

Distribution Exact Savings Choices Vectorized

This is the example vignette for function: [snw_ds_main_vec](#) from the [PrjOptiSNW Package](#). This function solves for vfi and gets distribution induced by policy functions and exogenous distributions. Vectorized vfi and distribution methods.

Test SNW_DS_MAIN_VEC

Call the function with testing defaults.

```
mp_params = snw_mp_param('default_docdense');
mp_controls = snw_mp_control('default_test');
mp_controls('bl_print_vfi') = false;
mp_controls('bl_print_ds') = true;
mp_controls('bl_print_ds_verbose') = false;
[Phi_true,Phi_adj,A_agg,Y_inc_agg,it,mp_dsvfi_results] = snw_ds_main_vec(mp_params, mp_controls)
```

Completed SNW_VFI_MAIN_BISEC_VEC;SNW_MP_PARAM=default_docdense;SNW_MP_CONTROL=default_test;time=495.7322

XX

CONTAINER NAME: mp_outcomes ND Array (Matrix etc)

XX

	i	idx	ndim	numel	rowN	colN	sum	mean	std	coefvari
	—	—	—	—	—	—	—	—	—	—
V_VFI	1	1	6	4.37e+07	83	5.265e+05	-1.5339e+08	-3.5101	26.119	-7.441
ap_VFI	2	2	6	4.37e+07	83	5.265e+05	1.4159e+09	32.402	36.798	1.1357
cons_VFI	3	3	6	4.37e+07	83	5.265e+05	2.1402e+08	4.8975	8.3294	1.7007

xxx TABLE:V_VFI XXXXXXXXXXXXXXXXXXXX

	c1	c2	c3	c4	c5	c526496	c526497	c526498	c526499	c526500
	—	—	—	—	—	—	—	—	—	—
r1	-346.51	-346.12	-343.63	-337.86	-328.51	21.702	21.852	22.003	22.154	22.306
r2	-334.38	-333.99	-331.51	-325.83	-316.83	21.724	21.869	22.015	22.163	22.315
r3	-322.45	-322.06	-319.6	-314.14	-305.6	21.745	21.885	22.027	22.171	22.315
r4	-310.63	-310.27	-307.99	-302.88	-294.87	21.767	21.903	22.041	22.182	22.32
r5	-299.94	-299.6	-297.46	-292.67	-285.12	21.775	21.907	22.042	22.18	22.32
r79	-9.9437	-9.9325	-9.8557	-9.6597	-9.3232	2.5394	2.5501	2.5602	2.5696	2.578
r80	-8.9023	-8.8911	-8.8143	-8.6183	-8.2818	2.3039	2.3121	2.3198	2.327	2.333
r81	-7.6363	-7.6251	-7.5484	-7.3524	-7.0159	2.0068	2.0124	2.0176	2.0226	2.027
r82	-5.9673	-5.9561	-5.8793	-5.6833	-5.3468	1.5958	1.5989	1.6018	1.6046	1.607
r83	-3.5892	-3.578	-3.5012	-3.3052	-2.9687	0.97904	0.98004	0.98097	0.98185	0.9826

xxx TABLE:ap_VFI XXXXXXXXXXXXXXXXXXXX

	c1	c2	c3	c4	c5	c526496	c526497	c526498	c526499	c526500
	—	—	—	—	—	—	—	—	—	—
r1	0	0	0.0005656	0.0075134	0.022901	114.75	120.41	126.27	132.38	138.8
r2	0	0	0.00051498	0.0065334	0.021549	114.86	120.53	126.41	132.54	138.95
r3	0	0	0.00051498	0.0049294	0.019875	114.97	120.65	126.56	132.7	139.12
r4	0	0	0.00051498	0.0047937	0.019672	115.73	121.42	127.34	133.51	139.92
r5	0	0	0.00048517	0.0046683	0.019484	116.5	122.21	128.15	134.32	140.74
r79	0	0	0	0	0	81.091	85.68	90.335	94.378	98.419
r80	0	0	0	0	0	76.669	80.563	84.304	88.04	91.693
r81	0	0	0	0	0	68.313	71.534	74.475	77.832	81.11
r82	0	0	0	0	0	50.126	53.467	56.953	58.745	60.587
r83	0	0	0	0	0	0	0	0	0	0

xxx TABLE:cons_VFI XXXXXXXXXXXXXXXXXXXX

	c1	c2	c3	c4	c5	c526496	c526497	c526498	c526499	c
r1	0.036717	0.037251	0.040426	0.04363	0.048012	9.6491	9.817	9.9649	10.073	1
r2	0.036717	0.037251	0.040477	0.04461	0.049364	9.8118	9.9685	10.101	10.191	1
r3	0.036717	0.037251	0.040477	0.046214	0.051039	9.9779	10.12	10.234	10.302	1
r4	0.038144	0.038678	0.041903	0.047776	0.052666	10.131	10.258	10.354	10.405	1
r5	0.039534	0.040068	0.043323	0.04929	0.054241	10.272	10.384	10.463	10.5	1
r79	0.2179	0.21844	0.22216	0.23228	0.25197	35.858	37.092	38.455	40.627	4
r80	0.2179	0.21844	0.22216	0.23228	0.25197	40.253	42.183	44.459	46.938	8
r81	0.2179	0.21844	0.22216	0.23228	0.25197	48.587	51.19	54.266	57.123	6
r82	0.2179	0.21844	0.22216	0.23228	0.25197	66.755	69.238	71.77	76.192	8
r83	0.2179	0.21844	0.22216	0.23228	0.25197	116.87	122.69	128.71	134.92	1
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:1 of 82,	time-this-age:0.38533							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:2 of 82,	time-this-age:4.8535							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:3 of 82,	time-this-age:5.4245							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:4 of 82,	time-this-age:5.9426							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:5 of 82,	time-this-age:6.1288							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:6 of 82,	time-this-age:6.5704							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:7 of 82,	time-this-age:6.8969							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:8 of 82,	time-this-age:6.9897							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:9 of 82,	time-this-age:7.1947							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:10 of 82,	time-this-age:8.6388							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:11 of 82,	time-this-age:9.0845							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:12 of 82,	time-this-age:10.3717							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:13 of 82,	time-this-age:10.517							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:14 of 82,	time-this-age:10.7579							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:15 of 82,	time-this-age:10.8217							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:16 of 82,	time-this-age:10.8223							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:17 of 82,	time-this-age:10.7043							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:18 of 82,	time-this-age:10.7417							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:19 of 82,	time-this-age:10.8037							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:20 of 82,	time-this-age:10.818							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:21 of 82,	time-this-age:10.7822							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:22 of 82,	time-this-age:11.9326							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:23 of 82,	time-this-age:11.9625							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:24 of 82,	time-this-age:11.8969							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:25 of 82,	time-this-age:11.7013							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:26 of 82,	time-this-age:11.9384							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:27 of 82,	time-this-age:12.7336							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:28 of 82,	time-this-age:12.6447							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:29 of 82,	time-this-age:12.7296							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:30 of 82,	time-this-age:12.7955							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:31 of 82,	time-this-age:12.6745							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:32 of 82,	time-this-age:12.822							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:33 of 82,	time-this-age:12.4306							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:34 of 82,	time-this-age:12.5625							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:35 of 82,	time-this-age:12.4247							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:36 of 82,	time-this-age:12.2152							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:37 of 82,	time-this-age:12.4463							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:38 of 82,	time-this-age:12.409							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:39 of 82,	time-this-age:12.2658							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:40 of 82,	time-this-age:12.2869							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:41 of 82,	time-this-age:12.1216							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:42 of 82,	time-this-age:12.1159							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:43 of 82,	time-this-age:12.0175							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:44 of 82,	time-this-age:11.8754							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:45 of 82,	time-this-age:11.8576							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:46 of 82,	time-this-age:11.6876							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:47 of 82,	time-this-age:11.4529							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:48 of 82,	time-this-age:11.2909							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:49 of 82,	time-this-age:13.2073							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:50 of 82,	time-this-age:14.38							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:51 of 82,	time-this-age:14.2335							

SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:52	of 82,	time-this-age:14.3025
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:53	of 82,	time-this-age:14.4099
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:54	of 82,	time-this-age:14.6607
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:55	of 82,	time-this-age:14.3725
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:56	of 82,	time-this-age:13.0721
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:57	of 82,	time-this-age:14.2288
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:58	of 82,	time-this-age:11.5969
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:59	of 82,	time-this-age:11.2636
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:60	of 82,	time-this-age:11.4644
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:61	of 82,	time-this-age:11.153
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:62	of 82,	time-this-age:9.8175
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:63	of 82,	time-this-age:9.4858
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:64	of 82,	time-this-age:8.2039
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:65	of 82,	time-this-age:7.8046
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:66	of 82,	time-this-age:8.0482
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:67	of 82,	time-this-age:7.7332
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:68	of 82,	time-this-age:7.8717
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:69	of 82,	time-this-age:7.7449
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:70	of 82,	time-this-age:7.6917
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:71	of 82,	time-this-age:7.4818
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:72	of 82,	time-this-age:7.5373
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:73	of 82,	time-this-age:7.477
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:74	of 82,	time-this-age:7.0533
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:75	of 82,	time-this-age:7.0132
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:76	of 82,	time-this-age:6.8244
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:77	of 82,	time-this-age:6.5596
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:78	of 82,	time-this-age:6.3739
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:79	of 82,	time-this-age:6.145
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:80	of 82,	time-this-age:5.9883
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:81	of 82,	time-this-age:5.6745
SNW_DS_MAIN_VEC	ACUMU	MASS:	Finished	Age	Group:82	of 82,	time-this-age:5.4529
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:1	of 82,	time-this-age:0.32995
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:2	of 82,	time-this-age:0.046363
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:3	of 82,	time-this-age:0.0452
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:4	of 82,	time-this-age:0.04461
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:5	of 82,	time-this-age:0.046124
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:6	of 82,	time-this-age:0.044917
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:7	of 82,	time-this-age:0.044963
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:8	of 82,	time-this-age:0.045331
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:9	of 82,	time-this-age:0.044994
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:10	of 82,	time-this-age:0.045092
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:11	of 82,	time-this-age:0.045782
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:12	of 82,	time-this-age:0.045744
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:13	of 82,	time-this-age:0.044755
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:14	of 82,	time-this-age:0.045424
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:15	of 82,	time-this-age:0.04489
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:16	of 82,	time-this-age:0.045122
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:17	of 82,	time-this-age:0.044855
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:18	of 82,	time-this-age:0.044743
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:19	of 82,	time-this-age:0.04457
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:20	of 82,	time-this-age:0.042135
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:21	of 82,	time-this-age:0.042964
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:22	of 82,	time-this-age:0.042523
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:23	of 82,	time-this-age:0.041992
SNW_DS_MAIN	NORMALIZE	MASS:	Finished	Age	Group:24	of 82,	time-this-age:0.042272
SNW_DS_MAIN	NORMALIZE	MASS:	Finished				

SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:35 of 82, time-this-age:0.041973
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:36 of 82, time-this-age:0.042507
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:37 of 82, time-this-age:0.04212
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:38 of 82, time-this-age:0.041928
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:39 of 82, time-this-age:0.042805
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:40 of 82, time-this-age:0.042282
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:41 of 82, time-this-age:0.042023
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:42 of 82, time-this-age:0.041985
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:43 of 82, time-this-age:0.042461
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:44 of 82, time-this-age:0.042176
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:45 of 82, time-this-age:0.041744
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:46 of 82, time-this-age:0.042401
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:47 of 82, time-this-age:0.041823
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:48 of 82, time-this-age:0.042776
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:49 of 82, time-this-age:0.042345
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:50 of 82, time-this-age:0.041778
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:51 of 82, time-this-age:0.04279
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:52 of 82, time-this-age:0.042188
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:53 of 82, time-this-age:0.042106
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:54 of 82, time-this-age:0.041468
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:55 of 82, time-this-age:0.04238
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:56 of 82, time-this-age:0.042431
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:57 of 82, time-this-age:0.042291
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:58 of 82, time-this-age:0.042408
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:59 of 82, time-this-age:0.042301
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:60 of 82, time-this-age:0.041831
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:61 of 82, time-this-age:0.041465
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:62 of 82, time-this-age:0.043668
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:63 of 82, time-this-age:0.042077
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:64 of 82, time-this-age:0.041524
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:65 of 82, time-this-age:0.043254
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:66 of 82, time-this-age:0.042202
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:67 of 82, time-this-age:0.041436
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:68 of 82, time-this-age:0.041208
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:69 of 82, time-this-age:0.041526
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:70 of 82, time-this-age:0.042328
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:71 of 82, time-this-age:0.041618
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:72 of 82, time-this-age:0.041941
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:73 of 82, time-this-age:0.04211
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:74 of 82, time-this-age:0.041632
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:75 of 82, time-this-age:0.041663
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:76 of 82, time-this-age:0.042221
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:77 of 82, time-this-age:0.042
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:78 of 82, time-this-age:0.041732
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:79 of 82, time-this-age:0.042972
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:80 of 82, time-this-age:0.04279
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:81 of 82, time-this-age:0.042028
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:82 of 82, time-this-age:0.042981
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:83 of 82, time-this-age:0.041914
 SNW_DS_MAIN: Share of population with assets equal to upper bound on asset grid:6.6266e-06
 SNW_DS_MAIN: Accidental bequests are thrown in the ocean
 SNW_DS_MAIN_VEC: Number of a2-adjustments (for taxation) used to balance the government budget= 0
 SNW_DS_MAIN_VEC: Old and updated value of a2=1.5286 1.5286
 SNW_DS_MAIN_VEC: Aggregates: Cons., Gov. cons., Save, Assets, Income, Bequests 48.88966 11.38831 194.5563
 SNW_DS_MAIN_VEC: Resource constraint: C_t+A_{t+1}+G_t=A_t+Y_t 259.3534 259.3526
 Completed SNW_DS_MAIN_VEC;SNW_MP_PARAM=default_docdense;SNW_MP_CONTROL=default_test;time=869.5447
 xxx tb_outcomes: all stats xxx

OriginalVariableNames	a_ss	ap_ss	cons_ss	n_ss	y_all	y_head_inc	y
{'mean' }	4.2486	4.3473	1.0676	2.3554	1.4672	1.1087	
{'unweighted_sum' }	2228	5.3198e+08	5.0976e+07	21	8.3563e+07	1.9253e+06	
{'sd' }	6.7963	6.834	0.69454	1.4375	1.4636	1.0092	
{'coefofvar' }	1.5996	1.572	0.65055	0.61029	0.99755	0.91029	
{'gini' }	0.68054	0.68147	0.3385	0.3128	0.44353	0.41889	

{'min'}	}	0	0	0.036717	1	0.038108	0.038108
{'max'}	}	135	163.7	141.66	6	50.873	24.357
{'pVis0'}	}	0.1223	0.10225	0	0	0	0
{'pYls0'}	}	0	0	0	0	0	0
{'pYgr0'}	}	0.8777	0.89775	1	1	1	1
{'pVisMINY'}	}	0.1223	0.10225	8.6094e-07	0.36005	8.6094e-07	1.2258e-06
{'pVisMAXY'}	}	6.6266e-06	2.2031e-12	0	0.041101	2.2031e-12	1.641e-09
{'p0_01'}	}	0	0	0.066316	1	0.069931	0.065666
{'p0_1'}	}	0	0	0.10404	1	0.11208	0.1034
{'p1'}	}	0	0	0.185	1	0.20291	0.17983
{'p5'}	}	0	0	0.27653	1	0.28	0.25935
{'p10'}	}	0	0	0.35932	1	0.35446	0.31385
{'p20'}	}	0.064373	0.070044	0.49736	1	0.50155	0.41397
{'p25'}	}	0.11124	0.18238	0.56384	1	0.5774	0.46885
{'p30'}	}	0.26367	0.37542	0.63117	1	0.65517	0.5291
{'p40'}	}	0.68544	0.85525	0.77036	2	0.8305	0.65232
{'p50'}	}	1.4131	1.5959	0.92038	2	1.0329	0.80051
{'p60'}	}	2.5301	2.7681	1.086	2	1.2828	0.98453
{'p70'}	}	4.1199	4.5042	1.2802	3	1.6166	1.2256
{'p75'}	}	5.4836	5.7337	1.3961	3	1.8353	1.3831
{'p80'}	}	7.1191	7.2583	1.5324	4	2.1144	1.5829
{'p90'}	}	12.56	12.145	1.9406	5	3.0534	2.2473
{'p95'}	}	16.875	17.551	2.3509	5	4.0423	2.9873
{'p99'}	}	30.548	31.57	3.4062	6	6.9038	5.03
{'p99_9'}	}	56.953	57.547	5.2994	6	14.807	8.8596
{'p99_99'}	}	90.439	90.439	7.5689	6	21.018	13.695
{'fl_cov_a_ss'}	}	46.189	46.181	3.4533	-1.4145	4.552	3.9111
{'fl_cor_a_ss'}	}	1	0.99429	0.73158	-0.14479	0.45762	0.57021
{'fl_cov_ap_ss'}	}	46.181	46.704	3.5562	-1.3778	5.3963	4.1925
{'fl_cor_ap_ss'}	}	0.99429	1	0.74922	-0.14025	0.53951	0.60786
{'fl_cov_cons_ss'}	}	3.4533	3.5562	0.48239	0.23887	0.77192	0.5697
{'fl_cor_cons_ss'}	}	0.73158	0.74922	1	0.23926	0.75937	0.81274
{'fl_cov_n_ss'}	}	-1.4145	-1.3778	0.23887	2.0664	0.36008	0.092861
{'fl_cor_n_ss'}	}	-0.14479	-0.14025	0.23926	1	0.17115	0.064008
{'fl_cov_y_all'}	}	4.552	5.3963	0.77192	0.36008	2.1421	1.1244
{'fl_cor_y_all'}	}	0.45762	0.53951	0.75937	0.17115	1	0.7612
{'fl_cov_y_head_inc'}	}	3.9111	4.1925	0.5697	0.092861	1.1244	1.0186
{'fl_cor_y_head_inc'}	}	0.57021	0.60786	0.81274	0.064008	0.7612	1
{'fl_cov_y_head_earn'}	}	1.9006	2.2089	0.43359	0.19345	0.97967	0.891
{'fl_cor_y_head_earn'}	}	0.30133	0.34828	0.67268	0.14501	0.72126	0.95129
{'fl_cov_y_spouse_inc'}	}	0.64085	1.2037	0.20222	0.26722	1.0177	0.10581
{'fl_cor_y_spouse_inc'}	}	0.098743	0.18445	0.3049	0.19466	0.72817	0.10979
{'fl_cov_yshr_interest'}	}	0.77027	0.72501	0.038411	-0.066855	-0.0092638	0.0068725
{'fl_cor_yshr_interest'}	}	0.67438	0.63125	0.32907	-0.27673	-0.037662	0.040518
{'fl_cov_yshr_wage'}	}	-0.77963	-0.69253	-0.0045925	0.17059	0.10778	0.062723
{'fl_cor_yshr_wage'}	}	-0.3398	-0.30018	-0.019587	0.35152	0.21813	0.1841
{'fl_cov_yshr_SS'}	}	0.0093601	-0.032478	-0.033818	-0.10373	-0.098514	-0.069596
{'fl_cor_yshr_SS'}	}	0.0058267	-0.020106	-0.206	-0.3053	-0.28477	-0.29175
{'fl_cov_yshr_tax'}	}	0.099405	0.11025	0.018741	0.01336	0.038806	0.024785
{'fl_cor_yshr_tax'}	}	0.41564	0.45846	0.76677	0.26411	0.75345	0.69786
{'fl_cov_yshr_nttxss'}	}	0.090044	0.14273	0.052559	0.11709	0.13732	0.094381
{'fl_cor_yshr_nttxss'}	}	0.05183	0.081703	0.29603	0.31865	0.36703	0.36583
{'fracByP0_01'}	}	0	0	5.4315e-06	0.15286	4.2545e-06	5.2111e-06
{'fracByP0_1'}	}	0	0	8.2399e-05	0.15286	6.3218e-05	7.7572e-05
{'fracByP1'}	}	0	0	0.0013761	0.15286	0.0010863	0.0013135
{'fracByP5'}	}	0	0	0.01022	0.15286	0.007951	0.010012
{'fracByP10'}	}	0	0	0.025187	0.15286	0.018765	0.02408
{'fracByP20'}	}	0.00074359	0.00061895	0.065443	0.15286	0.04804	0.055597
{'fracByP25'}	}	0.0014042	0.0020497	0.090297	0.15286	0.066483	0.075666
{'fracByP30'}	}	0.0041483	0.0051966	0.11827	0.15286	0.08755	0.0995
{'fracByP40'}	}	0.01665	0.018812	0.18387	0.40183	0.13814	0.15151
{'fracByP50'}	}	0.045047	0.046332	0.26291	0.40183	0.20163	0.21876
{'fracByP60'}	}	0.094899	0.095657	0.35672	0.40183	0.27993	0.29717
{'fracByP70'}	}	0.17353	0.17824	0.46729	0.56321	0.37814	0.39623
{'fracByP75'}	}	0.24359	0.23689	0.52992	0.56321	0.43683	0.45498

{'fracByP80'}	}	0.32643	0.31096	0.59841	0.75407	0.50391	0.52169
{'fracByP90'}	}	0.56332	0.5274	0.75898	0.8953	0.67588	0.69048
{'fracByP95'}	}	0.69729	0.69468	0.85836	0.8953	0.79474	0.80629
{'fracByP99'}	}	0.90278	0.90216	0.96058	1	0.93117	0.94
{'fracByP99_9'}	}	0.98493	0.98362	0.99414	1	0.98801	0.99016
{'fracByP99_99'}	}	0.99793	0.99759	0.99921	1	0.99841	0.99857

```
% [Phi_true,Phi_adj] = snw_ds_main(mp_params, mp_controls);
Phi_true = Phi_true/sum(Phi_true(:));
```

Show All Info in mp_dsvfi_results

```
mp_cl_mt_xyz_of_s = mp_dsvfi_results('mp_cl_mt_xyz_of_s');
disp(mp_cl_mt_xyz_of_s('tb_outcomes'))
```

	mean	unweighted_sum	sd	coefofvar	gini	min	max	pYis0
a_ss	4.2486	2228	6.7963	1.5996	0.68054	0	135	0.1223
ap_ss	4.3473	5.3198e+08	6.834	1.572	0.68147	0	163.7	0.10225
cons_ss	1.0676	5.0976e+07	0.69454	0.65055	0.3385	0.036717	141.66	0
n_ss	2.3554	21	1.4375	0.61029	0.3128	1	6	0
y_all	1.4672	8.3563e+07	1.4636	0.99755	0.44353	0.038108	50.873	0
y_head_inc	1.1087	1.9253e+06	1.0092	0.91029	0.41889	0.038108	24.357	0
y_head_earn	0.88655	19732	0.92804	1.0468	0.53121	0	18.957	0.2016
y_spouse_inc	0.35849	4.8273e+05	0.95494	2.6638	0.85255	0	26.627	0.52499
yshr_interest	0.12214	3.8429e+06	0.16806	1.3759	0.66002	0	0.99299	0.1223
yshr_wage	0.77513	8.8876e+06	0.33759	0.43553	0.2056	0	1	0.10584
yshr_SS	0.10273	30336	0.23637	2.3009	0.91226	0	1	0.7984
yshr_tax	0.17862	2.8339e+06	0.03519	0.19701	0.11226	0.036506	0.2552	0
yshr_nttxss	0.075896	2.8036e+06	0.25563	3.3681	1.3974	-0.89184	0.2552	0