669	.0541016	-11.54	0.000	-.730204	-.5181298
_cons	6.674134	.1836039	36.35	0.000	6.314277	7.033991
<b>qcomplements</b>						
ln_tot_exp	-.019458	.0009739	-19.98	0.000	-.0213668	-.0175491
educ_rank	-.0090979	.0059153	-1.54	0.124	-.0206916	.0024959
age	.0002124	.0000452	4.70	0.000	.0001238	.0003009
occupation_rank	-.0031419	.0006071	-5.18	0.000	-.0043318	-.001952
consu	.0010453	.0002089	5.00	0.000	.0006359	.0014547
lpnonfresh	-.0019125	.0015175	-1.26	0.208	-.0048867	.0010616
lpdensefoods	.0035766	.0012188	2.93	0.003	.0011878	.0059654
lpcomplements	.002246	.0014693	1.53	0.126	-.0006337	.0051257
lpfruitsveg	-.0045916	.0016211	-2.83	0.005	-.0077689	-.0014142
lpprotein	-.0067447	.0014999	-4.50	0.000	-.0096844	-.0038051
lphousehold	-.0045554	.0033245	-1.37	0.171	-.0110712	.0019605
lptransport	.0119816	.0028261	4.24	0.000	.0064426	.0175206
_cons	.3404638	.0142592	23.88	0.000	.3125163	.3684114
<b>qvcomplements</b>						
ln_tot_exp	.1136877	.0133871	8.49	0.000	.0874495	.1399259
educ_rank	-.248013	.0796859	-3.11	0.002	-.4041944	-.0918316
age	.00161	.0006869	2.34	0.019	.0002637	.0029563
occupation_rank	.0207096	.0091022	2.28	0.023	.0028696	.0385496
consu	-.006739	.0031612	-2.13	0.033	-.0129349	-.0005432
lpnonfresh	-.0313928	.0246077	-1.28	0.202	-.0796231	.0168374
lpdensefoods	.1020079	.0205442	4.97	0.000	.0617421	.1422738
lpcomplements	.2638667	.0232033	11.37	0.000	.2183891	.3093442
lpfruitsveg	.0121317	.0299757	0.40	0.686	-.0466195	.070883
lpprotein	.07781	.0249433	3.12	0.002	.028922	.126698
lphousehold	.32526	.0711626	4.57	0.000	.1857838	.4647362
lptransport	-.7496835	.0610912	-12.27	0.000	-.86942	-.6299471
_cons	4.986608	.2070636	24.08	0.000	4.580771	5.392445
<b>qfruitsveg</b>						
ln_tot_exp	-.0166768	.0019718	-8.46	0.000	-.0205415	-.012812
educ_rank	-.026454	.012067	-2.19	0.028	-.050105	-.0028031
age	-.0001668	.0000907	-1.84	0.066	-.0003446	.000011
occupation_rank	.0059543	.0012164	4.89	0.000	.0035701	.0083384
consu	-.00168	.0004161	-4.04	0.000	-.0024956	-.0008645
lpnonfresh	.0149367	.0028289	5.28	0.000	.0093921	.0204813
lpdensefoods	.0026797	.0022205	1.21	0.228	-.0016725	.0070318
lpcomplements	-.0045916	.0016211	-2.83	0.005	-.0077689	-.0014142
lpfruitsveg	-.0052753	.0038715	-1.36	0.173	-.0128633	.0023128
lpprotein	.008582	.0027292	3.14	0.002	.0032328	.0139312
lphousehold	-.0189393	.0050936	-3.72	0.000	-.0289226	-.008956
lptransport	.0026078	.0044804	0.58	0.561	-.0061735	.0113892
_cons	.3270542	.0275603	11.87	0.000	.273037	.3810714
<b>qvfruitsveg</b>						
ln_tot_exp	-.0251	.0103146	-2.43	0.015	-.0453162	-.0048837
educ_rank	.1927939	.0613244	3.14	0.002	.0726003	.3129875
age	.0010596	.0005026	2.11	0.035	.0000745	.0020447
occupation_rank	-.0126876	.0067021	-1.89	0.058	-.0258235	.0004482
consu	.0071618	.0023235	3.08	0.002	.0026079	.0117157
lpnonfresh	.1384562	.0180412	7.67	0.000	.1030961	.1738164
lpdensefoods	.0150406	.0150899	1.00	0.319	-.0145351	.0446163
lpcomplements	-.0335403	.0169601	-1.98	0.048	-.0667814	-.0002992
lpfruitsveg	.2610036	.0221172	11.80	0.000	.2176547	.3043525
lpprotein	.0493416	.0182926	2.70	0.007	.0134888	.0851944
lphousehold	.3796278	.0529159	7.17	0.000	.2759146	.4833411
lptransport	-.8099295	.0454751	-17.81	0.000	-.8990591	-.7208
_cons	6.498424	.157663	41.22	0.000	6.189411	6.807438
<b>qprotein</b>						
ln_tot_exp	.0015388	.0027048	0.57	0.569	-.0037625	.0068402
educ_rank	.0324471	.0166636	1.95	0.052	-.0002129	.065107
age	.000318	.0001257	2.53	0.011	.0000717	.0005643

occupation_rank	-.0045545	.001685	-2.70	0.007	-.007857	-.0012519
consu	-.0048978	.0005773	-8.48	0.000	-.0060293	-.0037663
lpnonfresh	.0087333	.0035728	2.44	0.015	.0017308	.0157357
lpdensefoods	-.0020588	.002481	-0.83	0.407	-.0069215	.002804
lpcomplements	-.0067447	.0014999	-4.50	0.000	-.0096844	-.0038051
lpfruitsveg	.008582	.0027292	3.14	0.002	.0032328	.0139312
lpprotein	-.0289924	.004364	-6.64	0.000	-.0375457	-.020439
lphousehold	-.0019642	.00479	-0.41	0.682	-.0113524	.007424
lptransport	.0224448	.0040996	5.47	0.000	.0144098	.0304798
_cons	.1649707	.037288	4.42	0.000	.0918877	.2380537
<b>qprotein</b>						
ln_tot_exp	.0516982	.0137922	3.75	0.000	.0246659	.0787305
educ_rank	.1650131	.082153	2.01	0.045	.0039962	.32603
age	-.0000827	.000721	-0.11	0.909	-.0014959	.0013305
occupation_rank	.0056861	.0095349	0.60	0.551	-.0130019	.0243741
consu	.0066834	.0033138	2.02	0.044	.0001885	.0131784
lpnonfresh	-.0342658	.0259027	-1.32	0.186	-.0850342	.0165026
lpdensefoods	-.0096013	.0216502	-0.44	0.657	-.0520349	.0328322
lpcomplements	-.1030626	.0243206	-4.24	0.000	-.1507302	-.0553951
lpfruitsveg	.0450234	.0317354	1.42	0.156	-.017177	.1072237
lpprotein	.2995196	.0263225	11.38	0.000	.2479285	.3511108
lphousehold	.615534	.075716	8.13	0.000	.4671333	.7639346
lptransport	-.8131472	.0648902	-12.53	0.000	-.9403296	-.6859648
_cons	6.831788	.2147408	31.81	0.000	6.410904	7.252672
<b>qhousehold</b>						
ln_tot_exp	-.0048344	.0034762	-1.39	0.164	-.0116476	.0019789
educ_rank	.0399318	.0211125	1.89	0.059	-.0014479	.0813114
age	-.0005104	.0001589	-3.21	0.001	-.0008219	-.0001989
occupation_rank	-.0058077	.0021381	-2.72	0.007	-.0099982	-.0016172
consu	-.0022723	.000729	-3.12	0.002	-.0037012	-.0008435
lpnonfresh	-.0333917	.0051483	-6.49	0.000	-.0434821	-.0233013
lpdensefoods	.0017369	.0039157	0.44	0.657	-.0059377	.0094116
lpcomplements	-.0045554	.0033245	-1.37	0.171	-.0110712	.0019605
lpfruitsveg	-.0189393	.0050936	-3.72	0.000	-.0289226	-.008956
lpprotein	-.0019642	.00479	-0.41	0.682	-.0113524	.007424
lphousehold	.1495612	.0137166	10.90	0.000	.1226771	.1764452
lptransport	-.0924475	.009992	-9.25	0.000	-.1120314	-.0728636
_cons	.4043142	.0505277	8.00	0.000	.3052817	.5033467
<b>qtransport</b>						
ln_tot_exp	.0419333	.0029023	14.45	0.000	.036245	.0476217
educ_rank	.0133714	.0173579	0.77	0.441	-.0206495	.0473924
age	-.0005267	.0001303	-4.04	0.000	-.0007821	-.0002714
occupation_rank	-.0025126	.0017516	-1.43	0.151	-.0059457	.0009205
consu	-.002911	.0006024	-4.83	0.000	-.0040918	-.0017303
lpnonfresh	-.0115034	.0042052	-2.74	0.006	-.0197454	-.0032613
lpdensefoods	.0012679	.0033526	0.38	0.705	-.0053031	.007839
lpcomplements	.0119816	.0028261	4.24	0.000	.0064426	.0175206
lpfruitsveg	.0026078	.0044804	0.58	0.561	-.0061735	.0113892
lpprotein	.0224448	.0040996	5.47	0.000	.0144098	.0304798
lphousehold	-.0924475	.009992	-9.25	0.000	-.1120314	-.0728636
lptransport	.0656487	.0105661	6.21	0.000	.0449396	.0863579
_cons	-.6075212	.0404635	-15.01	0.000	-.6868281	-.5282142

end of do-file