

First-Order✓

Norm of Iteration step	Func-count	Residual	optimality	Lambda✓
0	4	0.0694079	0.316	0.01
1	8	6.73034e-05	0.0176	0.001✓
0.243741				
2	12	4.64754e-10	4.13e-05	0.0001✓
0.00628919				
3	16	3.75398e-18	1.42e-09	1e-05✓
1.8289e-05				
4	20	4.6218e-28	1.42e-14	1e-06✓
2.04729e-09				

Equation solved.

fsolve completed because the vector of function values is near zero as measured by the value of the function tolerance, and the problem appears regular as measured by the gradient.

<stopping criteria details>

Max. abs. error in calibration targets:1.6931e-14

pis1 =

7.8215e-08

pis2 =

1.2411e-04

pis3 =

0.3892

RnotSIR =

1.4998

First-Order✓

Norm of Iteration step	Func-count	Residual	optimality	Lambda✓
0	1751	0.000482659	1.48e-05	0.01
1	3502	0.000481991	1.45e-05	0.001✓
0.00578071				
2	5253	0.000475375	1.44e-05	0.0001✓
0.0574099				
3	7004	0.000415576	1.36e-05	1e-05✓
0.537002				
4	8755	0.000141569	8.07e-06	1e-06✓
3.17147				
5	10506	1.61855e-06	8.41e-07	1e-07✓
3.86924				
6	12257	2.01727e-10	8.49e-09	1e-08✓
0.452811				
7	14008	4.08296e-16	7.23e-11	1e-09✓
0.00514259				
8	15759	1.85726e-23	7.24e-11	1e-10✓
7.36711e-06				

Equation solved, solver stalled.

fsolve stopped because the relative size of the current step is less✓  
than the  
value of the step size tolerance and the vector of function values  
is near zero as measured by the value of the function tolerance.

<stopping criteria details>

Equation solved. The magnitude of the search direction is less than✓  
the specified tolerance

Max. abs. error in equilib. equations:7.0429e-13

aggCons\_trough\_percent =

-5.5036

aggCons\_avg\_first\_year\_percent =

-2.4969

```
terminal_one_minus_susceptibles_percent =
```

```
56.6604
```

```
peak_infection_percent =
```

```
5.9271
```

```
terminal_death_share_percent =
```

```
0.1417
```

```
terminal_number_deaths_US_millions =
```

```
0.4674
```

```
Elapsed time is 33.035659 seconds.
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>>
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