

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. More Dense Simulation. Vectorized to get distribution, but uses **bisect vec** for VFI.

Test SNW_DS_MAIN_VEC Defaults Dense

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=234.2237

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

CONTAINER NAME: mp_outcomes ND Array (Matrix etc)

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

	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	6
r81	0.2179	0.21844	0.22216	0.23228	0.25197	48.587	51.19	54.266	57.123	8
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:0.48418							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:2 of 82,	time-this-age:4.5075							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:3 of 82,	time-this-age:5.7758							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:4 of 82,	time-this-age:6.1208							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:5 of 82,	time-this-age:6.5417							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:6 of 82,	time-this-age:7.083							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:7 of 82,	time-this-age:7.4327							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:8 of 82,	time-this-age:7.7609							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:9 of 82,	time-this-age:8.2184							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:10 of 82,	time-this-age:9.5964							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:11 of 82,	time-this-age:9.7541							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:12 of 82,	time-this-age:11.3014							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:13 of 82,	time-this-age:11.3944							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:14 of 82,	time-this-age:11.3322							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:15 of 82,	time-this-age:11.5277							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:16 of 82,	time-this-age:11.9461							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:17 of 82,	time-this-age:11.6505							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:18 of 82,	time-this-age:11.9663							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:19 of 82,	time-this-age:11.9451							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:20 of 82,	time-this-age:12.0175							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:21 of 82,	time-this-age:12.0305							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:22 of 82,	time-this-age:12.9894							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:23 of 82,	time-this-age:13.3004							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:24 of 82,	time-this-age:13.2201							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:25 of 82,	time-this-age:13.0713							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:26 of 82,	time-this-age:13.0777							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:27 of 82,	time-this-age:13.9953							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:28 of 82,	time-this-age:13.7495							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:29 of 82,	time-this-age:13.9164							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:30 of 82,	time-this-age:13.7756							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:31 of 82,	time-this-age:13.7336							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:32 of 82,	time-this-age:13.6508							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:33 of 82,	time-this-age:13.7827							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:34 of 82,	time-this-age:13.7384							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:35 of 82,	time-this-age:13.6075							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:36 of 82,	time-this-age:13.4344							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:37 of 82,	time-this-age:13.3535							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:38 of 82,	time-this-age:13.2082							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:39 of 82,	time-this-age:13.4255							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:40 of 82,	time-this-age:13.3415							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:41 of 82,	time-this-age:13.3007							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:42 of 82,	time-this-age:12.9676							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:43 of 82,	time-this-age:12.7222							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:44 of 82,	time-this-age:12.8866							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:45 of 82,	time-this-age:12.9692							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:46 of 82,	time-this-age:12.6458							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:47 of 82,	time-this-age:12.7353							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:48 of 82,	time-this-age:12.4721							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:49 of 82,	time-this-age:14.5103							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:50 of 82,	time-this-age:14.3515							
SNW_DS_MAIN_VEC ACUMU	MASS: Finished	Age Group:51 of 82,	time-this-age:15.1363							

SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:52 of 82, time-this-age:15.4419
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:53 of 82, time-this-age:15.5071
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:54 of 82, time-this-age:15.3158
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:55 of 82, time-this-age:15.5545
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:56 of 82, time-this-age:13.8214
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:57 of 82, time-this-age:15.37
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:58 of 82, time-this-age:12.7642
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:59 of 82, time-this-age:12.8943
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:60 of 82, time-this-age:12.4232
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:61 of 82, time-this-age:13.1266
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:62 of 82, time-this-age:11.6599
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:63 of 82, time-this-age:11.311
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:64 of 82, time-this-age:9.6286
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:65 of 82, time-this-age:9.6127
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:66 of 82, time-this-age:9.5362
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:67 of 82, time-this-age:9.4717
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:68 of 82, time-this-age:9.0979
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:69 of 82, time-this-age:8.8206
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:70 of 82, time-this-age:8.6657
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:71 of 82, time-this-age:8.4039
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:72 of 82, time-this-age:8.5242
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:73 of 82, time-this-age:8.1249
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:74 of 82, time-this-age:7.7322
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:75 of 82, time-this-age:7.7105
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:76 of 82, time-this-age:7.5299
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:77 of 82, time-this-age:7.1787
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:78 of 82, time-this-age:6.8581
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:79 of 82, time-this-age:6.7112
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:80 of 82, time-this-age:6.2875
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:81 of 82, time-this-age:5.7167
 SNW_DS_MAIN_VEC ACUMU MASS: Finished Age Group:82 of 82, time-this-age:5.08
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:1 of 82, time-this-age:0.2988
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:2 of 82, time-this-age:0.058596
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:3 of 82, time-this-age:0.060327
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:4 of 82, time-this-age:0.061785
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:5 of 82, time-this-age:0.062647
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:6 of 82, time-this-age:0.050905
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:7 of 82, time-this-age:0.051139
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:8 of 82, time-this-age:0.059177
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:9 of 82, time-this-age:0.063292
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:10 of 82, time-this-age:0.059997
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:11 of 82, time-this-age:0.064253
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:12 of 82, time-this-age:0.055315
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:13 of 82, time-this-age:0.057587
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:14 of 82, time-this-age:0.061842
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:15 of 82, time-this-age:0.061399
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:16 of 82, time-this-age:0.062957
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:17 of 82, time-this-age:0.05743
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:18 of 82, time-this-age:0.063064
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:19 of 82, time-this-age:0.055026
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:20 of 82, time-this-age:0.053961
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:21 of 82, time-this-age:0.050416
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:22 of 82, time-this-age:0.057357
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:23 of 82, time-this-age:0.049988
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:24 of 82, time-this-age:0.061724
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:25 of 82, time-this-age:0.048989
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:26 of 82, time-this-age:0.05789
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:27 of 82, time-this-age:0.048067
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:28 of 82, time-this-age:0.065258
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:29 of 82, time-this-age:0.051444
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:30 of 82, time-this-age:0.05969
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:31 of 82, time-this-age:0.048033
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:32 of 82, time-this-age:0.055682
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:33 of 82, time-this-age:0.048521
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:34 of 82, time-this-age:0.058185

SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:35 of 82, time-this-age:0.050949
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:36 of 82, time-this-age:0.053854
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:37 of 82, time-this-age:0.049522
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:38 of 82, time-this-age:0.062952
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:39 of 82, time-this-age:0.05567
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:40 of 82, time-this-age:0.057658
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:41 of 82, time-this-age:0.055768
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:42 of 82, time-this-age:0.055618
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:43 of 82, time-this-age:0.054474
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:44 of 82, time-this-age:0.055961
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:45 of 82, time-this-age:0.051369
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:46 of 82, time-this-age:0.048842
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:47 of 82, time-this-age:0.053878
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:48 of 82, time-this-age:0.04771
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:49 of 82, time-this-age:0.058897
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:50 of 82, time-this-age:0.048742
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:51 of 82, time-this-age:0.043868
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:52 of 82, time-this-age:0.059429
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:53 of 82, time-this-age:0.050384
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:54 of 82, time-this-age:0.054141
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:55 of 82, time-this-age:0.050537
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:56 of 82, time-this-age:0.04595
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:57 of 82, time-this-age:0.061315
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:58 of 82, time-this-age:0.046414
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:59 of 82, time-this-age:0.055424
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:60 of 82, time-this-age:0.05507
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:61 of 82, time-this-age:0.044066
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:62 of 82, time-this-age:0.059774
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:63 of 82, time-this-age:0.05149
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:64 of 82, time-this-age:0.050386
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:65 of 82, time-this-age:0.050659
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:66 of 82, time-this-age:0.055251
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:67 of 82, time-this-age:0.052794
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:68 of 82, time-this-age:0.068309
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:69 of 82, time-this-age:0.052281
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:70 of 82, time-this-age:0.049016
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:71 of 82, time-this-age:0.059436
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:72 of 82, time-this-age:0.044294
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:73 of 82, time-this-age:0.048183
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:74 of 82, time-this-age:0.042352
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:75 of 82, time-this-age:0.065515
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:76 of 82, time-this-age:0.050545
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:77 of 82, time-this-age:0.046323
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:78 of 82, time-this-age:0.054578
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:79 of 82, time-this-age:0.047615
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:80 of 82, time-this-age:0.042437
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:81 of 82, time-this-age:0.06228
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:82 of 82, time-this-age:0.05088
 SNW_DS_MAIN NORMALIZE MASS: Finished Age Group:83 of 82, time-this-age:0.049113
 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=945.8894
 xxx tb_outcomes: all stats xxx

OriginalVariableNames	a_ss	ap_ss	cons_ss	v_ss	n_ss	y_all	y
{'mean' }	4.2486	4.3473	1.0676	-15.745	2.3554	1.415	
{'sd' }	6.7963	6.834	0.69454	21.68	1.4375	1.4926	
{'coefofvar' }	1.5996	1.572	0.65055	-1.3769	0.61029	1.0548	
{'min' }	0	0	0.036717	-586.22	1	0	
{'max' }	135	163.7	141.66	24.63	6	50.873	

{ 'pYis0' }	0.1223	0.10225	0	0	0	0.0072908
{ 'pYls0' }	0	0	0	0.8122	0	0
{ 'pYgr0' }	0.8777	0.89775	1	0.1878	1	0.99271
{ 'pYisMINY' }	0.1223	0.10225	8.6094e-07	1.2848e-09	0.36005	0.0072908
{ 'pYisMAXY' }	6.6266e-06	2.2031e-12	0	0	0.041101	2.2031e-12
{ 'p0_01' }	0	0	0.066316	-253.42	1	0
{ 'p0_1' }	0	0	0.10404	-166.9	1	0
{ 'p1' }	0	0	0.185	-96.092	1	0.0013184
{ 'p5' }	0	0	0.27653	-56.05	1	0.1012
{ 'p10' }	0	0	0.35932	-41.447	1	0.22272
{ 'p20' }	0.064373	0.070044	0.49736	-27.45	1	0.42045
{ 'p25' }	0.11124	0.18238	0.56384	-23.085	1	0.50808
{ 'p30' }	0.26367	0.37542	0.63117	-19.607	1	0.60105
{ 'p40' }	0.68544	0.85525	0.77036	-14.252	2	0.78729
{ 'p50' }	1.4131	1.5959	0.92038	-10.153	2	0.99853
{ 'p60' }	2.5301	2.7681	1.086	-6.7158	2	1.2567
{ 'p70' }	4.1199	4.5042	1.2802	-3.5921	3	1.594
{ 'p75' }	5.4836	5.7337	1.3961	-2.0335	3	1.8147
{ 'p80' }	7.1191	7.2583	1.5324	-0.41501	4	2.1
{ 'p90' }	12.56	12.145	1.9406	3.5073	5	3.0498
{ 'p95' }	16.875	17.551	2.3509	6.4545	5	4.0398
{ 'p99' }	30.548	31.57	3.4062	11.343	6	6.8953
{ 'p99_9' }	56.953	57.547	5.2994	15.761	6	14.807
{ 'p99_99' }	90.439	90.439	7.5689	18.531	6	21.018
{ 'fl_cov_a_ss' }	46.189	46.181	3.4533	66.374	-1.4145	4.389
{ 'fl_cor_a_ss' }	1	0.99429	0.73158	0.45048	-0.14479	0.43268
{ 'fl_cov_ap_ss' }	46.181	46.704	3.5562	68.204	-1.3778	5.2598
{ 'fl_cor_ap_ss' }	0.99429	1	0.74922	0.46034	-0.14025	0.51566
{ 'fl_cov_cons_ss' }	3.4533	3.5562	0.48239	9.9576	0.23887	0.77394
{ 'fl_cor_cons_ss' }	0.73158	0.74922	1	0.66131	0.23926	0.74658
{ 'fl_cov_v_ss' }	66.374	68.204	9.9576	470	-1.5579	15.049
{ 'fl_cor_v_ss' }	0.45048	0.46034	0.66131	1	-0.04999	0.46509
{ 'fl_cov_n_ss' }	-1.4145	-1.3778	0.23887	-1.5579	2.0664	0.40409
{ 'fl_cor_n_ss' }	-0.14479	-0.14025	0.23926	-0.04999	1	0.18834
{ 'fl_cov_y_all' }	4.389	5.2598	0.77394	15.049	0.40409	2.2277
{ 'fl_cor_y_all' }	0.43268	0.51566	0.74658	0.46509	0.18834	1
{ 'fl_cov_y_head_inc' }	3.9111	4.1925	0.5697	11.491	0.092861	1.1533
{ 'fl_cor_y_head_inc' }	0.57021	0.60786	0.81274	0.52517	0.064008	0.76559
{ 'fl_cov_y_head_earn' }	1.9006	2.2089	0.43359	8.4668	0.19345	1.026
{ 'fl_cor_y_head_earn' }	0.30133	0.34828	0.67268	0.42082	0.14501	0.74068
{ 'fl_cov_y_spouse_inc' }	0.64085	1.2037	0.20222	3.9277	0.26722	1.0262
{ 'fl_cor_y_spouse_inc' }	0.098743	0.18445	0.3049	0.18972	0.19466	0.72
{ 'fl_cov_yshr_interest' }	0.77027	0.72501	0.038411	1.3454	-0.066855	-0.020719
{ 'fl_cor_yshr_interest' }	0.67438	0.63125	0.32907	0.36927	-0.27673	-0.082599
{ 'fl_cov_yshr_wage' }	-0.77963	-0.69253	-0.0045925	-1.649	0.17059	0.14034
{ 'fl_cor_yshr_wage' }	-0.3398	-0.30018	-0.019587	-0.22531	0.35152	0.27852
{ 'fl_cov_yshr_SS' }	0.0093601	-0.032478	-0.033818	0.30355	-0.10373	-0.11962
{ 'fl_cor_yshr_SS' }	0.0058267	-0.020106	-0.206	0.059238	-0.3053	-0.33906
{ 'fl_cov_yshr_tax' }	0.099405	0.11025	0.018741	0.55346	0.01336	0.04008
{ 'fl_cor_yshr_tax' }	0.41564	0.45846	0.76677	0.72546	0.26411	0.76309
{ 'fl_cov_yshr_nttxss' }	0.090044	0.14273	0.052559	0.2499	0.11709	0.1597
{ 'fl_cor_yshr_nttxss' }	0.05183	0.081703	0.29603	0.045094	0.31865	0.41856
{ 'fracByP0_01' }	0	0	5.4315e-06	0.0018677	0.15286	0
{ 'fracByP0_1' }	0	0	8.2399e-05	0.012968	0.15286	0
{ 'fracByP1' }	0	0	0.0013761	0.080387	0.15286	1.3833e-06
{ 'fracByP5' }	0	0	0.01022	0.25904	0.15286	0.0014863
{ 'fracByP10' }	0	0	0.025187	0.41107	0.15286	0.00716
{ 'fracByP20' }	0.00074359	0.00061895	0.065443	0.62446	0.15286	0.030312
{ 'fracByP25' }	0.0014042	0.0020497	0.090297	0.70441	0.15286	0.046785
{ 'fracByP30' }	0.0041483	0.0051966	0.11827	0.77196	0.15286	0.066368
{ 'fracByP40' }	0.01665	0.018812	0.18387	0.87856	0.40183	0.11522
{ 'fracByP50' }	0.045047	0.046332	0.26291	0.95559	0.40183	0.17805
{ 'fracByP60' }	0.094899	0.095657	0.35672	1.0089	0.40183	0.2574
{ 'fracByP70' }	0.17353	0.17824	0.46729	1.0416	0.56321	0.35748
{ 'fracByP75' }	0.24359	0.23689	0.52992	1.0506	0.56321	0.41756

{'fracByP80'}	}	0.32643	0.31096	0.59841	1.0545	0.75407	0.48651
{'fracByP90'}	}	0.56332	0.5274	0.75898	1.0454	0.8953	0.66421
{'fracByP95'}	}	0.69729	0.69468	0.85836	1.0299	0.8953	0.78735
{'fracByP99'}	}	0.90278	0.90216	0.96058	1.0085	1	0.92866
{'fracByP99_9'}	}	0.98493	0.98362	0.99414	1.0011	1	0.98757
{'fracByP99_99'}	}	0.99793	0.99759	0.99921	1.0001	1	0.99835

```
% [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 More Dense

```
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	sd	coefofvar	min	max	pYis0	pYls0	pYgr0
a_ss	4.2486	6.7963	1.5996	0	135	0.1223	0	0.8777
ap_ss	4.3473	6.834	1.572	0	163.7	0.10225	0	0.89775
cons_ss	1.0676	0.69454	0.65055	0.036717	141.66	0	0	1
v_ss	-15.745	21.68	-1.3769	-586.22	24.63	0	0.8122	0.1878
n_ss	2.3554	1.4375	0.61029	1	6	0	0	1
y_all	1.415	1.4926	1.0548	0	50.873	0.0072908	0	0.99271
y_head_inc	1.1087	1.0092	0.91029	0.038108	24.357	0	0	1
y_head_earn	0.88655	0.92804	1.0468	0	18.957	0.2016	0	0.7984
y_spouse_inc	0.35849	0.95494	2.6638	0	26.627	0.52499	0	0.47501
yshr_interest	0.12214	0.16806	1.3759	0	0.99299	0.1223	0	0.8777
yshr_wage	0.77513	0.33759	0.43553	0	1	0.10584	0	0.89416
yshr_SS	0.10273	0.23637	2.3009	0	1	0.7984	0	0.2016
yshr_tax	0.17862	0.03519	0.19701	0.036506	0.2552	0	0	1
yshr_nttxss	0.075896	0.25563	3.3681	-0.89184	0.2552	0	0.17845	0.82155